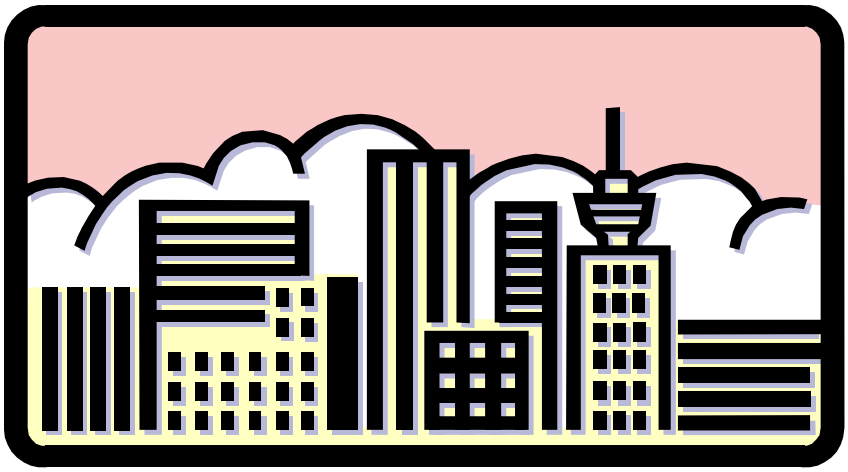
California Environmental Protection Agency
AIR RESOURCES BOARD

2005 Architectural Coatings Survey

Final Report

December 2007



State of California
California Environmental Protection Agency
Air Resources Board

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This report has been reviewed and approved for publication by the Air Resources Board (ARB, Board). Approval does not signify that the contents reflect the views and policies of the ARB, nor does mention of any company constitute endorsement. This report is a direct reflection of the California sales data (for calendar year 2004) submitted by the companies that responded to the "ARB Architectural Coatings Survey" conducted in 2005.

Acknowledgements

The Air Resources Board would like to thank the companies that responded to our 2005 survey. (See Chapter 2 for a list of survey respondents.)

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APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARB, Board	Air Resources Board
ASTM	American Society for Testing and Materials
CAS#	Chemical Abstract Service number
dba	Doing Business As
MIR	Maximum Incremental Reactivity
NA	Not Applicable
PD	Protected Data
PSU	Primer, Sealer, Undercoater
QDPSU	Quick Dry Primer, Sealer, Undercoater
U.S. EPA	United States Environmental Protection Agency
SB	Solvent-borne
SCAQMD	South Coast Air Quality Management District
SCM	Suggested Control Measure
SWA	Sales-Weighted Average
VOC	Volatile Organic Compound
WB	Water-borne

Executive Summary

1. Introduction

This report presents results from the 2005 Architectural Coatings Survey conducted by the California Air Resources Board (ARB or Board) for coatings sold in California during 2004. This is the eighth survey of this type conducted by the ARB for the purpose of estimating emissions from architectural coatings

Architectural coatings do not include aerosol coating products.

Historically, the ARB has conducted architectural coating surveys every four or five years. Previous surveys were conducted in 1976, 1981, 1985, 1989, 1993, 1998, and 2001. The information collected in the surveys is used to help the ARB and local air pollution control districts (APCDs) or air quality management districts (AQMDs) track the volatile organic compound (VOC) emissions from architectural coatings. The surveys are also used in the development of regulations or rules to reduce the VOC emissions from these products.

The local districts have the primary responsibility for control of air pollution from stationary sources, including the application of architectural coatings. The local districts develop, adopt, and enforce rules and regulations under their jurisdiction to achieve and maintain the state and federal ambient air quality standards. The local districts have regulated architectural coatings in California since the 1970s.

The ARB's role over the years has been to provide technical assistance to the districts in the form of industry surveys and research. To track the emission contributions of architectural coatings, an inventory was created that is based on the surveys. The ARB has also provided regulatory and policy guidance through the development of a suggested control measure (SCM) for architectural coatings that was first adopted in 1977, and was amended in 1985, 1989, and 2000.

2. Companies

In April 2005, the ARB mailed survey questionnaires to almost **900** companies that potentially sold architectural coating products in California in 2004. Almost half of these companies responded but did not submit data, primarily for the following reasons: they did not have any sales of architectural coatings in California during 2004; they did not manufacture architectural coatings; or their sales were being reported by another company. Approximately **30%** of the companies surveyed did not respond at all. A total of **197** companies submitted data, including companies that sent in surveys for multiple divisions or subsidiaries. This represents an increase when compared to the previous five ARB surveys (conducted in 2001, 1998, 1993, 1989, 1985), that had an average of 156 companies responding with data. ARB is confident that the survey response accurately represents the 2004 sales volume in California, based on comparisons between the survey data and manufacturing data compiled by the U.S. Census Bureau.

Chapter 2 contains information about the companies that submitted data. Most of the sales volume reported in the survey was reported by a small number of companies. The top ten companies accounted for 81% of the total reported sales volume, while the remaining 187 companies accounted for 19% of the sales volume. More than half of the companies that provided data could be considered to be small businesses, because they have less than 250 employees. In addition, more than half of the companies were marketing their products on a national or international basis, rather than being specific to California or marketing to a regional area.

3. Sales

The 2005 survey requested 2004 California sales information for 52 coating categories. Table E-1 lists the total sales for coating categories, as well as subtotals for solvent-borne and water-borne sales in each category. In addition, the table contains a percentage breakdown for recommended exposure (i.e., interior, exterior, or dual exposure).

Based on survey data, about 110 million gallons of architectural coatings were sold in California during 2004, with 88% of that volume coming from water-borne products and 12% from solvent-borne products. Most of the reported sales volume was limited to a small number of categories, with the top five categories accounting for more than 70% of the total sales volume. These top five categories are: Flat; Nonflat – Medium Gloss; Nonflat – Low Gloss; Primer, Sealer, and Undercoater; and Traffic Marking. Most products (97%) were sold in large containers (larger than one quart). More detailed information on sales data is presented in Chapter 3.

A copy of the survey questionnaire is available in the Appendix. Some manufacturers considered the data provided in the 2004 Architectural Coatings Survey to be trade secret and confidential. To address this concern, but still allow the publishing of survey results, the ARB implemented the historical practice of concealing all sales data values that did not represent at least three companies, otherwise known as the "Three Company Rule." Throughout this report the term "Protected Data" (or PD) is used to reflect that compliance with the "Three Company Rule" could not be satisfied and the data were concealed to protect company confidentiality.

Table E-1: *Sales by Category*

	2004 Sales Including Quarts (gallons)							
Coating Category	**Total**	**Solvent-borne**	**Water-borne**	**% SB**	**% WB**	**% Int**	**% Ext**	**% Dual**
Bituminous Roof	1,464,326	133,728	1,330,598	9	91	0	100	0
Bituminous Roof Primer	68,092	59,968	8,124	88	12	0	100	0
Bond Breakers	187,785	PD	PD	PD	PD	0	100	0
Clear Brushing Lacquer	PD	PD	0	100	0	100	0	0
Concrete Curing Compounds	793,566	43,771	749,795	6	94	0	35	65
Driveway Sealer	2,205,366	PD	PD	PD	PD	0	100	0
Dry Fog	377,707	187,112	190,595	50	50	97	1	2
Faux Finishing	303,810	4,430	299,379	1	99	98	0	2

Table E-1: *Sales by Category*

Coating Category	2004 Sales Including Quarts (gallons)			% SB	% WB	% Int	% Ext	% Dual
	Total	**Solvent-borne**	**Water-borne**					
Fire Resistive	12,577	PD	PD	PD	PD	91	0	9
Fire Retardant - Clear	PD	PD	0	100	0	57	0	43
Fire Retardant - Opaque	200,150	PD	PD	PD	PD	100	0	0
Flat	37,264,874	4,082	37,260,792	0	100	49	36	15
Floor	1,239,892	71,170	1,168,722	6	94	7	0	93
Form Release Compounds	323,612	284,655	38,957	88	12	0	4	96
Graphic Arts	PD	PD	PD	PD	PD	0	0	100
High Temperature	11,736	11,736	0	100	0	9	0	91
Industrial Maintenance	2,137,772	1,422,836	714,936	67	33	13	9	78
Lacquers	1,291,571	937,855	353,715	73	27	94	0	5
Low Solids	65,680	0	65,680	0	100	0	88	12
Magnesite Cement	PD	PD	0	100	0	0	100	0
Mastic Texture	677,063	PD	PD	PD	PD	0	77	23
Metallic Pigmented	570,977	438,025	132,953	77	23	1	90	9
Multi-Color	13,635	PD	PD	PD	PD	100	0	0
Nonflat - High Gloss	1,760,459	40,777	1,719,682	2	98	42	1	58
Nonflat - Low Gloss	12,023,079	3,856	12,019,222	0	100	68	15	18
Nonflat - Medium Gloss	20,072,832	77,878	19,994,953	0	100	55	13	31
Other	89,473	2,576	86,896	3	97	57	25	18
Pre-Treatment Wash Primer	4,959	PD	PD	PD	PD	0	0	100
Primer, Sealer, and Undercoater	10,402,018	225,380	10,176,638	2	98	38	11	52
Quick Dry Enamel	763,266	713,196	50,070	93	7	30	13	57
Quick Dry Primer, Sealer, and Undercoater	249,710	220,361	29,349	88	12	46	0	54
Recycled	223,381	0	223,381	0	100	0	46	54
Roof	1,406,889	42,967	1,363,922	3	97	0	100	0
Rust Preventative	2,095,500	2,004,661	90,839	96	4	29	6	66
Sanding Sealers	84,273	60,457	23,816	72	28	100	0	0
Shellacs - Clear	PD	PD	0	100	0	100	0	0
Shellacs - Opaque	PD	PD	0	100	0	0	0	100
Specialty Primer, Sealer, and Undercoater	2,009,464	1,532,541	476,924	76	24	2	6	92
Stains - Clear/Semitransparent	1,865,237	1,462,300	402,937	78	22	26	55	19
Stains - Opaque	957,506	20,627	936,880	2	98	0	98	2
Swimming Pool	20,364	9,828	10,536	48	52	0	24	76
Swimming Pool Repair and Maintenance	PD	PD	0	100	0	0	77	23
Traffic Marking	2,214,451	329,369	1,885,082	15	85	0	96	4
Varnishes - Clear	970,695	694,415	276,280	72	28	76	11	13
Varnishes - Semitransparent	89,303	86,302	3,001	97	3	96	4	0
Waterproofing Concrete/Masonry Sealers	1,908,378	955,355	953,023	50	50	0	36	64
Waterproofing Sealers	1,511,911	195,212	1,316,699	13	87	3	68	30
Wood Preservatives	173,846	164,236	9,610	94	6	0	100	0
TOTAL:	**110,407,721**	**13,053,035**	**97,354,686**	**12**	**88**	**43**	**29**	**28**

4. VOC Content

The survey collected information on VOC content, including both VOC Actual and VOC Regulatory. VOC Actual, also known as Material VOC, is the weight of VOCs divided by the total volume of coating. VOC Actual is usually expressed in units of grams/liter (g/l) and it is the value that is used to calculate VOC emissions.

VOC Regulatory is the term that is used for regulatory purposes to establish VOC content limits. VOC Regulatory, also known as Coating VOC, is the weight of VOCs divided by the volume of coating, less the volume of water and exempt compounds.

Table E-2 provides sales-weighted average (SWA) VOC content values for the top five coating categories, based on sales volume. For these categories, the majority of the reported sales volume contains less than 5% VOCs by weight. Chapter 4 of this report contains summaries of sales-weighted average VOC values. It also contains charts of sales volume vs. VOC Regulatory and sales volume vs. weight percent VOC. Chapter 8 contains tables that provide SWA weight percent VOC data for each category.

Table E-2: ***VOC Contents for Top Five Categories (based on sales volume)***

Coating Category	SWA VOC Regulatory (g/l)	SWA VOC Actual (g/l)	SWA Weight % VOC
Flat	82	32	2%
Nonflat – Medium Gloss	129	51	4%
Nonflat – Low Gloss	118	48	4%
Primer, Sealer, and Undercoater	128	54	4%
Traffic Marking	101	66	4%

5. VOC Emissions

In 2004, VOC emissions from architectural coatings were approximately 34,600 tons per year or almost **95** tons per day as an annual average, not including emissions from thinning, additives, and equipment cleanup. Water-borne products generated **48**% of these emissions, while the solvent-borne products generated **52**%. Survey data were also used to estimate VOC emissions from the following associated activities:

(1) Using solvent for thinning solvent-borne coatings;
(2) Using solvent for equipment cleanup after the use of solvent-borne and water-borne coatings; and
(3) Using additives to enhance the performance of water-borne coatings.

ARB estimates that these three associated activities generate more than **20** tons per day of VOC emissions. Total estimated average annual emissions are more than **115** tons per day (almost **95** tons per day from coatings only and more than **20** tons per day from thinning/cleanup/additives). Most of the reported emissions are generated by a small number of categories, with the top five categories accounting for 50% of the total emissions quantity. The top five categories for VOC emissions are: Flat; Nonflat – Medium Gloss; Rust Preventative; Nonflat – Low Gloss; and Primer, Sealer, and Undercoater.

Table E-3 lists VOC emissions (tons per day) for each coating category, as well as subtotals for solvent-borne and water-borne emissions in each category. More detailed emissions data are presented in Chapter 5.

Table E-3: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/DAY)						
	SB	WB	TOTAL (without thinning, cleanup, additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup, additives)
Bituminous Roof	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Bituminous Roof Primer	0.2	0.0	0.2	0.0	0.0	0.0	0.2
Bond Breakers	0.0	0.2	0.2	0.0	0.0	0.0	0.2
Clear Brushing Lacquer	0.5	0.0	0.5	0.0	0.0	0.0	0.6
Concrete Curing Compounds	0.1	0.3	0.4	0.0	0.1	0.0	0.6
Driveway Sealer	0.0	0.0	0.0	0.0	0.3	0.0	0.4
Dry Fog	0.7	0.1	0.8	0.1	0.0	0.0	0.9
Faux Finishing	0.0	0.3	0.3	0.0	0.0	0.0	0.4
Fire Resistive	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Opaque	0.7	0.0	0.7	0.1	0.0	0.0	0.8
Flat	0.0	13.8	13.8	0.0	5.8	0.2	19.8
Floor	0.2	0.5	0.7	0.0	0.2	0.0	0.9
Form Release Compounds	0.8	0.0	0.8	0.1	0.0	0.0	1.0
Graphic Arts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High Temperature	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Industrial Maintenance	3.6	0.6	4.3	0.7	0.2	0.0	5.2
Lacquers	3.3	0.3	3.6	0.5	0.1	0.0	4.2
Low Solids	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Magnesite Cement	0.1	0.0	0.1	0.0	0.0	0.0	0.1
Mastic Texture	0.3	0.3	0.5	0.1	0.1	0.0	0.7
Metallic Pigmented	2.1	0.0	2.2	0.2	0.1	0.0	2.4
Multi-Color	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonflat - High Gloss	0.2	1.2	1.3	0.0	0.3	0.0	1.6
Nonflat - Low Gloss	0.0	6.6	6.6	0.0	1.9	0.1	8.6
Nonflat - Medium Gloss	0.3	11.4	11.7	0.0	3.1	0.1	15.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-Treatment Wash Primer	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primer, Sealer, and Undercoater	0.9	5.5	6.4	0.1	1.6	0.1	8.2
Quick Dry Enamel	3.2	0.1	3.2	0.3	0.1	0.0	3.7
Quick Dry Primer, Sealer, and Undercoater	1.0	0.0	1.0	0.1	0.0	0.0	1.2
Recycled	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roof	0.1	0.3	0.4	0.0	0.0	0.0	0.4
Rust Preventative	8.6	0.1	8.7	1.0	0.3	0.0	10.0
Sanding Sealers	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Shellacs - Clear	0.3	0.0	0.3	0.0	0.0	0.0	0.4

Table E-3: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/DAY)						
	SB	**WB**	**TOTAL (without thinning, cleanup, additives)**	**Thinning**	**Cleanup**	**Additives**	**TOTAL (including thinning, cleanup, additives)**
Shellacs - Opaque	0.8	0.0	0.8	0.1	0.0	0.0	0.9
Specialty Primer, Sealer, and Undercoater	6.0	0.2	6.2	0.7	0.2	0.0	7.2
Stains - Clear/Semitransparent	6.0	0.3	6.3	0.7	0.2	0.0	7.2
Stains - Opaque	0.1	0.4	0.5	0.0	0.1	0.0	0.6
Swimming Pool	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Swimming Pool Repair and Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traffic Marking	0.4	1.3	1.7	0.2	0.3	0.0	2.1
Varnishes - Clear	3.6	0.3	3.9	0.3	0.1	0.0	4.4
Varnishes - Semitransparent	0.4	0.0	0.4	0.0	0.0	0.0	0.5
Waterproofing Concrete/Masonry Sealers	2.2	0.6	2.8	0.5	0.1	0.0	3.4
Waterproofing Sealers	0.6	0.8	1.4	0.1	0.2	0.0	1.7
Wood Preservatives	0.6	0.0	0.6	0.1	0.0	0.0	0.7
TOTALS (tons/day)	**49.0**	**45.7**	**94.7**	**6.2**	**13.9**	**0.5**	**115.4**
% of Total Emissions (w/o thinning/cleanup):	**52%**	**48%**					
% of Total Emissions (with thinning/cleanup):	**43%**	**40%**		**5%**	**12%**	**0%**	

6. Complying Marketshares

Complying marketshare is the percentage of sales volume that is less than or equal to an established VOC limit. ARB staff compared the reported VOC Regulatory values with VOC limits to determine the complying marketshares for each coating category. Chapter 6 contains complying marketshares based on VOC limits in ARB's 2000 SCM. It also contains complying marketshares based on the South Coast Air Quality Management District's (SCAQMD) future VOC limits that are scheduled to take effect in or before 2008.

Overall, 92% of the sales volume complied with VOC limits in the 2000 SCM, excluding small containers, and 19% of the sales volume complied with VOC limits in SCAQMD Rule 1113. These percentages do not include the sales of small containers (i.e., one quart or less), because the SCM contains an exemption from VOC limits for small containers. SCAQMD Rule 1113 also contained a general small container exemption in 2004. Table E-4 contains complying marketshares for the top five categories, based on sales volume, excluding small containers.

Table E-4: ***Complying Marketshares for Top Five Categories (based on sales volume)***

Coating Category	2000 SCM		SCAQMD	
	VOC Limit	Complying Marketshare	VOC Limit	Complying Marketshare
Flat	100	90%	50	7%
Nonflat – Medium Gloss	150	92%	50	4%
Nonflat – Low Gloss	150	99%	50	3%
Primer, Sealer, and Undercoater	200	98%	100	37%
Traffic Marking	150	100%	100	74%

7. Sales Volume Versus VOC Content

Chapter 7 of this report contains charts that plot percent of total sales volume against VOC Regulatory. These charts illustrate the percent of sales that is at or below the 2000 SCM VOC limit for each coating category.

8. Volume Percents and Weight Percents

The survey collected information on volume percents and weight percents of coating components (solids, water, exempt compounds), including all of the parameters that are used when calculating VOC Actual and VOC Regulatory. These data made it possible to verify reported VOC content values. Chapter 8 of this report contains summaries of sales-weighted average values for volume percents, weight percents, and coating densities.

9. Substrate and Resin

The survey also gathered data on the types of substrates that were recommended for a particular product. In addition to substrate information, the survey collected data on resin types and number of components (i.e., single-component or multi-component) for all of the coating categories. Chapter 9 of this report contains summaries of substrate, resin, and component information. For the top five categories, based on sales volume, the most prevalent resins included the following, sorted alphabetically: Acrylic, Alkyd, Polyvinyl Acetate, and Vinyl Acrylic.

10. Ingredients

The survey gathered speciation data for all volatile ingredients (VOCs, exempt compounds, and water). Data were collected for all volatile ingredients that amounted to at least 0.1% (by weight) of each coating. Speciated data were not collected for the solids portion of the coatings. Table E-5 lists the top ten VOC ingredients in architectural coatings. Chapter 10 of this report provides more detailed ingredient data, including ingredient listings for each category.

Table E-5: ***Top Ten VOC Ingredients (sorted in descending order, based on weight)***

CAS #	Ingredient Name
0	Bin 11 Hydrocarbon Solvent
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate
107211	Ethylene Glycol
57556	Propylene Glycol
0	Bin 15 Hydrocarbon Solvent
0	Bin 6 Hydrocarbon Solvent
0	Bin 10 Hydrocarbon Solvent
112345	2-(2-Butoxyethoxy) Ethanol
0	Bin 22 Hydrocarbon Solvent
1330207	Xylene

11. Survey Comparisons

Chapter 11 of this report provides comparisons of data from ARB's 2001 survey (2000 sales) with the 2005 survey (2004 sales). Overall, the percent change in sales volume from 2000 to 2004 represents an annual growth rate of approximately 3%. This increase appears to be consistent with industry reports of sales growth for architectural coatings nationwide. Chapter 11 includes summary data for each category and provides a historical comparison for all of the architectural coatings surveys conducted by ARB since 1975. From 1975 to 2004, the sales volume increased 129%, but VOC emissions declined 16% because the VOC content of coatings decreased significantly.

12. Averaging Program

The 2000 SCM contains a voluntary compliance option referred to as the averaging provision. This provision was intended to provide additional flexibility to the regulated industry, by allowing manufacturers to average emissions from higher-VOC products with emissions from low-VOC products. During 2003 and 2004, ARB staff managed the statewide averaging program for the eighteen local air districts that adopted rules based on the SCM, at that time. The averaging program in these rules ended on January 1, 2005.

In 2001, the SCAQMD began managing their own averaging program under their Architectural Coating Rule 1113. The averaging programs managed by the SCAQMD and the ARB were very similar, with one major exception - the SCAQMD averaging program is still in effect because it has no sunset date (i.e., expiration date).

Chapter 12 of this report provides an analysis of the survey data for products that were included in an architectural coating averaging program during 2004. For two categories (Quick Dry Enamel and Quick Dry Primer, Sealer, and Undercoater), more than half of the reported sales volume consisted of high-VOC products that exceeded VOC limits and were included in an averaging program. For the remaining categories, less than 10% of the sales volume consisted of high-VOC products in an averaging program.

Chapter 1 -- Introduction and Background

This report presents results from the 2005 Architectural Coatings Survey conducted by the California Air Resources Board (ARB or Board) for coatings sold in California during 2004. This is the eighth survey of this type conducted by the ARB for the purpose of estimating emissions from architectural coatings. For purposes of this survey, architectural coatings are defined as follows:

> **"Architectural Coating:** A coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings."

Architectural coatings do not include aerosol coating products.

Historically, the ARB has conducted architectural coating surveys every four or five years. Previous surveys were conducted in 1976, 1981, 1985, 1989, 1993, 1998, and 2001. The information collected in the surveys is used to help the ARB and local air pollution control districts (APCDs) or air quality management districts (AQMDs) track the volatile organic compound (VOC) emissions from architectural coatings. The surveys are also used in the development of regulations or rules to reduce the VOC emissions from these products.

The local districts have the primary responsibility for control of air pollution from stationary sources, such as the application of coatings. The local districts develop, adopt, and enforce rules and regulations under their jurisdiction to achieve and maintain the state and federal ambient air quality standards. The local districts have regulated architectural coatings in California since the 1970s.

The ARB's role over the years has been to provide technical assistance to the districts in the form of industry surveys and research. To track the emission contributions of architectural coatings, an inventory was created that is based on the surveys. The ARB has also provided regulatory and policy guidance through the development of a suggested control measure (SCM) for architectural coatings that was first adopted in 1977, and was amended in 1985, 1989, and 2000. In October 2007, the Board approved an updated version of the SCM.

The 2005 Architectural Coatings Survey

In April 2005, ARB staff began conducting a survey to collect data for architectural coatings that were sold in California during calendar year 2004. The survey included coating manufacturers, distributors, importers, and retailers. Chapter 2 contains information about the companies that submitted data.

The 2005 Architectural Coatings survey requested 2004 California sales information for 52 coating categories. For each of the coating categories, the survey collected the following information:

- sales in gallons, broken down by sales in small containers (sizes of 1 quart or less) and large containers (greater than 1 quart);
- substrate description;
- type of application (interior/exterior/dual);
- vehicle technology (solvent-borne or water-borne);
- resin type;
- component description (single- or multi-component);
- coating density;
- weight percent for solids, volatiles, water, and exempt compounds;
- volume percent for solids, water, and exempt compounds;
- VOC content;
- method for VOC determination (U.S. EPA Method 24 or formulation data); and
- volatile ingredients.

A copy of the survey questionnaire is available in the Appendix. Some manufacturers considered the data provided in the survey to be trade secret and confidential. To address this concern, but still allow the publishing of survey results, the ARB implemented the historical practice of concealing all sales data values that did not represent at least three companies, otherwise known as the "Three Company Rule." In addition, this report contains summarized survey data, rather than lists of individual survey responses to further protect confidentiality. Every effort was made to reveal as much of the survey data as possible without compromising the "Three Company Rule." However, instances did arise where it was necessary to conceal certain portions of the survey results. Throughout this report the term "Protected Data" (or PD) is used to reflect that compliance with the "Three Company Rule" could not be satisfied and the data were concealed to protect company confidentiality.

Based on survey data, about **110** million gallons of architectural coatings were sold in California during 2004, with **88**% of that volume coming from water-borne products and **12**% from solvent-borne products. VOC emissions from these coatings are approximately 34,600 tons per year or almost **95** tons per day as an annual average, not including emissions from thinning, additives, and equipment cleanup. Water-borne products generate **48**% of these emissions, while the solvent-borne products generate **52**%. Survey data were also used to estimate VOC emissions from the following associated activities:

(1) Using solvent for thinning solvent-borne coatings;

(2) Using solvent for equipment cleanup after the use of solvent-borne and water-borne coatings; and
(3) Using additives to enhance the performance of water-borne coatings.

ARB estimates that these three associated activities generate more than **20** tons per day of VOC emissions. Total estimated average annual emissions are more than **115** tons per day (almost **95** tons per day from coatings only and more than **20** tons per day from thinning/cleanup/additives). More detailed information on sales and emissions data is presented in Chapters 3 and 5, respectively.

Information on VOC content was also collected for all 52 coating categories. Chapter 4 contains summaries of VOC content data that were determined by calculating sales-weighted averages for VOC Actual and VOC Regulatory. Chapter 4 also contains charts of sales plotted against VOC content. VOC Actual, also known as Material VOC, is the weight of VOCs divided by the total volume of coating. VOC Actual is usually expressed in units of grams/liter and it is the value that is used to calculate VOC emissions, which are presented in Chapter 5.

VOC Regulatory is the term that is used for regulatory purposes to establish VOC content limits. VOC Regulatory, also known as Coating VOC, is the weight of VOCs divided the volume of coating, less the volume of water and exempt compounds. The original rationale behind the VOC Regulatory value was to provide an equivalent basis for comparing the polluting portion of solvent-borne and water-borne coatings. Also, it was believed that the VOC Regulatory approach would prohibit coating manufacturers from simply diluting a coating with water to meet VOC limits.

Reported VOC Regulatory values were compared with VOC limits to determine the complying marketshares for each coating category. Complying marketshare is the percentage of sales volume that is less than or equal to an established VOC limit. Chapter 6 contains complying marketshares based on VOC limits in ARB's 2000 SCM. It also contains complying marketshares based on the South Coast Air Quality Management District's (SCAQMD) future VOC limits that are scheduled to take effect in or before 2008. Chapter 7 contains charts that provide a graphical view of complying marketshares. The charts plot percent of total sales volume against VOC Regulatory, which illustrates the percent of sales that is at or below the 2000 SCM VOC limit for each coating category.

ARB's 2005 survey included the collection of complete volume percent and weight percent data for coating components. These data included all of the parameters that are used when calculating VOC Actual and VOC Regulatory. Collection of this information allowed ARB staff to verify reported VOC content values. Chapter 8 contains sales-weighted average values for density, volume percent data, and weight percent data for all survey categories.

The 2005 survey also gathered substrate and resin data. If a coating product was designed for a specific substrate(s), survey respondents were asked to list all of the applicable substrates. Chapter 9 contains a summary of substrate and resin information.

The 2005 Architectural Coatings Survey included the collection of ingredient data for the volatile components of the coating (VOCs, exempt compounds, and water). Speciated data were not collected for the solids portion of the coatings. Chapter 10 contains more information regarding the ingredient data.

Chapter 11 provides a historical comparison of sales and emissions data, using results from all of ARB's Architectural Coatings Surveys.

The final chapter, Chapter 12, provides data analyses for coatings that were included in averaging programs, managed by ARB and the SCAQMD.

Chapter 2 -- Companies

The 2005 survey was sent to almost **900** companies that potentially sold architectural coating products in California in 2004. In some cases, the mailing list included multiple divisions within a parent company. Based on individual responses, more than one-fourth of the companies on the mailing list submitted survey data. ARB staff compiled a summary list of these companies by consolidating multiple divisions under the parent company name. As shown in Table 2-1, the consolidated list includes a total of **197** companies that submitted data. This represents an increase when compared to the previous five ARB surveys (conducted in 2001, 1998, 1993, 1989, 1985), that had an average of 156 companies submitting data. The consolidated total of 197 companies includes 51 companies that are located in California. Almost one-third of the companies on the mailing list responded but did not submit data, primarily for the following reasons: they did not have any sales of architectural coatings in California during 2004; they did not manufacture architectural coatings; or their sales were to be reported by another company. Roughly ten percent of the mailed surveys were undeliverable and almost one-third of the companies surveyed did not respond at all.

This chapter includes the following data summaries:

Table 2-1: *Survey Respondents*

Table 2-2: *Top 10 Manufacturers (based on sales volume, but sorted alphabetically)*

Figure 2-1: *Top 10 Manufacturers*

Figure 2-2: *Gross Earnings*

Figure 2-3: *Number of Employees*

Figure 2-4: *Marketing Classification*

Figure 2-5: *Method for Determining California Sales*

Figure 2-6: *Type of Business*

Table 2-1: ***Survey Respondents***

Count	Company Name	Count	Company Name
1	3M Company	41	Davlin Coatings, Inc.
2	Ace Hardware Corporation	42	Dayton Superior
3	Acrymax Technologies Inc.	43	Decosup Inc.
4	Advanced Polymer Technology Corp.	44	Deft, Inc.
5	Aervoe Industries, Inc	45	Degussa Building Systems
6	Aexcel Corporation	46	Dow Corning Corporation
7	Akzo Nobel Coatings	47	Drummond American Corporation
8	Amazon Environmental	48	Duckback Products
9	American Building Restoration Products, Inc	49	Dunn-Edwards
10	American Polymers Corporation DBA Polycoat Products	50	E.I. Dupont de Nemours and Company
11	American Safety Technologies	51	Eco Paint
12	Ameron International	52	Edoco
13	Amteco, Inc	53	Elastomeric Roofing Systems, Inc
14	Andek Corporation	54	Ellis Paint Company
15	APOC	55	Ennis Paint Inc.
16	Arizona Polymer Flooring	56	Epmar Corp.
17	Armstrong-Clark Company	57	Epro Services, Inc.
18	Basic Coatings, Inc.	58	Euclid Chemical Company
19	BayOne Urethane Systems LLC	59	Everest Coatings Inc.
20	Behr Process Corporation	60	EVR-Gard Coatings
21	Benjamin Moore & Co.	61	Faux Effects International, Inc.
22	BonaKemi USA, Inc.	62	Fields Company LLC
23	C.I.M. Industries Inc.	63	Finnaren & Haley Inc.
24	Cal Western Paints, Inc.	64	Flamort Co., Inc.
25	California Products Corporation	65	Flood Company
26	Carboline Company	66	Frazee Industries
27	Carlisle Coatings & Waterproofing Inc.	67	Gaco Western, Inc.
28	Catalina Industries, Inc.	68	Gardner-Gibson
29	Ceilcote USA,Inc	69	Garland Company
30	CGI International, Inc.	70	Gemini Coatings, Inc.
31	CMP Coatings Inc.	71	Glaze 'N Seal Products
32	Color Wheel Paint Co., Inc.	72	Glidden Company (dba: ICI Paints)
33	Colorado Paint Co.	73	Glitsa American, Inc.
34	Conklin Company, Inc.	74	Golden Artist Colors, Inc.
35	Conspec	75	Golden Pacific
36	Contract Coatings Corp.	76	Griggs Paint & Silkscreen of Domcom ENT.,INC.
37	Cresset Chemical Company	77	Gulf Coast Paint Mfg.
38	Daly's Inc.	78	Hamilton Coatings
39	Dampney Company, Inc.	79	HARCO Chemical Coatings, Inc.
40	Dap Inc.	80	Henry Company

Table 2-1: ***Survey Respondents (continued)***

Count	Company Name	Count	Company Name
81	Hill Brothers Chemical Company	121	Perma-Chink Systems, Inc.
82	Hillyard Industries, Inc.	122	Pervo Paint Company
83	Hirshfield's Paint Manufacturing	123	Pioneer Eclipse Corporation
84	Honeywell	124	Pioneer Manufacturing Co.
85	Ingels, Inc.	125	Poly-Carb, INC.
86	Insl-x Products Corporation	126	Polymerica,Inc.
87	Insulating Coatings Corporation	127	Ponderosa Paint Co., Inc.
88	Integrity Coatings, Inc.	128	PPG Industries, Inc.
89	International Coatings	129	Preserva Products, Ltd.
90	International Paint LLC/Akzo Nobel Coatings	130	Pride Paint Company
91	ITW Devcon	131	Professional Products of Kansas, Inc.
92	ITW Philadelphia Resins	132	Prosoco, Inc.
93	Jasco Chemical Corp.	133	R.J. McGlennon Co. Inc.
94	JFB Hart Coatings, Inc.	134	Reilly Industries, Inc.
95	Jones-Blair Co.	135	Rockwood Pigments
96	Karnak Corp.	136	Rodda Paint Company
97	Kelley Technical Coatings, Inc.	137	Roman Decorating Products
98	Kelly-Moore Paint Co., Inc.	138	Rudd Company
99	Koppers Inc.	139	Rust-Oleum Corp.
100	Kwal Paint Inc.	140	Samuel Cabot Inc.
101	L & M Construction Chemicals	141	Scotch Paint Corp
102	L.M. Scofield Company	142	Seal-Krete
103	LaPolla Industries, Inc.	143	SEM Products, Inc.
104	Life Paint Company	144	Seymour of Sycamore
105	Milamar Coatings, LLC	145	Sheffield Bronze Paint Corp.
106	Miller Paint Company, Inc.	146	Sherwin-Williams Co.
107	Minuteman International	147	Sierra Corp.
108	Mortex Mfg. Co., Inc.	148	Sigma Coatings USA B.V.
109	Mule-Hide Products Co.	149	Sika Corporation
110	Multicolor Specialties, Inc.	150	Simpson Coatings Group, Inc.
111	National Coatings Co.	151	SINAK Corporation
112	NCH Corporation	152	Siplast, Inc.
113	NoFire Technologies, Inc.	153	Somay Products, Inc.
114	Norton & Son of California	154	Southern Diversified Products, LLC
115	Nox-Crete Products Groups, Inc.	155	Southwest Distributing dba SWD Urethane Co.
116	Nu-Chem Inc.	156	Southwestern Petroleum Corporation
117	Old Masters	157	Specialty Coatings & Chemicals Inc
118	Pacific Polymers International	158	Specialty Construction Brands, Inc.
119	ParexLahabra, Inc.	159	Spectra-Tone Paint Corp.
120	Performance Coatings Inc.	160	SPM Thermoshield Inc.

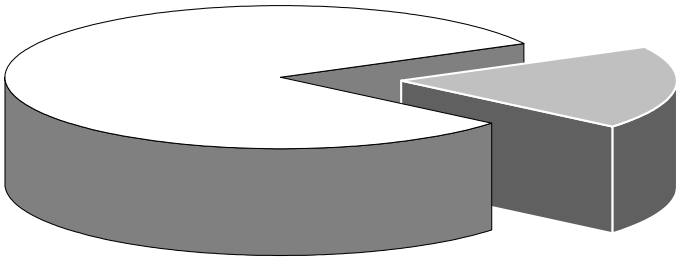
Table 2-1: ***Survey Respondents (continued)***

Count	Company Name	Count	Company Name
161	SR Products	180	United Coatings Manufacturing Co.
162	Star Bronze Company, Inc.	181	United Gilsonite Laboratories
163	StonCor Group, Inc.	182	United States Gypsum Company
164	Sumter Coatings, Inc.	183	US Mix Co.
165	Surface Protection Industries Inc.	184	Valspar Corporation
166	Symons	185	Vanex, Inc.
167	T.J. Ronan Paint Corp.	186	Visions Recycling, Inc.
168	TAMKO Building Products, Inc.	187	Vista Paint Corporation
169	Tapecoat Co.	188	W.C. Richards Co.
170	Tennant Company	189	W.R. Grace & Co. - Conn.
171	Texas Refinery Corp.	190	W.R. Meadows Inc.
172	Textured Coatings of America	191	Waterlox Coatings Corp.
173	ThorWorks Industries, Inc.	192	Wijzonol Bouwverven International B.V.
174	TMT Pathway	193	Willamette Valley Company
175	Tnemec Company Inc.	194	XIM Products
176	Tremco Incorporated	195	Yenkin-Majestic Paint Corporation
177	Trinity Coatings Co.	196	Zinsser Co., Inc.
178	Tropical Asphalt, LLC	197	ZRC Worldwide
179	True Value Manufacturing		

Table 2-2: ***Top 10 Manufacturers (based on sales volume, but sorted alphabetically)***

Company Name
Behr Process Corporation
Benjamin Moore & Co.
Dunn-Edwards
Frazee Industries
Glidden Company (dba: ICI Paints)
Henry Company
Kelly-Moore Paint Co., Inc.
Sherwin-Williams Co.
Valspar Corporation
Vista Paint Corporation

Figure 2-1
Top 10 Manufacturers



Top 10 manufacturers account for 81% of total sales

Remaining manufacturers account for 19% of total sales

Figure 2-2
Survey Respondents' Gross Earnings

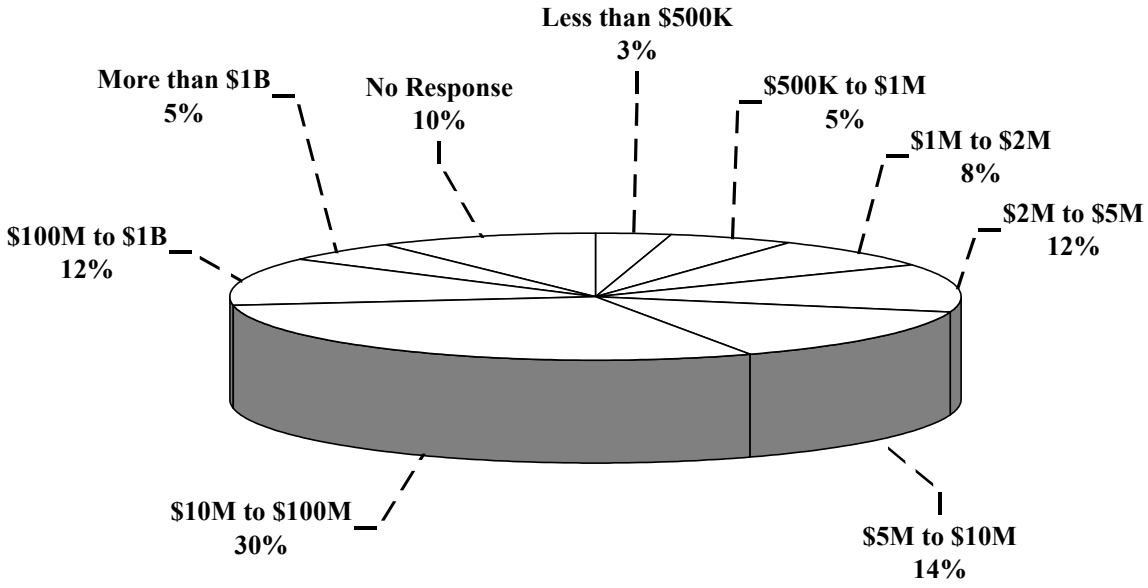
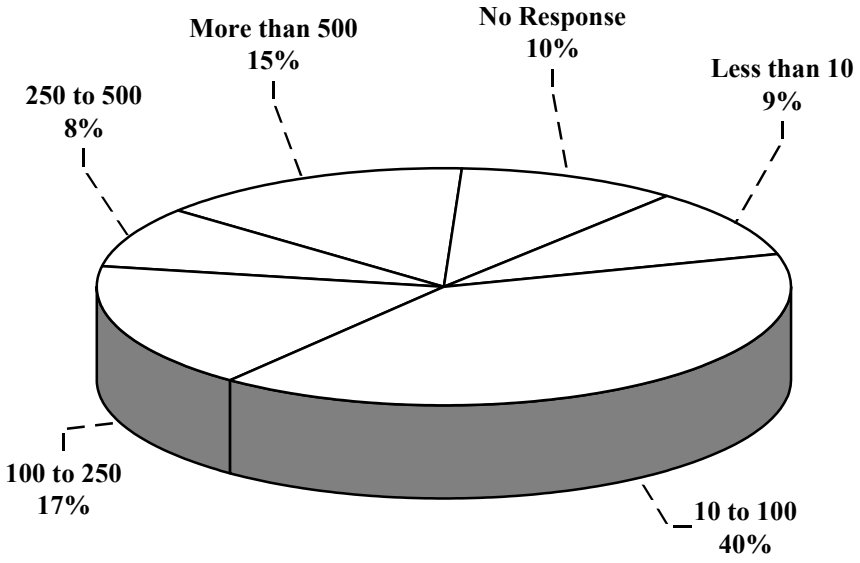
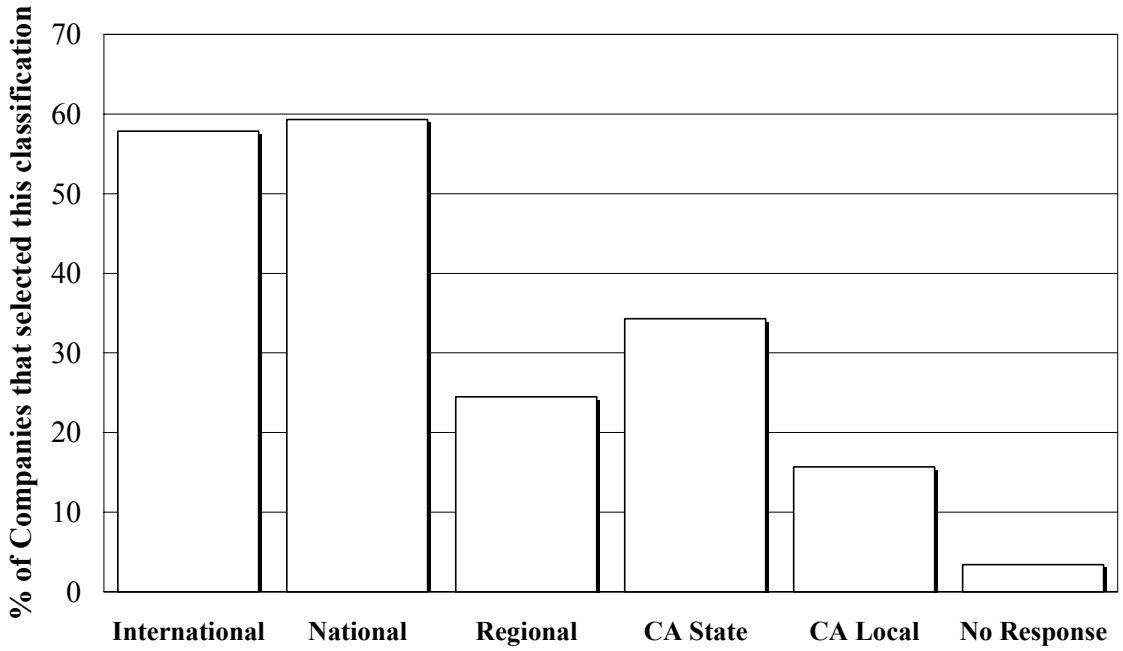


Figure 2-3
Survey Respondents' Number of Employees



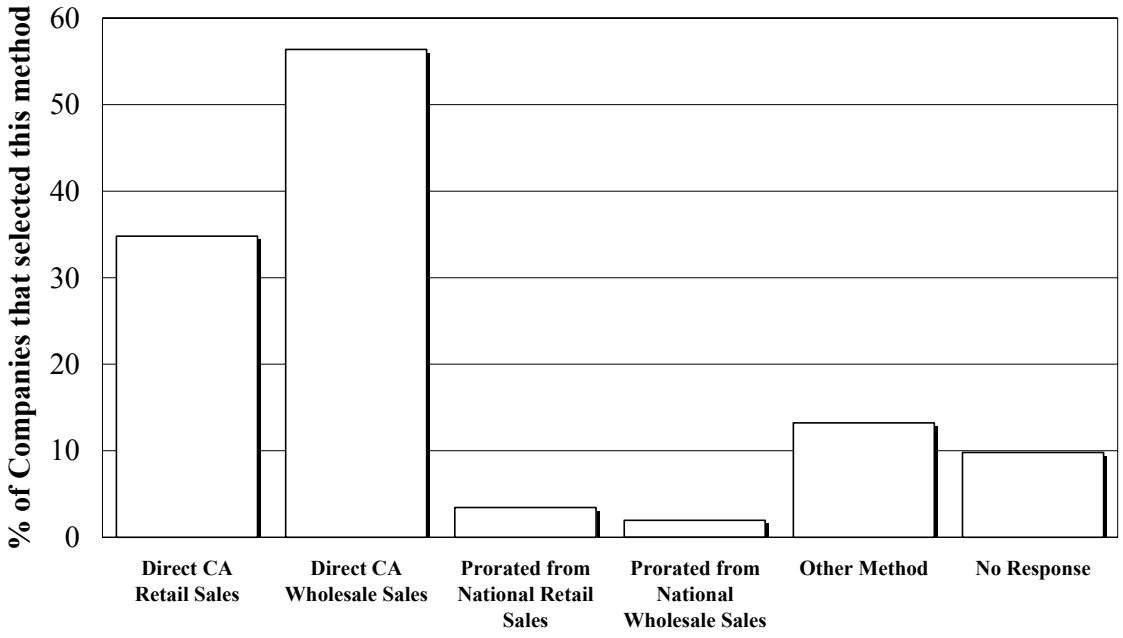
The 2005 survey collected data on marketing classification. Survey respondents were allowed to select multiple classifications (e.g., international and regional) and **52**% of the companies reported more than one classification. Figure 2-4 illustrates the percentage of companies that selected a particular marketing classification. Please note that the total percentage is greater than 100%, because companies could select multiple classifications.

Figure 2-4
Survey Respondents' Marketing Classifications



The 2005 survey collected data on the methods that were used to determine the sales of architectural coatings in California. Survey respondents were allowed to select multiple methods (e.g., direct California wholesale and Other) and **18**% of the companies reported more than one method. Figure 2-5 illustrates the percentage of companies that selected a particular method for determining California sales. Please note that the total percentage is greater than 100%, because companies could select multiple methods.

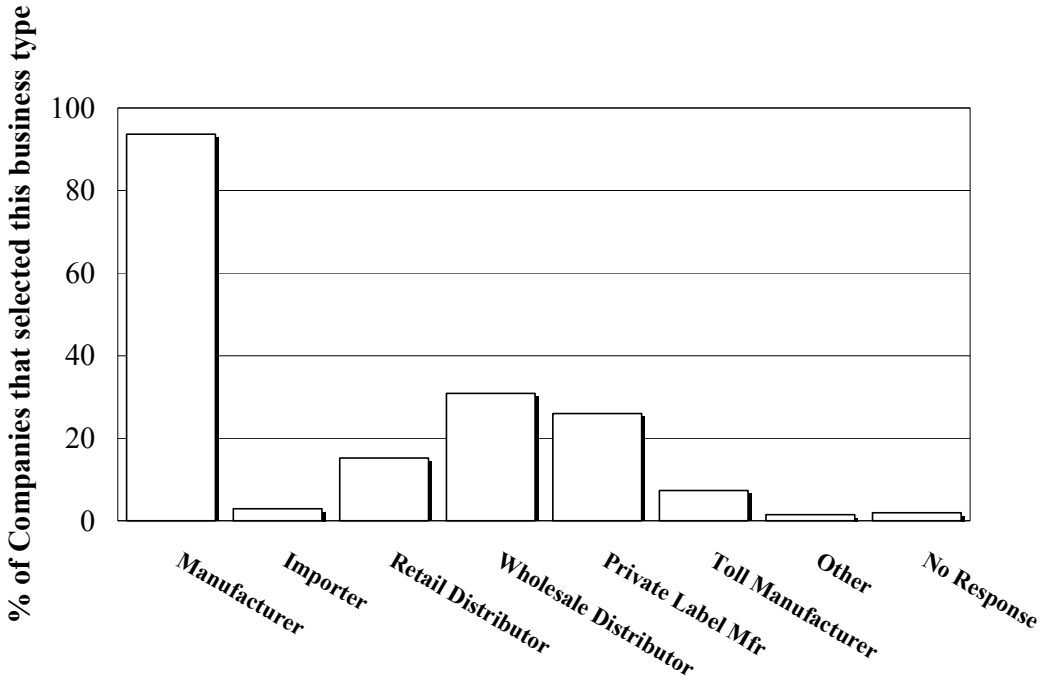
Figure 2-5
Method for Determining California Sales



Notes:
Under "Other Method" of determining sales, companies generally reported slight variations of the standard methods based on retail and wholesale sales. In addition, some companies reported direct sales to the end user.

The survey gathered data on the type of business (e.g., manufacturer, wholesale distributor, etc.). Survey respondents were allowed to select multiple descriptions for their business type and **45**% of the companies reported more than one type. Figure 2-6 illustrates the percentage of companies that selected a particular business type. Please note that the total percentage is greater than 100%, because companies could select multiple types.

Figure 2-6
Type of Business



Chapter 3 -- Sales

Based on survey data, approximately **110** million gallons of architectural coatings were sold in California during 2004. To determine the accuracy of these sales figures, we consulted the U.S. Census Bureau's Current Industrial Reports for Paint and Allied Products for calendar year 2004. This report includes nationwide data for shipments of the following categories: architectural coatings; industrial new construction and maintenance paints; and traffic marking paints. Total nationwide shipments in 2004 for these three categories were approximately **916** million gallons, which represents more than a 25% increase from the 2000 value of 727 million gallons. Since California represents 12% of the national population, we assumed that California shipments were approximately equal to 12% of the nationwide total for the above-listed categories or **110** million gallons. We then compared the census data to the sales reported in our survey and found that our survey total is the same as the estimate based on census data. Therefore, we feel confident that the survey captured the California sales information adequately.

The reported sales for the survey include products sold to professional paint contractors as well as to homeowners or "do-it-yourselfers". According to an industry survey, professional paint contractors accounted for almost 70% of the architectural coating sales in 2000 for the Western United States[1].

This chapter includes the following data summaries:

Table 3-1: *Sales by Category (sorted by category)*

Table 3-2: *Sales by Category (sorted by volume in descending order)*

Table 3-3: *Sales by Category (based on container size)*

Figure 3-1: *Solvent-borne and Water-borne Sales*

Figure 3-2: *Top 10 Coating Categories*

Figure 3-3: *Sales by Container Size*

[1] Scott Detivaux and Chuck Bangert, "Regional Variation in the Architectural Coatings Market – It Is Not One Market!", Paint & Coatings Industry, September 2001.

Table 3-1 lists total sales for coating categories, as well as sub-totals for solvent-borne and water-borne sales in each category. In addition, the table contains a percentage breakdown for recommended exposure (i.e., interior, exterior, or dual exposure).

Table 3-1: *Sales by Category*

Coating Category	2004 Sales Including Quarts (gallons)			% SB	% WB	% Int	% Ext	% Dual
	Total	Solvent-borne	Water-borne					
Bituminous Roof	1,464,326	133,728	1,330,598	9	91	0	100	0
Bituminous Roof Primer	68,092	59,968	8,124	88	12	0	100	0
Bond Breakers	187,785	PD	PD	PD	PD	0	100	0
Clear Brushing Lacquer	PD	PD	0	100	0	100	0	0
Concrete Curing Compounds	793,566	43,771	749,795	6	94	0	35	65
Driveway Sealer	2,205,366	PD	PD	PD	PD	0	100	0
Dry Fog	377,707	187,112	190,595	50	50	97	1	2
Faux Finishing	303,810	4,430	299,379	1	99	98	0	2
Fire Resistive	12,577	PD	PD	PD	PD	91	0	9
Fire Retardant - Clear	PD	PD	0	100	0	57	0	43
Fire Retardant - Opaque	200,150	PD	PD	PD	PD	100	0	0
Flat	37,264,874	4,082	37,260,792	0	100	49	36	15
Floor	1,239,892	71,170	1,168,722	6	94	7	0	93
Form Release Compounds	323,612	284,655	38,957	88	12	0	4	96
Graphic Arts	PD	PD	PD	PD	PD	0	0	100
High Temperature	11,736	11,736	0	100	0	9	0	91
Industrial Maintenance	2,137,772	1,422,836	714,936	67	33	13	9	78
Lacquers	1,291,571	937,855	353,715	73	27	94	0	5
Low Solids	65,680	0	65,680	0	100	0	88	12
Magnesite Cement	PD	PD	0	100	0	0	100	0
Mastic Texture	677,063	PD	PD	PD	PD	0	77	23
Metallic Pigmented	570,977	438,025	132,953	77	23	1	90	9
Multi-Color	13,635	PD	PD	PD	PD	100	0	0
Nonflat - High Gloss	1,760,459	40,777	1,719,682	2	98	42	1	58
Nonflat - Low Gloss	12,023,079	3,856	12,019,222	0	100	68	15	18
Nonflat - Medium Gloss	20,072,832	77,878	19,994,953	0	100	55	13	31
Other	89,473	2,576	86,896	3	97	57	25	18
Pre-Treatment Wash Primer	4,959	PD	PD	PD	PD	0	0	100
Primer, Sealer, and Undercoater	10,402,018	225,380	10,176,638	2	98	38	11	52
Quick Dry Enamel	763,266	713,196	50,070	93	7	30	13	57
Quick Dry Primer, Sealer, and Undercoater	249,710	220,361	29,349	88	12	46	0	54
Recycled	223,381	0	223,381	0	100	0	46	54
Roof	1,406,889	42,967	1,363,922	3	97	0	100	0
Rust Preventative	2,095,500	2,004,661	90,839	96	4	29	6	66
Sanding Sealers	84,273	60,457	23,816	72	28	100	0	0
Shellacs - Clear	PD	PD	0	100	0	100	0	0
Shellacs - Opaque	PD	PD	0	100	0	0	0	100

Table 3-1: ***Sales by Category***

Coating Category	2004 Sales Including Quarts (gallons)			% SB	% WB	% Int	% Ext	% Dual
	Total	Solvent-borne	Water-borne					
Specialty Primer, Sealer, and Undercoater	2,009,464	1,532,541	476,924	76	24	2	6	92
Stains - Clear/Semitransparent	1,865,237	1,462,300	402,937	78	22	26	55	19
Stains - Opaque	957,506	20,627	936,880	2	98	0	98	2
Swimming Pool	20,364	9,828	10,536	48	52	0	24	76
Swimming Pool Repair and Maintenance	PD	PD	0	100	0	0	77	23
Traffic Marking	2,214,451	329,369	1,885,082	15	85	0	96	4
Varnishes - Clear	970,695	694,415	276,280	72	28	76	11	13
Varnishes - Semitransparent	89,303	86,302	3,001	97	3	96	4	0
Waterproofing Concrete/Masonry Sealers	1,908,378	955,355	953,023	50	50	0	36	64
Waterproofing Sealers	1,511,911	195,212	1,316,699	13	87	3	68	30
Wood Preservatives	173,846	164,236	9,610	94	6	0	100	0
TOTAL:	**110,407,721**	**13,053,035**	**97,354,686**	**12**	**88**	**43**	**29**	**28**

Notes:

1. PD = Protected Data. Fewer than three companies reported sales. If fewer than three companies reported sales for either solvent-borne or water-borne, data was protected for both solvent-borne and water-borne.
2. The sales volumes in this table include sales of small containers (1 quart or less).
3. No sales were reported for the following categories: Antenna; Antifouling; Flow; and Temperature Indicator Safety.

Notes on specific coating categories:

Recycled: All of the recycled paint was reported for either dual or exterior applications. Recycled paint is often marketed for graffiti abatement purposes and it is generally formulated to withstand exterior exposures.

Swimming Pool and Swimming Pool Repair and Maintenance: A significant percentage of the swimming pool coatings were designated as being intended for Dual (Interior/Exterior) applications, rather than just exterior as would be expected. Some of the product literature for swimming pool coatings mentions their application for indoor pools. Water-borne coatings are sometimes recommended for indoor pools, but epoxy coatings may also be used for indoor pools to provide greater durability.

Traffic Marking: In the Traffic Marking coatings category, a small percentage of the sales volume is intended for Dual (Interior/Exterior) applications, rather than just exterior as would be expected. Some traffic coatings are used for interior applications (e.g., for marking lines in warehouses) and one manufacturer labels products as interior/exterior traffic coatings.

Provided below are the major clarifications and interpretations that ARB staff used when reviewing survey data to determine whether products had been placed in the most appropriate category.

Bituminous Roof, Bituminous Roof Primers, and Roof: Some companies reported roofing products that are adhesives, lap cements, repair products, or flashing cements. We removed these products from the survey data, because they are adhesives and sealants, rather than architectural coatings. These products should be subject to local air district rules for adhesives and sealants.

The definition for the Bituminous Roof includes the term "exclusively for roofing". However, some of the products that were reported as Bituminous Roof coatings could also be used on foundations and walls for waterproofing or dampproofing. These products were kept in the Bituminous Roof category.

Floor: Products that were reported as Floor coatings required a good deal of recategorization. In general, Floor coatings should be opaque products that include: deck, porch, and stair paints; and garage floor coatings. If the coating met the Floor definition, but also claimed the resistances for the Waterproofing Concrete/Masonry Sealers category, we moved it to Waterproofing Concrete/Masonry Sealers. If the coating was clear, but had no resistances specified, then we moved it to Waterproofing Sealers. If the coating was clear, but was designed for wood substrates, we moved it to Varnishes. If the coating was intended for floors in an industrial environment (e.g., chemical plant, food processing plant, etc.), we moved it to Industrial Maintenance.

Industrial Maintenance: In general, if a coating met a category definition, but the coating was primarily intended for use in an industrial setting (e.g., chemical plant, food processing plant, refinery, etc.), then we put it in the Industrial Maintenance category. This was the case for coatings reported as: Floor; Mastic Texture; Primer, Sealer, and Undercoater; Quick Dry Enamel; Quick Dry Primer, Sealer, and Undercoater; Rust Preventative; Waterproofing Concrete/Masonry Sealer; and Waterproofing Sealer.

Some anti-graffiti coatings that were reported as "Other" were put into the Industrial Maintenance category. Bituminous pipe and tank coatings were also put into the Industrial Maintenance category. If a product was reported as an Industrial Maintenance coating, but it met the Metallic Pigmented definition, we moved it to the Metallic Pigmented category.

Low Solids: There were many products that met the Low Solids criteria (1 pound or less of solids per gallon), but were reported in other categories. These products were kept in their reported categories.

Metallic Pigmented: As has historically been the case, the Metallic Pigmented category consists primarily of aluminum roof coatings, with smaller volumes of decorative metallic coatings and zinc-rich primers.

Primers, Sealers, and Undercoaters: Products that were reported as Primers, Sealers, and Undercoaters required a good deal of recategorization. If the coating had stain-blocking ability (e.g., for tannins) or any other Specialty PSU characteristics, we moved the coating to Specialty PSU. Products that were designed for use in an industrial setting were moved to the Industrial Maintenance category. If the coating was a rust inhibitor or had rust preventative properties, and was not intended for use in an industrial setting, we moved it to the Rust Preventative category. If the coating was a concrete sealer that was not topcoated, then we moved it to Waterproofing Sealers, or to Waterproofing Concrete/Masonry Sealers if it had the necessary resistances. If the coating was an oil finish that penetrated and sealed (e.g., Tung Oil or Teak Oil), then we moved it to Stains – Clear/Semitransparent. If it was a wood sealer that was not topcoated, then we moved it to Waterproofing Sealers. If the coating was a primer for non-bituminous roof coatings, we moved it to Roof Coatings.

Rust Preventative: Rust Preventative or rust inhibitor coatings used in a non-industrial setting (e.g., coatings applied by maintenance personnel), were kept in the Rust Preventative category. If the coating had industrial chemical and environmental resistances, we moved it to the Industrial Maintenance category.

Sanding Sealers: Lacquer Sanding Sealers reported as Sanding Sealers were moved to Lacquers.

Stains – Clear/Semitransparent: Some of the reported Stains also provide a film-forming protective finish. These products were moved to the Varnish category. Oil finishes that penetrate and seal (e.g., Tung Oils or Teak Oils) that were reported as Varnishes were moved to Stains – Clear/Semitransparent.

Traffic Marking: Solid thermoplastic traffic coatings that are melted onto a roadway were removed from the survey data.

Waterproofing Concrete/Masonry Sealers: Waterproofing Concrete/Masonry Sealers (WCMS) included coatings used for a wide variety of applications, such as: parking garages; bridge decks; exterior walls on houses and tilt-up buildings; non-skid floors; basements; floors in commercial, institutional, and retail establishments; foundations and walls that need dampproofing; and pool decks. The definition for the WCMS category includes the term “film-forming”. Some of the reported products were penetrating, rather than film-forming, but they were kept in the WCMS category if they met most of the definition. Some products that were reported as WCMS were moved to the Industrial Maintenance category if they appeared to be primarily marketed for industrial applications (e.g., manufacturing plants, chemical plants, water treatment facilities, etc.)

Table 3-2 illustrates the ranking of coating categories, based on sales volumes. This table does not include data for coating categories that had protected sales data.

Table 3-2: *Sales by Category* *(sorted by volume in descending order)*

Coating Category	2004 Sales (gallons)
Flat	37,264,874
Nonflat - Medium Gloss	20,072,832
Nonflat - Low Gloss	12,023,079
Primer, Sealer, and Undercoater	10,402,018
Traffic Marking	2,214,451
Industrial Maintenance	2,137,772
Rust Preventative	2,095,500
Specialty Primer, Sealer, and Undercoater	2,009,464
Waterproofing Concrete/Masonry Sealers	1,908,378
Stains - Clear/Semitransparent	1,865,237
Nonflat - High Gloss	1,760,459
Waterproofing Sealers	1,511,911
Bituminous Roof	1,464,326
Roof	1,406,889
Lacquers	1,291,571
Floor	1,239,892
Varnishes - Clear	970,695
Stains - Opaque	957,506
Concrete Curing Compounds	793,566
Quick Dry Enamel	763,266
Metallic Pigmented	570,977
Dry Fog	377,707
Form Release Compounds	323,612
Faux Finishing	303,810
Quick Dry Primer, Sealer, and Undercoater	249,710
Recycled	223,381
Wood Preservatives	173,846
Other	89,473
Varnishes - Semitransparent	89,303
Sanding Sealers	84,273
Bituminous Roof Primer	68,092
Low Solids	65,680
Swimming Pool	20,364
High Temperature	11,736

Notes:
1. The sales volumes in this table include sales of small containers (1 quart or less).
2. This table does not include data for coating categories that had protected sales data.
3. The "Other" coating category consists primarily of asbestos encapsulants, concrete dustproofers/hardeners, and tub and tile refinishing products.

Table 3-3 displays the sales for each category by small containers and large containers, including the percentage of sales in small containers. The percentage of sales in small containers for the 2005 survey was almost identical to the percentage for the 2001 survey.

Table 3-3: ***Sales by Category (based on container size)***

Coating Category	Total	Small Containers (<= 1 quart)	Large Containers (> 1 quart)	% Small Containers
Bituminous Roof	1,464,326	3,289	1,461,037	0%
Bituminous Roof Primer	68,092	0	68,092	0%
Bond Breakers	187,785	0	187,785	0%
Clear Brushing Lacquer	PD	PD	PD	24%
Concrete Curing Compounds	793,566	0	793,566	0%
Driveway Sealer	2,205,366	0	2,205,366	0%
Dry Fog	377,707	4,665	373,042	1%
Faux Finishing	303,810	68,571	235,239	23%
Fire Resistive	12,577	0	12,577	0%
Fire Retardant - Clear	PD	PD	PD	1%
Fire Retardant - Opaque	200,150	612	199,538	0%
Flat	37,264,874	571,525	36,693,348	2%
Floor	1,239,892	9,461	1,230,431	1%
Form Release Compounds	323,612	0	323,612	0%
Graphic Arts	PD	PD	PD	80%
High Temperature	11,736	3,620	8,116	31%
Industrial Maintenance	2,137,772	25,855	2,111,917	1%
Lacquers	1,291,571	33,975	1,257,596	3%
Low Solids	65,680	390	65,290	1%
Magnesite Cement	PD	PD	PD	0%
Mastic Texture	677,063	0	677,063	0%
Metallic Pigmented	570,977	13,384	557,593	2%
Multi-Color	13,635	263	13,372	2%
Nonflat - High Gloss	1,760,459	47,655	1,712,804	3%
Nonflat - Low Gloss	12,023,079	422,156	11,600,922	4%
Nonflat - Medium Gloss	20,072,832	811,163	19,261,669	4%
Other	89,473	593	88,880	1%
Pre-Treatment Wash Primer	4,959	1,050	3,909	21%
Primer, Sealer, and Undercoater	10,402,018	183,359	10,218,660	2%
Quick Dry Enamel	763,266	16,261	747,005	2%
Quick Dry Primer, Sealer, and Undercoater	249,710	8,595	241,115	3%
Recycled	223,381	0	223,381	0%
Roof	1,406,889	4,600	1,402,289	0%
Rust Preventative	2,095,500	232,389	1,863,110	11%
Sanding Sealers	84,273	44,477	39,796	53%

Table 3-3: ***Sales by Category (based on container size)***

Coating Category	Total	Small Containers (<= 1 quart)	Large Containers (> 1 quart)	% Small Containers
Shellacs - Clear	PD	PD	PD	27%
Shellacs - Opaque	PD	PD	PD	2%
Specialty Primer, Sealer, and Undercoater	2,009,464	47,315	1,962,149	2%
Stains - Clear/Semitransparent	1,865,237	539,236	1,326,001	29%
Stains - Opaque	957,506	3,431	954,075	0%
Swimming Pool	20,364	0	20,364	0%
Swimming Pool Repair and Maintenance	PD	PD	PD	0%
Traffic Marking	2,214,451	125	2,214,326	0%
Varnishes - Clear	970,695	504,466	466,229	52%
Varnishes - Semitransparent	89,303	84,160	5,143	94%
Waterproofing Concrete/Masonry Sealers	1,908,378	10,962	1,897,416	1%
Waterproofing Sealers	1,511,911	4,703	1,507,208	0%
Wood Preservatives	173,846	15,036	158,810	9%
TOTAL:	**110,407,721**	**3,754,758**	**106,652,963**	**3%**

Notes:

1. PD = Protected Data. Fewer than three companies reported sales (to be consistent with the protected data in Table 3-1).
2. No sales were reported for the following categories: Antenna; Antifouling; Flow; and Temperature Indicator Safety.

The proportions of solvent-borne and water-borne coatings are graphically illustrated in Figure 3-1, while Figure 3-2 highlights the top ten coating categories, based on sales volume.

Figure 3-1
Water-borne and Solvent-borne Sales

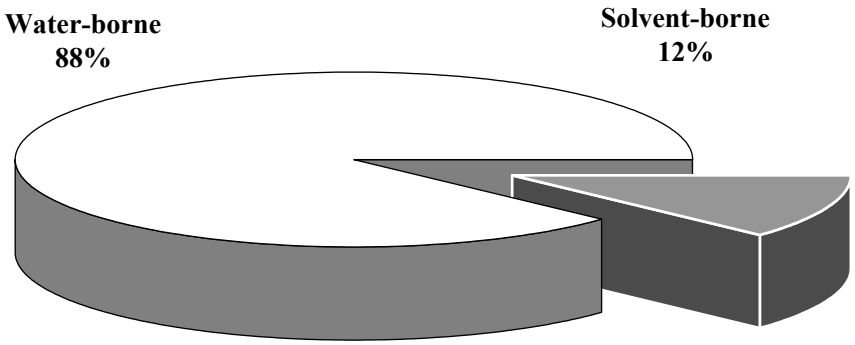
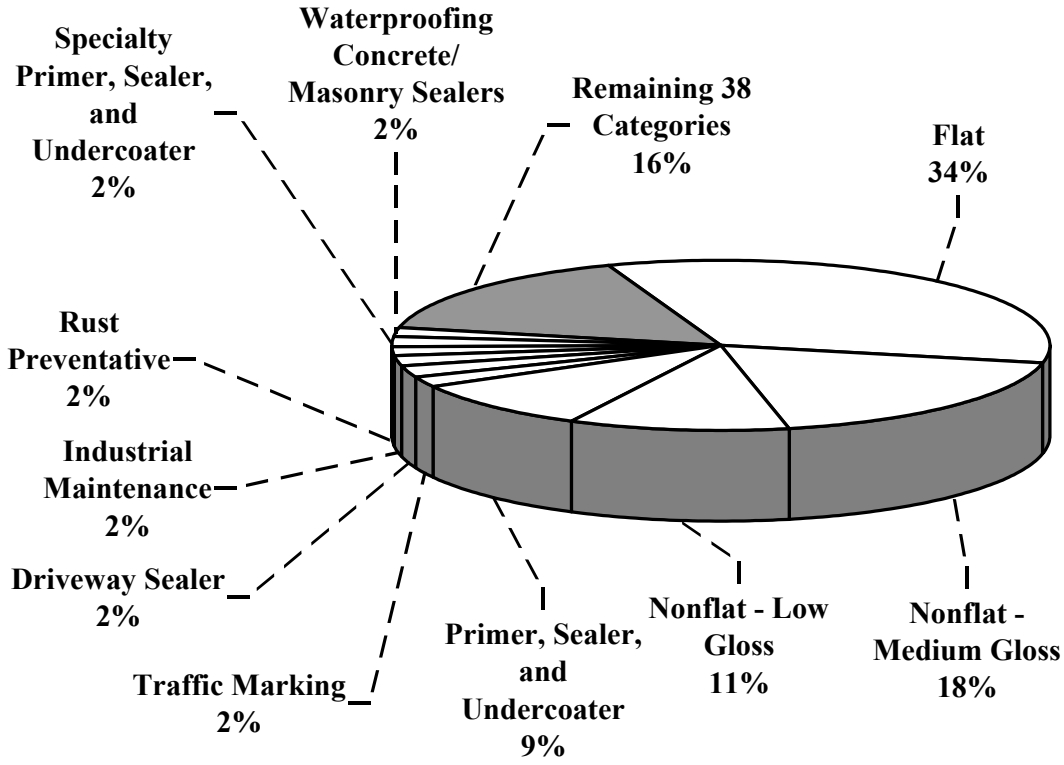


Figure 3-2
Top 10 Sales Categories

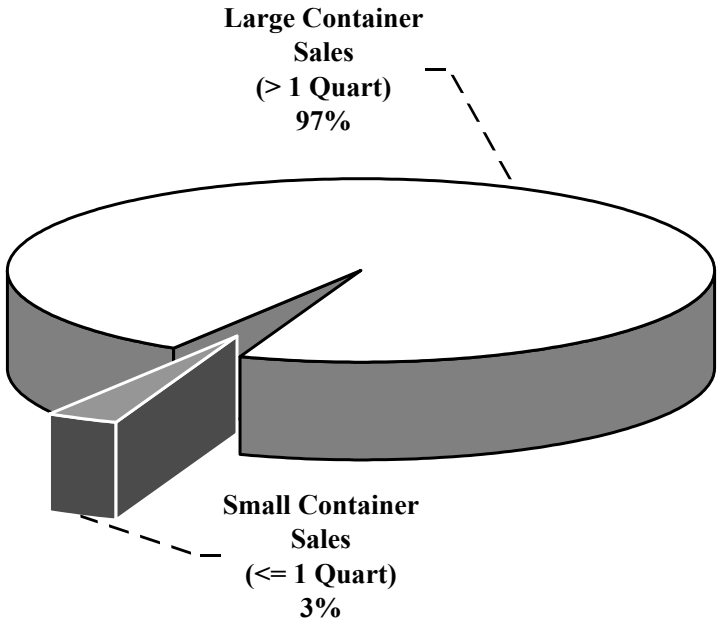


Top 10 categories account for 84% of total Sales.

Figure 3-3 illustrates the sales quantities for the following two container sizes:

- Large Containers - Greater than one quart (e.g., 1-gallon or 5-gallon)
- Small Containers - 1 quart or less

Figure 3-3
Sales by Container Size



Chapter 4 -- VOC Contents and VOC Distribution Histograms

The 2005 survey collected data on VOC Regulatory and VOC Actual values. The VOC could either be based on formulation data or U.S. EPA Method 24 laboratory results. Most survey respondents relied on formulation data to determine VOC content. The 2005 survey also collected data for the physical parameters that were used to calculate the VOC values (e.g., weight percent solids, etc.) ARB staff was then able to verify whether the reported parameters were consistent with the calculated VOC content, using the following equations:

$$VOC_{Actual} = \frac{W_{vm} - W_w - W_e}{V_c}$$

(Also known as Material VOC)

$$VOC_{Regulatory} = \frac{W_{vm} - W_w - W_e}{V_c - V_w - V_e}$$

(Also known as Coating VOC)

$$VOC_{Regulatory\ (Low\ Solids)} = \frac{W_{vm} - W_w - W_e}{V_c}$$

Where:

W_{vm} = Total weight of volatile materials (VOC + water + exempt compounds) in the coating, in grams
W_w = Weight of water in the coating, in grams
W_e = Weight of exempt compounds in the coating, in grams
V_c = Total volume of the coating, in liters
V_w = Volume of water in the coating, in liters
V_e = Volume of exempt compounds in the coating, in liters

This chapter contains data on sales-weighted average (SWA) VOC contents that were calculated for each category using the following equation:

$$SWA = \frac{((Value_1 \times Sales_1) + (Value_2 \times Sales_2) + (Value_n \times Sales_n))}{(Sales_1 + Sales_2 + Sales_n)}$$

Where:

Value $_{(1,2,...n)}$ = Coating characteristic values (e.g., VOC Actual, VOC Regulatory, etc.) for products 1,2,...n
Sales $_{(1,2,...n)}$ = Sales for products 1,2,...n

This chapter includes the following data summaries:

Table 4-1: *VOC Regulatory Contents*
Table 4-2: *VOC Actual Contents*

Figures 4-1 to 4-33: *VOC Distribution Histograms (includes two charts per category)*
a. Sales Volume vs. VOC Regulatory
b. Sales Volume vs. Weight Percent VOC

Sales of small containers (one quart or less) were included when calculating the sales-weighted average VOC contents in Table 4-1 and Table 4-2. In most categories, the VOC contents for water-borne coatings are substantially less than the value for solvent-borne coatings. However, there are some water-borne coatings that have a relatively high VOC value. This is due to the fact that some water-borne coatings can still contain an appreciable amount of organic solvent. It is also a result of the methods that manufacturers used to determine whether a coating was water-borne or solvent-borne. Some manufacturers chose to classify coatings based on the percentage of water in the coating. Other manufacturers classified coatings based on whether the coating equipment was cleaned with water or an organic solvent. If a coating contained a relatively large amount of organic solvent, but it could be cleaned with water, it could be classified as water-borne and the VOC value could seem to be higher than expected for a typical water-borne coating.

Table 4-1: *VOC Regulatory Contents*

Coating Category	SWA VOC REGULATORY (g/l)					
	All	**SB**	**WB**	**Int**	**Ext**	**Dual**
Bituminous Roof	26	252	3	NA	26	NA
Bituminous Roof Primer	324	346	167	NA	324	NA
Bond Breakers	302	717	300	NA	302	NA
Clear Brushing Lacquer	666	666	NA	666	NA	612
Concrete Curing Compounds	166	344	155	560	222	136
Driveway Sealer	3	439	2	NA	3	NA
Dry Fog	233	361	107	231	80	384
Faux Finishing	257	392	255	257	NA	273
Fire Resistive	123	279	18	130	NA	60
Fire Retardant - Clear	531	531	NA	527	NA	536
Fire Retardant - Opaque	317	348	39	318	NA	57
Flat	82	331	82	81	80	87
Floor	106	239	98	87	154	107
Form Release Compounds	233	243	158	NA	100	238
Graphic Arts	352	385	211	NA	NA	352
High Temperature	407	407	NA	279	NA	420
Industrial Maintenance	205	224	168	138	234	214
Lacquers	455	570	151	472	145	166
Low Solids	60	NA	60	28	65	26
Magnesite Cement	446	446	NA	NA	446	NA
Mastic Texture	101	248	70	NA	74	193
Metallic Pigmented	344	425	77	244	351	282
Multi-Color	103	551	94	103	NA	NA
Nonflat - High Gloss	151	373	146	144	172	157
Nonflat - Low Gloss	118	402	118	118	106	126
Nonflat - Medium Gloss	129	372	128	119	123	148
Other	66	520	53	82	70	11

Table 4-1: ***VOC Regulatory Contents***

Coating Category	SWA VOC REGULATORY (g/l)					
	All	**SB**	**WB**	**Int**	**Ext**	**Dual**
Pre-Treatment Wash Primer	266	747	132	NA	NA	266
Primer, Sealer, and Undercoater	128	371	122	115	139	135
Quick Dry Enamel	380	390	237	375	392	381
Quick Dry Primer, Sealer, and Undercoater	364	410	20	440	460	299
Recycled	193	NA	193	NA	213	175
Roof	46	232	40	NA	46	NA
Rust Preventative	368	376	198	365	306	375
Sanding Sealers	418	516	170	418	NA	513
Shellacs - Clear	617	617	NA	617	NA	NA
Shellacs - Opaque	521	521	NA	NA	NA	521
Specialty Primer, Sealer, and Undercoater	283	343	89	129	296	286
Stains - Clear/Semitransparent	339	367	240	486	270	338
Stains - Opaque	107	300	103	NA	106	145
Swimming Pool	250	304	199	NA	273	242
Swimming Pool Repair and Maintenance	588	588	NA	NA	587	590
Traffic Marking	101	147	93	NA	101	92
Varnishes - Clear	397	458	243	402	330	422
Varnishes - Semitransparent	433	439	260	439	277	NA
Waterproofing Concrete/Masonry Sealers	194	248	140	46	175	206
Waterproofing Sealers	186	297	170	180	236	72
Wood Preservatives	325	327	292	NA	325	917

Notes:
1. SB = Solvent-borne; WB = Water-borne
2. Int = Interior Exposure; Ext = Exterior Exposure; Dual = Interior and Exterior Exposure
3. NA = Not applicable. No sales were reported for this subcategory.
4. Sales of small containers (one quart or less) were included when calculating the sales-weighted average VOC contents.
5. For Low Solids coatings, VOC Regulatory equals VOC Actual.
6. The "Other" category consists primarily of asbestos encapsulants, concrete dustproofers/hardeners, and tub and tile refinishing products. Most of the sales volume for the "Other" category consists of water-borne products.

Notes on specific coating categories:

Wood Preservatives: The sales-weighted average VOC Regulatory value for water-borne Wood Preservatives seems high. A large portion of the volume for water-borne Wood Preservatives includes products that have low solids percentages and, therefore, could have been reported in the "Low Solids" category. Products with low solids percentages can have unusually high VOC Regulatory values, due to the

structure of the VOC Regulatory equation. If some of the Wood Preservatives had been reported in the "Low Solids" category, the VOC Regulatory value for those products would be much lower, because VOC Regulatory equals VOC Actual for the "Low Solids" category.

Table 4-2: *VOC Actual Contents*

	SWA VOC ACTUAL (g/l)					
Coating Category	**All**	**SB**	**WB**	**Int**	**Ext**	**Dual**
Bituminous Roof	25	250	2	NA	25	NA
Bituminous Roof Primer	309	341	71	NA	309	NA
Bond Breakers	79	717	76	NA	79	NA
Clear Brushing Lacquer	666	666	NA	666	NA	612
Concrete Curing Compounds	47	225	37	560	67	37
Driveway Sealer	2	439	1	NA	2	NA
Dry Fog	189	321	60	186	37	371
Faux Finishing	99	392	95	100	NA	40
Fire Resistive	117	278	8	123	NA	60
Fire Retardant - Clear	531	531	NA	527	NA	536
Fire Retardant - Opaque	315	348	15	316	NA	40
Flat	32	328	32	32	32	37
Floor	51	238	40	66	66	50
Form Release Compounds	217	242	32	NA	98	222
Graphic Arts	331	385	107	NA	NA	331
High Temperature	364	364	NA	279	NA	373
Industrial Maintenance	175	222	79	126	171	183
Lacquers	244	313	63	254	59	82
Low Solids	60	NA	60	28	65	26
Magnesite Cement	305	305	NA	NA	305	NA
Mastic Texture	66	193	39	NA	45	139
Metallic Pigmented	332	425	28	132	340	269
Multi-Color	30	309	25	30	NA	NA
Nonflat - High Gloss	67	373	59	59	136	72
Nonflat - Low Gloss	48	401	48	48	43	54
Nonflat - Medium Gloss	51	372	50	46	47	63
Other	24	499	10	30	26	5
Pre-Treatment Wash Primer	189	742	35	NA	NA	189
Primer, Sealer, and Undercoater	54	362	47	43	80	57
Quick Dry Enamel	371	389	107	373	388	366
Quick Dry Primer, Sealer, and Undercoater	359	405	10	440	460	290
Roof	25	230	18	NA	25	NA
Rust Preventative	363	375	87	364	281	369
Sanding Sealers	381	510	53	381	NA	495

Table 4-2: *VOC Actual Contents*

	SWA VOC ACTUAL (g/l)					
Coating Category	**All**	**SB**	**WB**	**Int**	**Ext**	**Dual**
Shellacs - Clear	581	581	NA	581	NA	NA
Shellacs - Opaque	489	489	NA	NA	NA	489
Specialty Primer, Sealer, and Undercoater	272	343	42	90	285	275
Stains - Clear/Semitransparent	295	357	71	452	206	338
Stains - Opaque	44	288	39	NA	44	42
Swimming Pool	189	304	82	NA	207	183
Swimming Pool Repair and Maintenance	588	588	NA	NA	587	590
Traffic Marking	66	96	61	NA	67	47
Varnishes - Clear	354	458	92	352	297	415
Varnishes - Semitransparent	426	439	60	438	122	NA
Waterproofing Concrete/Masonry Sealers	129	205	52	22	138	125
Waterproofing Sealers	83	269	55	30	106	34
Wood Preservatives	311	327	43	NA	311	917

Notes:
1. SB = Solvent-borne; WB = Water-borne
2. Int = Interior Exposure; Ext = Exterior Exposure; Dual = Interior and Exterior Exposure
3. NA = Not applicable. No sales were reported for this subcategory.
4. Sales of small containers (one quart or less) were included when calculating the sales-weighted average VOC contents.
5. The "Other" category consists primarily of asbestos encapsulants, concrete dustproofers/hardeners, and tub and tile refinishing products. Most of the sales volume for the "Other" category consists of water-borne products.
6. For the "Recycled" category, incomplete VOC Actual data were submitted. Therefore, we did not include Recycled coatings in this table.

Sales data are summarized in two ways to illustrate which VOC ranges have the highest sales volumes: (1) Sales Volume vs. VOC Regulatory content, in 50-gram/liter increments; and (2) Sales Volume vs. Weight Percent VOC. Figures 4-1a through 4-32a contain charts of the sales (including small containers) for each category in 50-gram/liter increments. Figures 4-1b through 4-32b contain charts of the sales (including small containers) for each category in weight percent VOC increments.

No figures are provided for the following categories because the sales data are protected, as shown in Table 3-1: Bond Breakers; Clear Brushing Lacquers; Driveway Sealers; Fire Resistive; Fire Retardant – Clear; Fire Retardant – Opaque; Graphic Arts; Magnesite Cement; Mastic Texture; Multi-Color; Pre-Treatment Wash Primer; Recycled; Shellacs – Clear; Shellacs – Opaque; Swimming Pool; and Swimming Pool Repair and Maintenance.

No figures are provided for the following categories because no sales were reported in the survey: Antenna; Antifouling; Flow; and Temperature Indicator Safety.

VOC DISTRIBUTION HISTOGRAMS

Figure 4-1a
Bituminous Roof

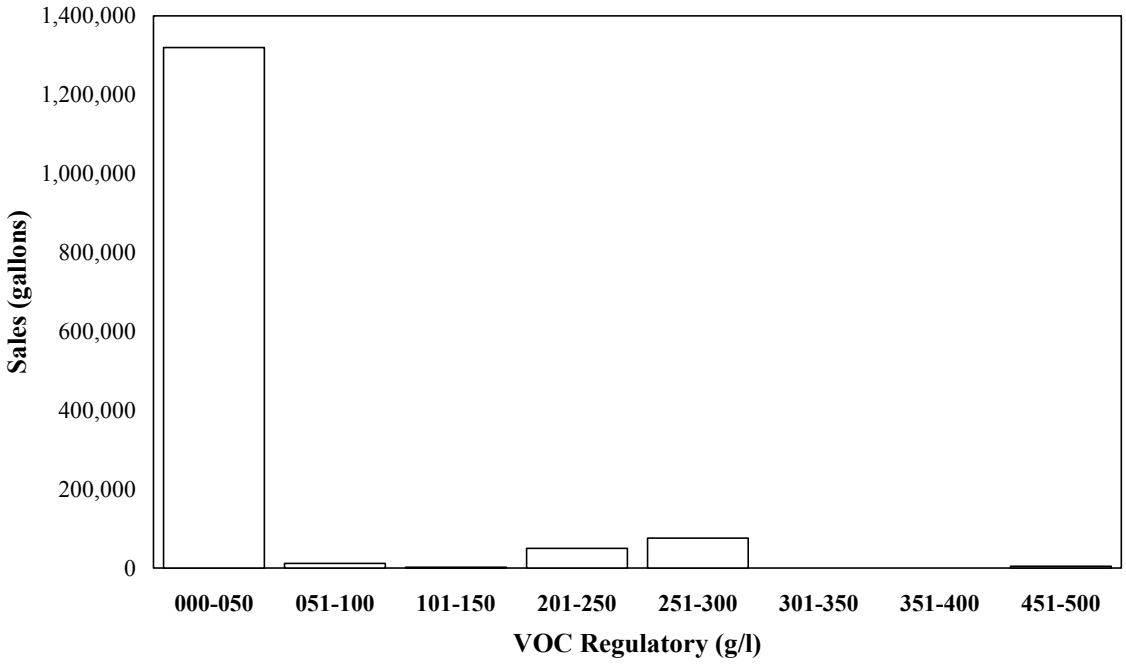


Figure 4-1b
Bituminous Roof

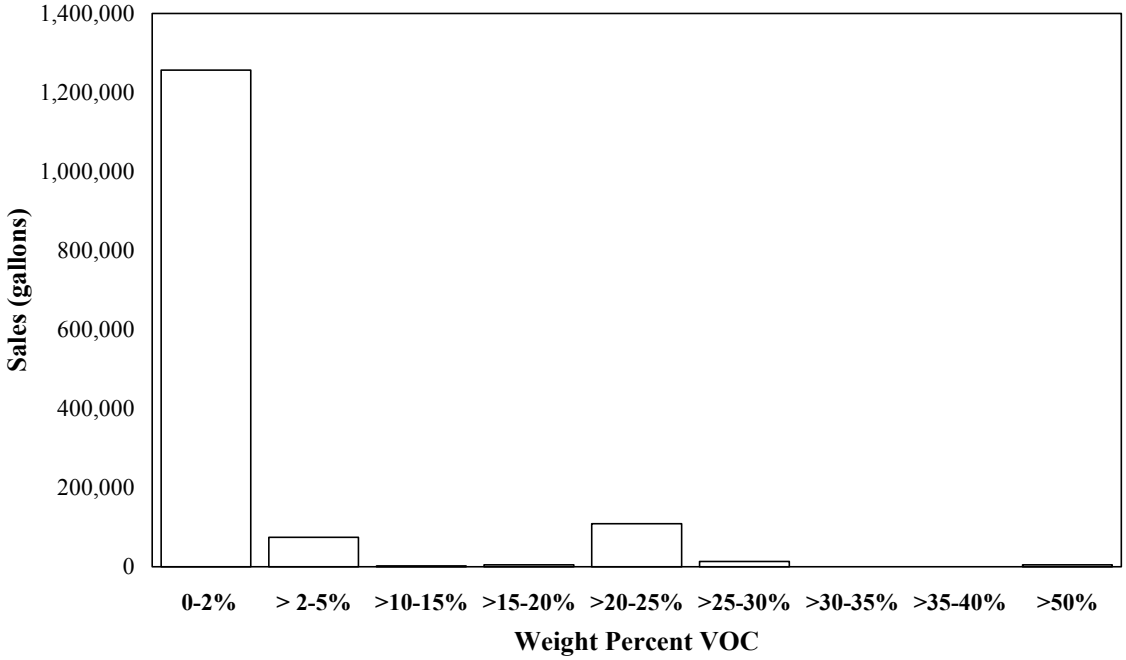


Figure 4-2a
Bituminous Roof Primer

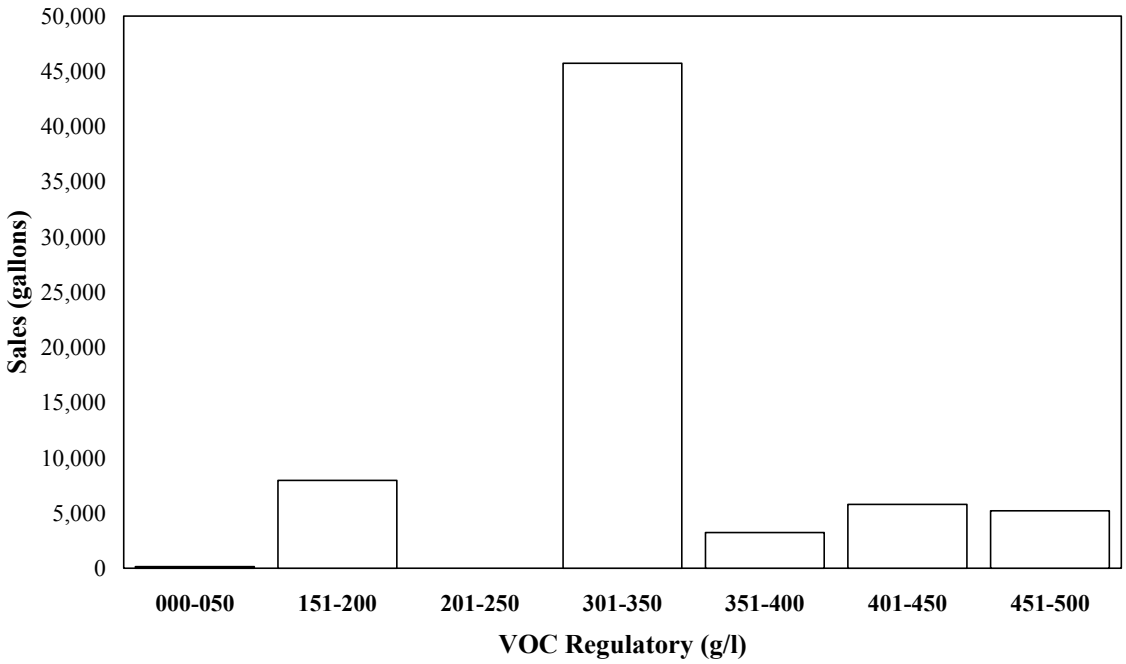
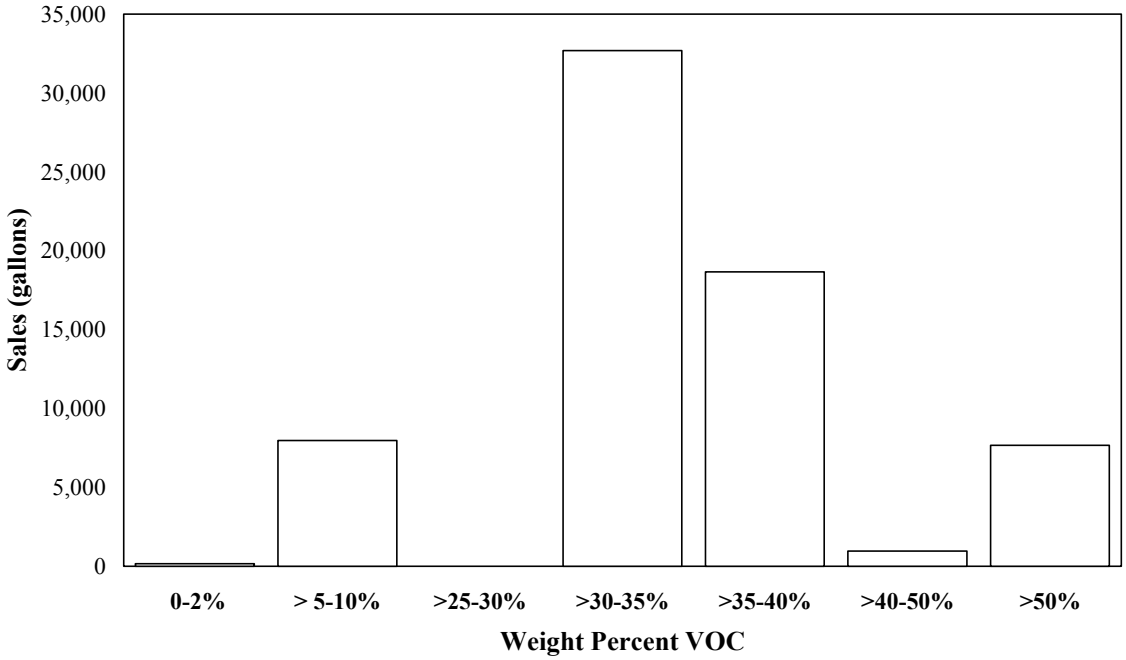


Figure 4-2b
Bituminous Roof Primer



No figures are provided for **Bond Breakers** or **Clear Brushing Lacquers**, because sales data are protected.

Figure 4-3a
Concrete Curing Compounds

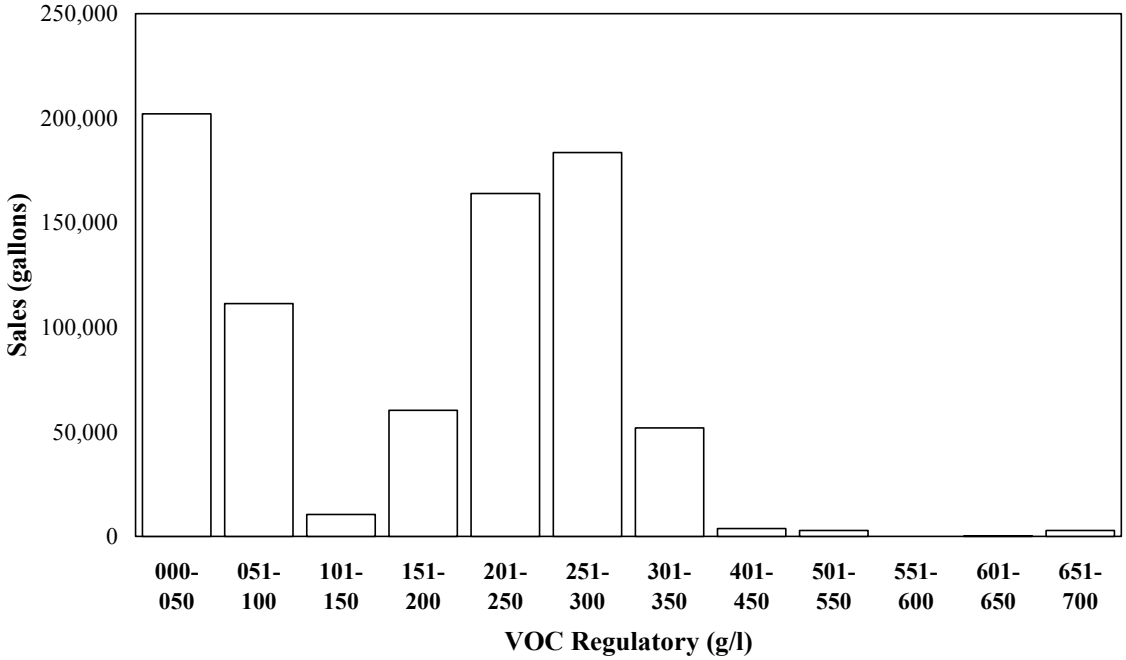
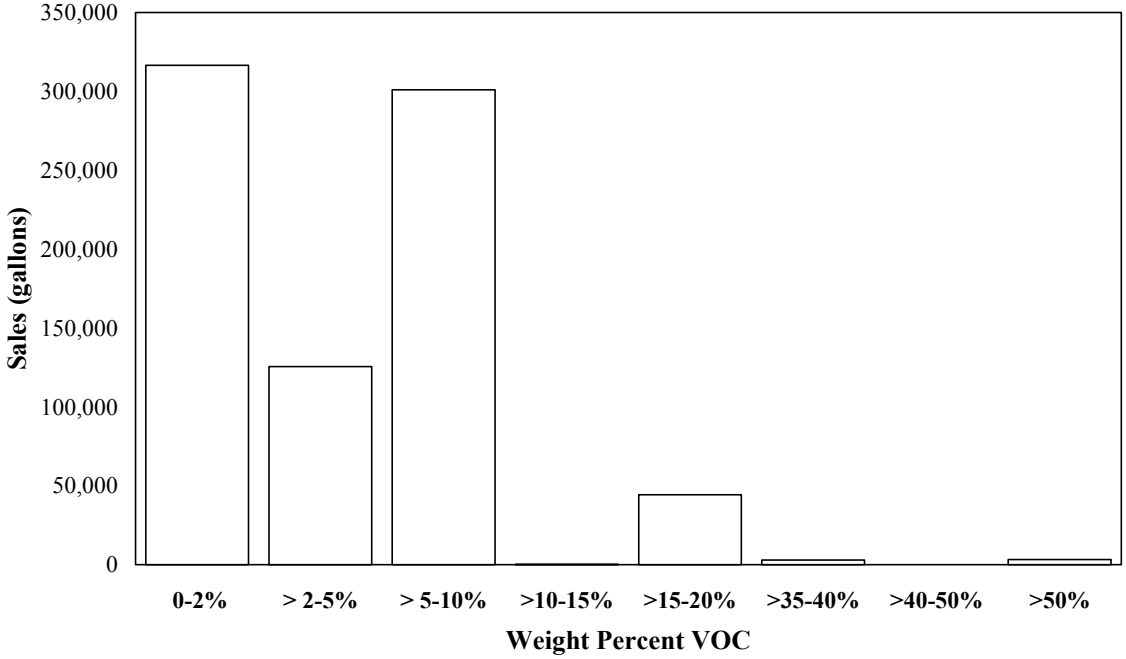


Figure 4-3b
Concrete Curing Compounds



No figures are provided for **Driveway Sealers**, because sales data are protected.

Figure 4-4a
Dry Fog

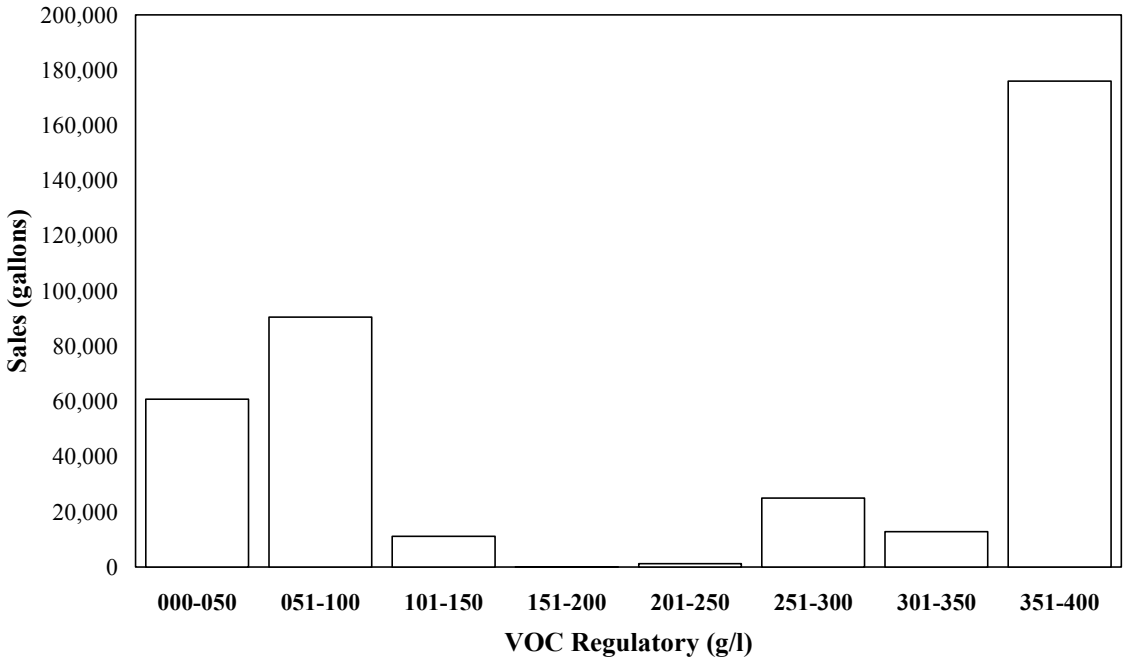


Figure 4-4b
Dry Fog

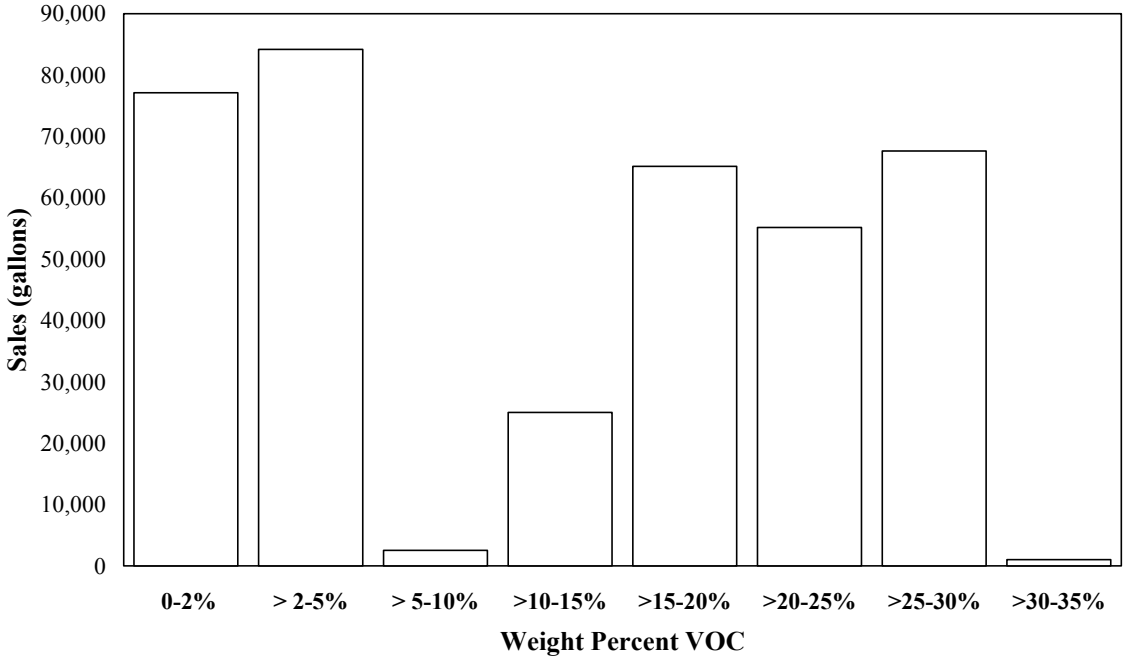


Figure 4-5a
Faux Finishing

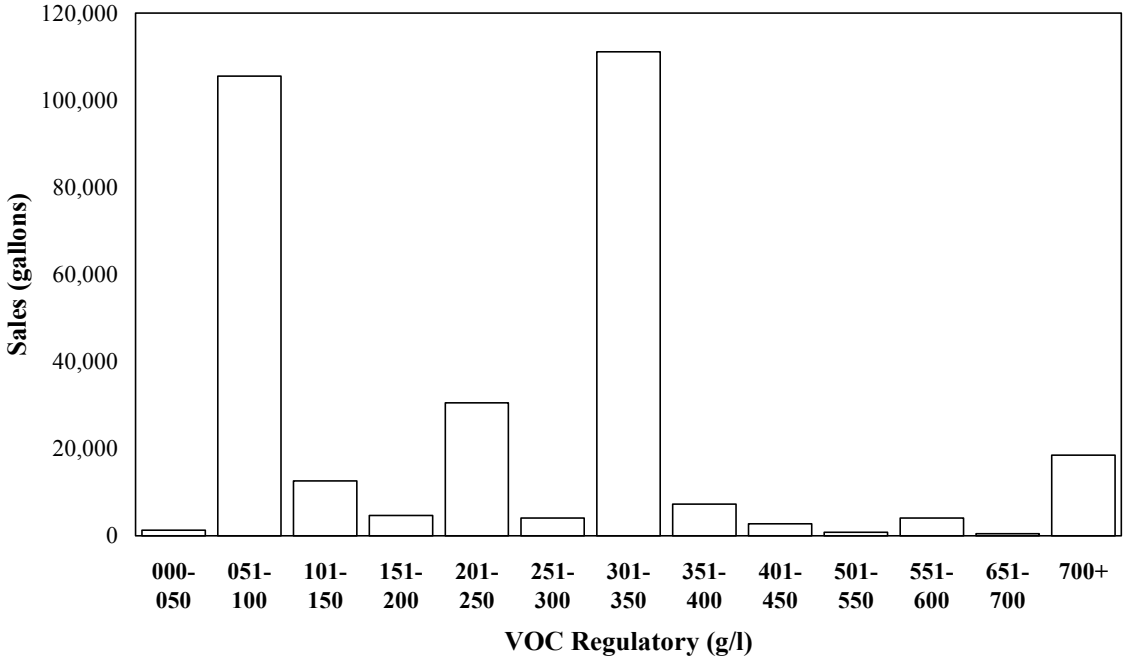
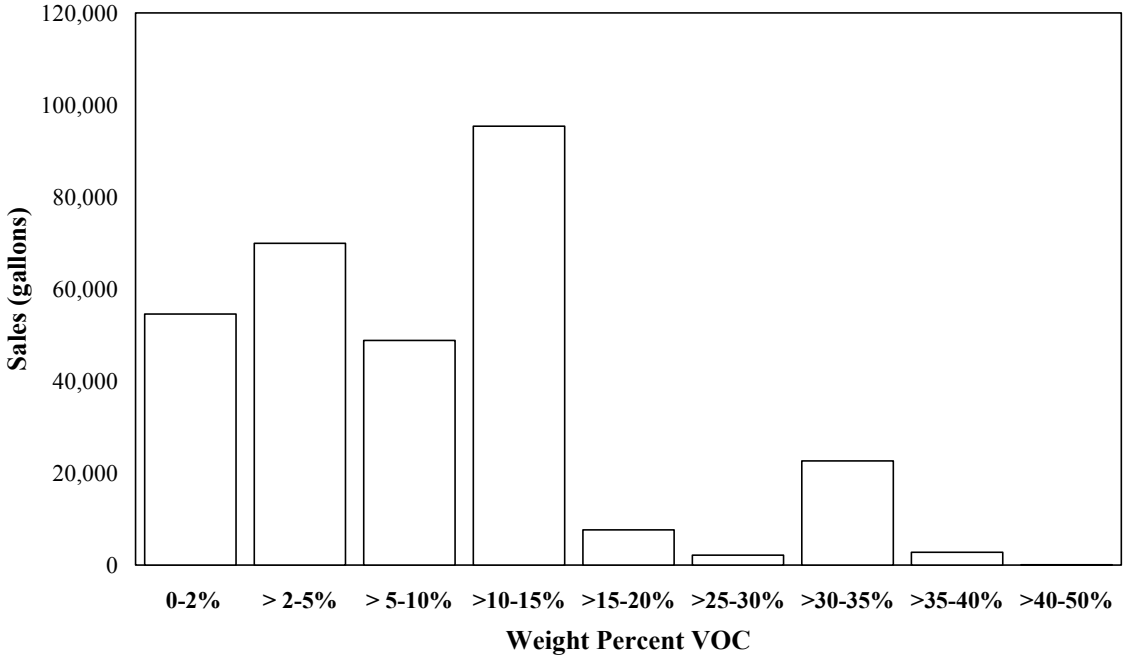


Figure 4-5b
Faux Finishing



No figures are provided for **Fire Resistive**, **Fire Retardant – Clear,** or **Fire Retardant - Opaque** coatings, because sales data are protected.

Figure 4-6a
Flat

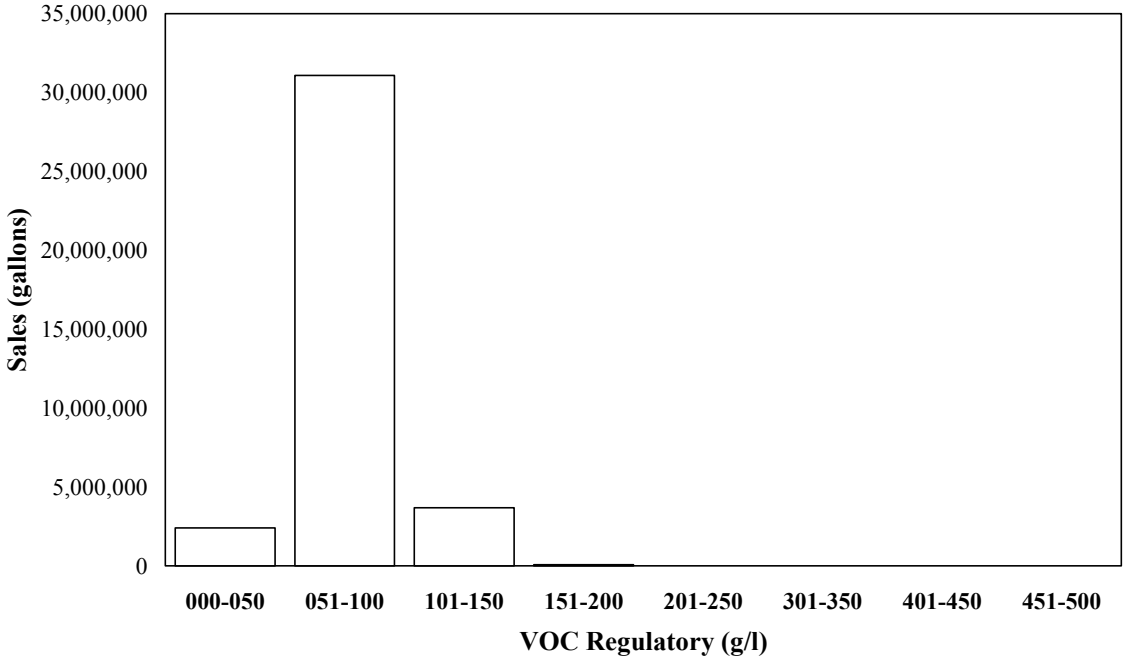


Figure 4-6b
Flat

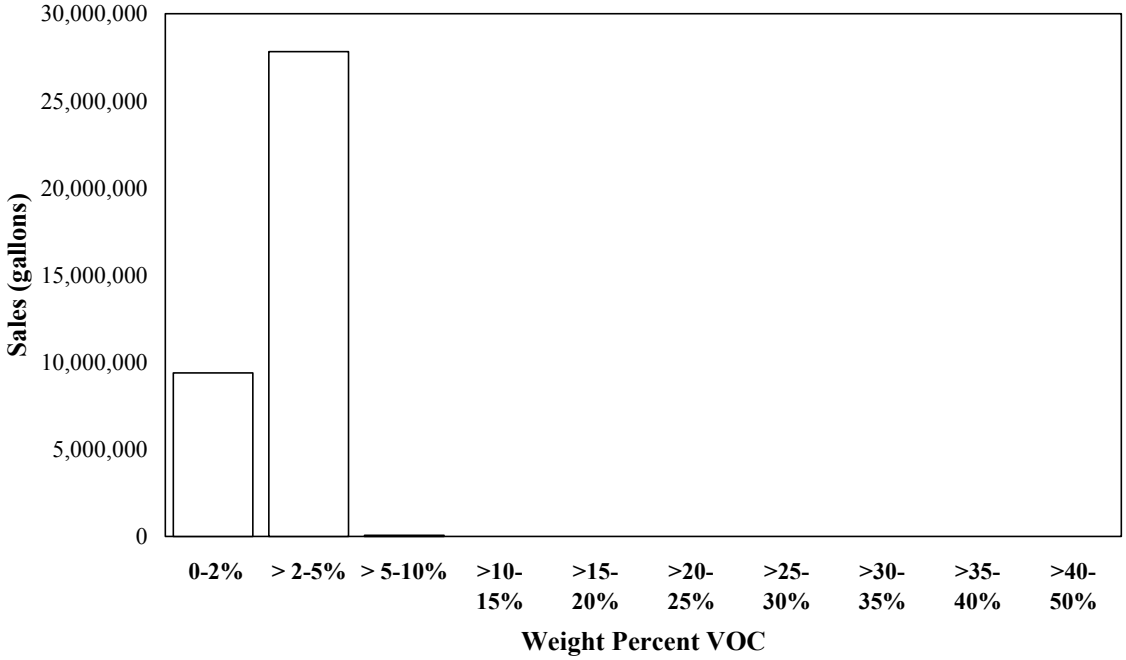


Figure 4-7a
Floor

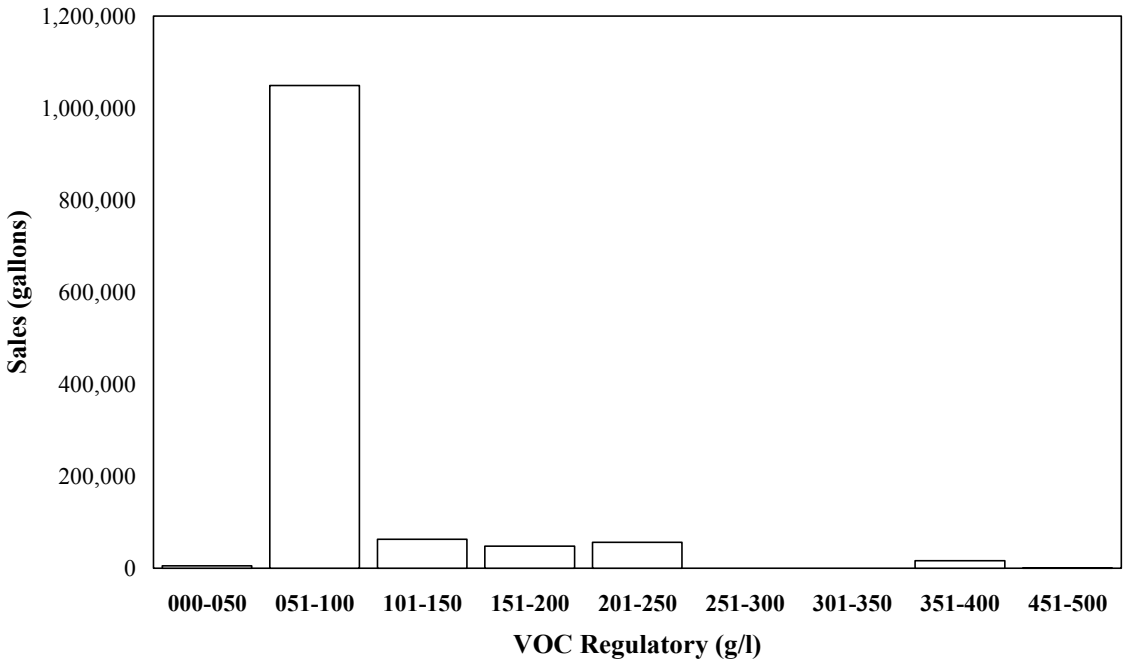


Figure 4-7b
Floor

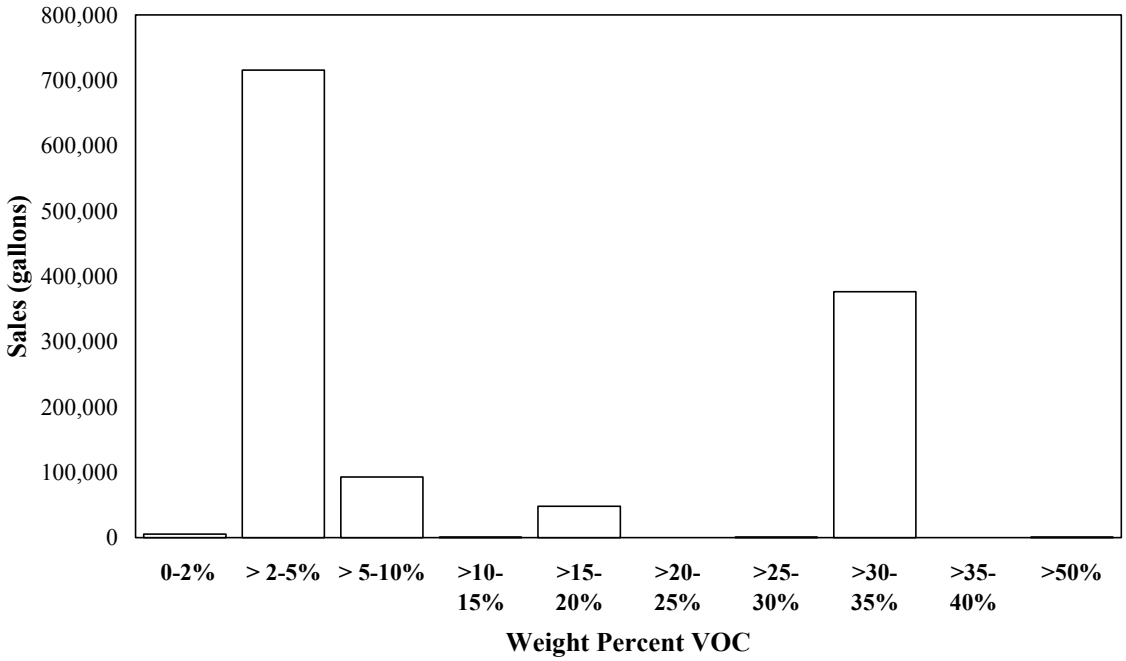


Figure 4-8a
Form Release Compounds

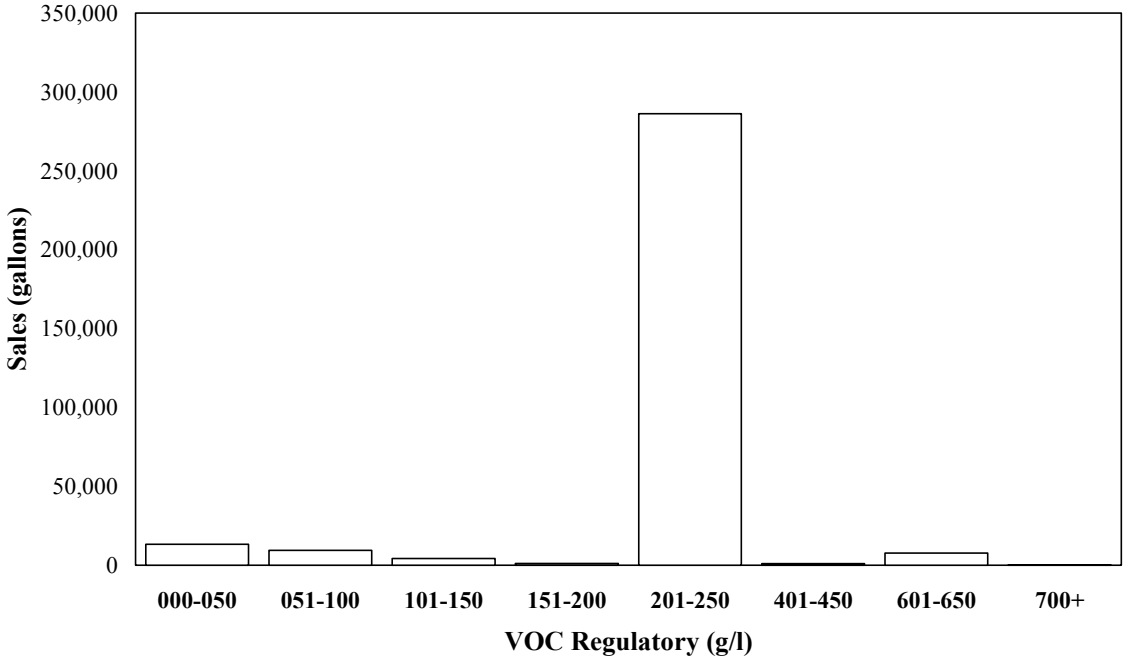
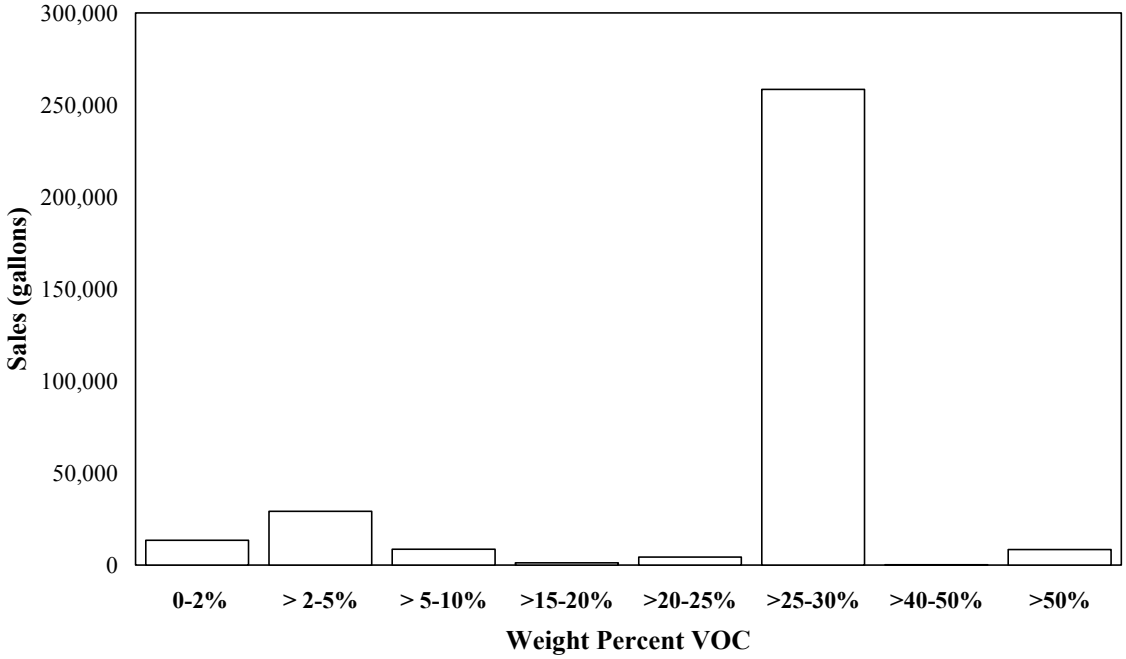


Figure 4-8b
Form Release Compounds



No figures are provided for **Graphic Arts** coatings, because sales data are protected.

Figure 4-9a
High Temperature

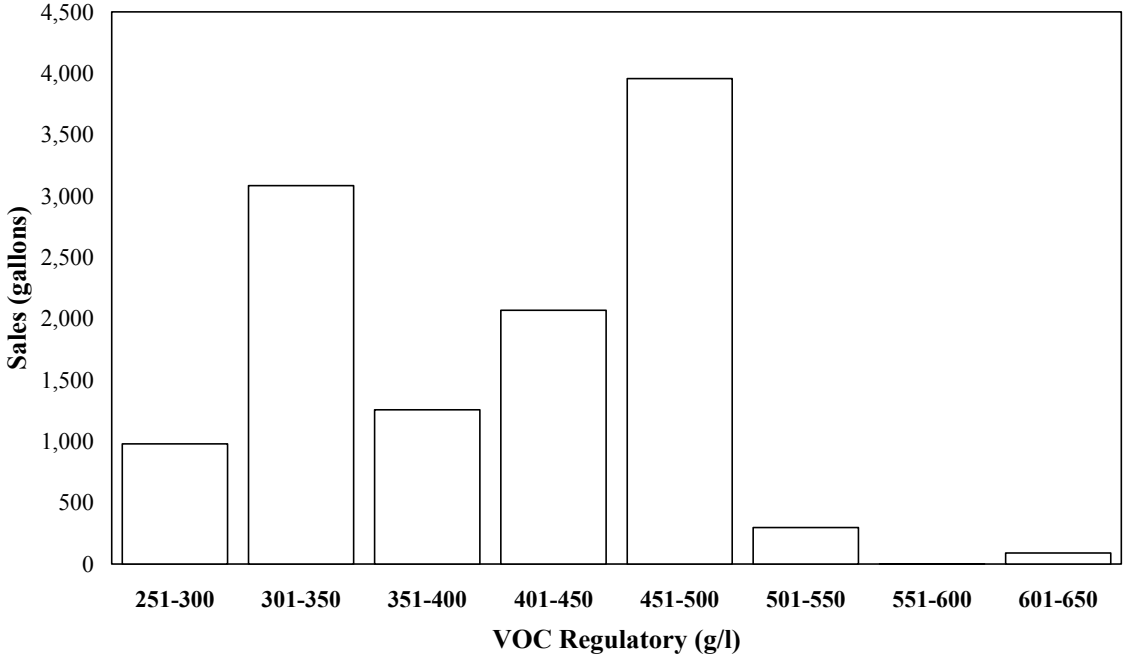


Figure 4-9b
High Temperature

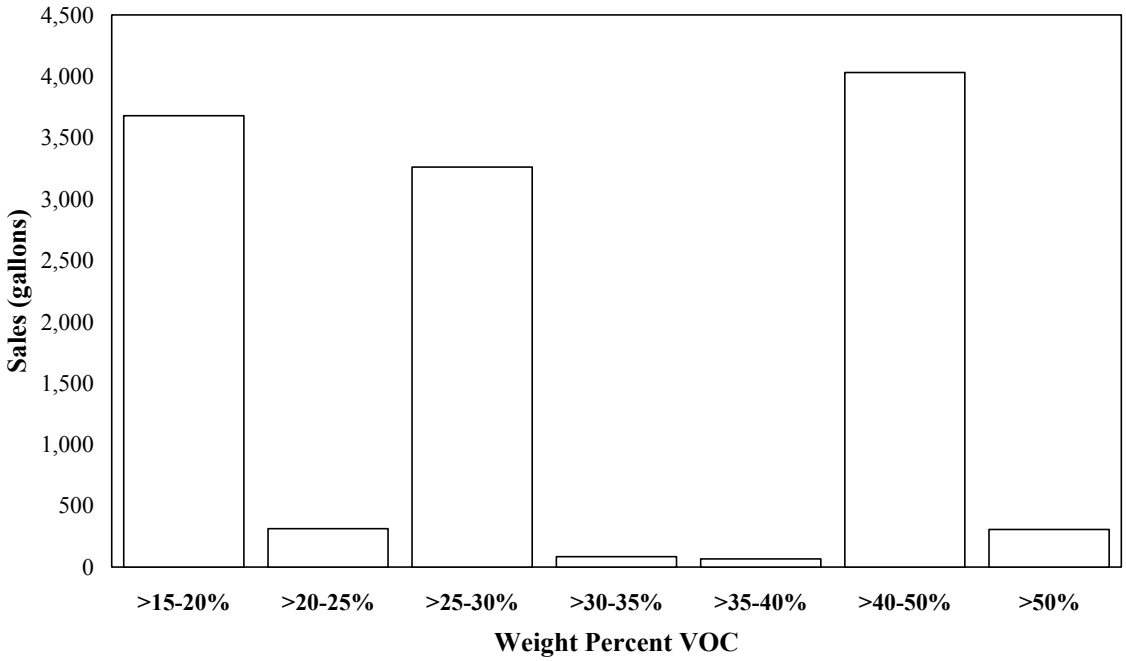


Figure 4-10a
Industrial Maintenance

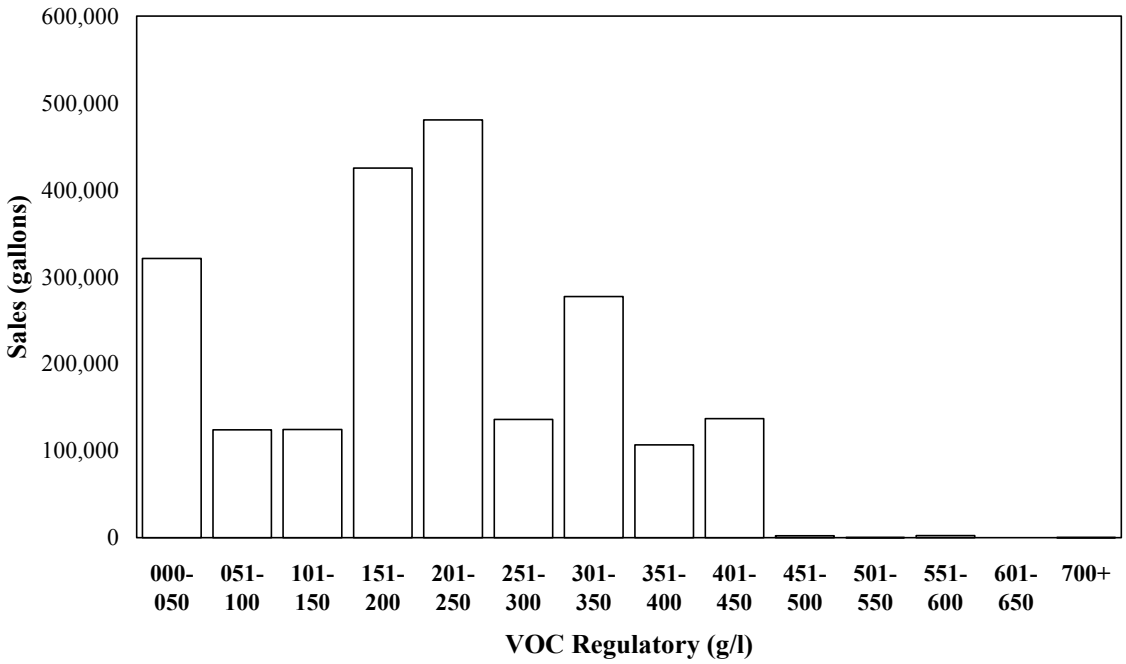


Figure 4-10b
Industrial Maintenance

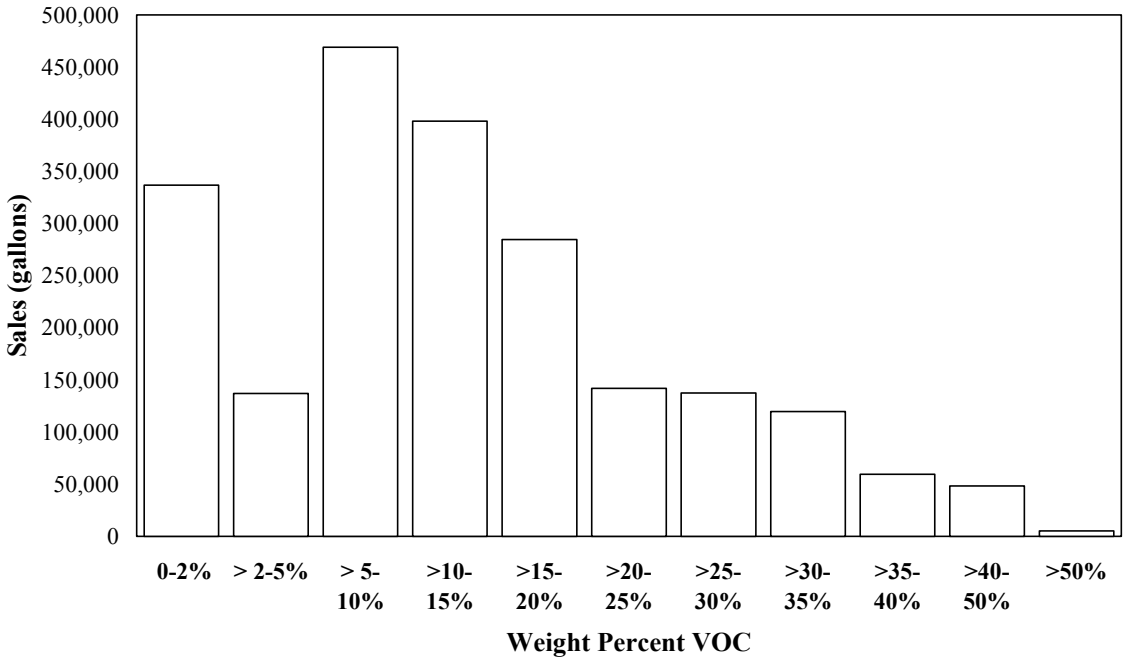


Figure 4-11a
Lacquers

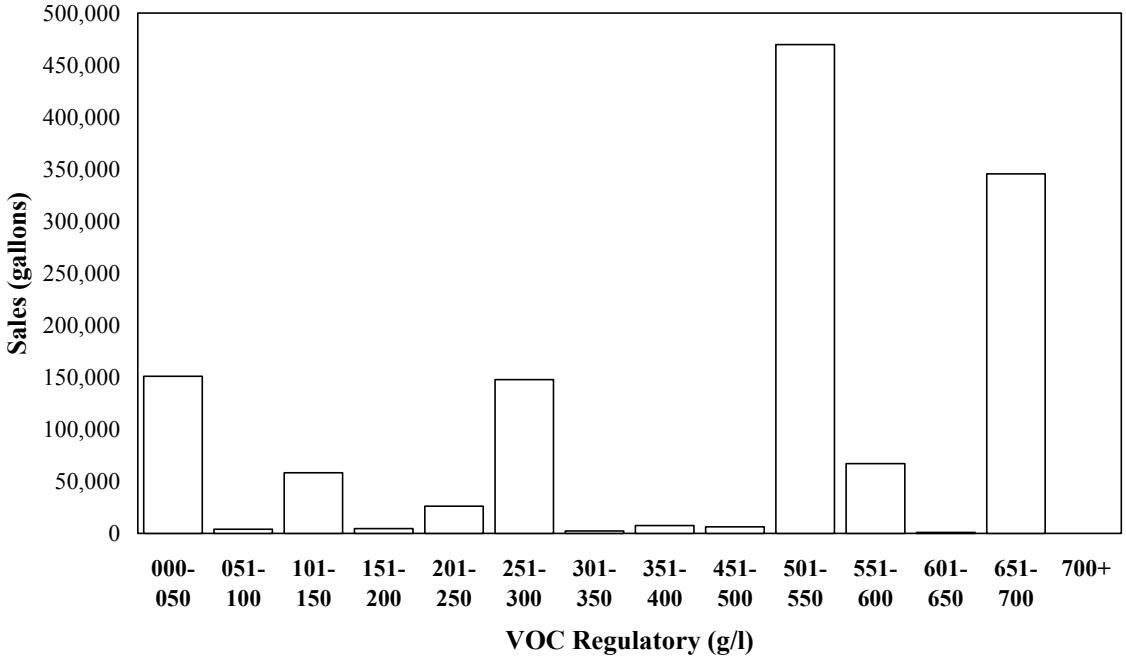


Figure 4-11b
Lacquers

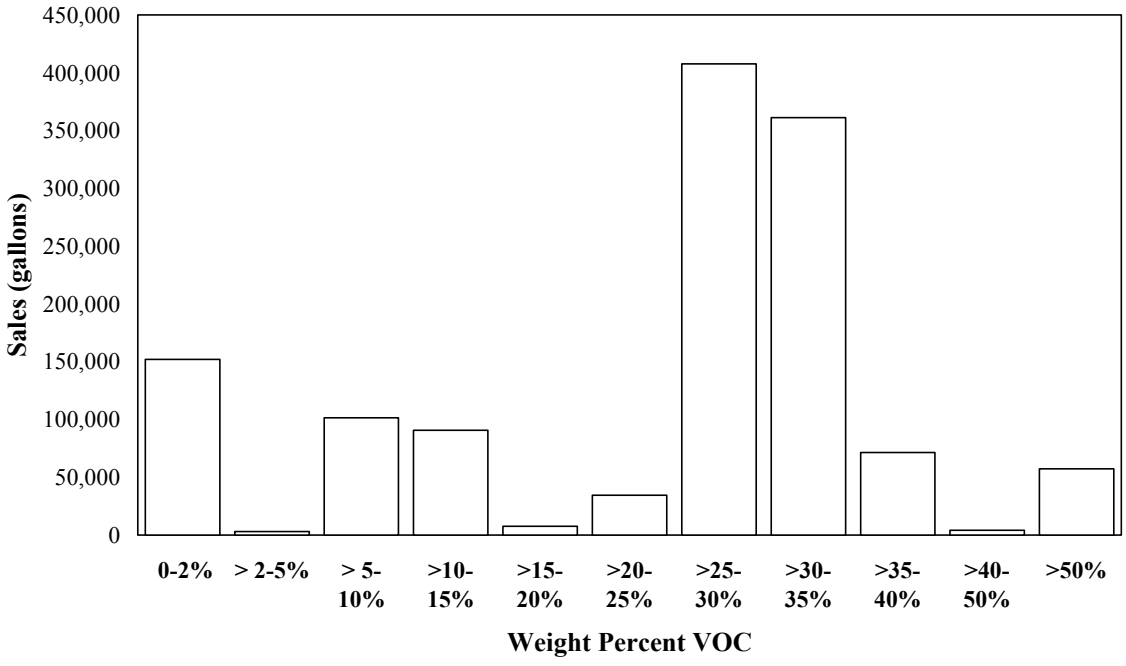


Figure 4-12a
Low Solids

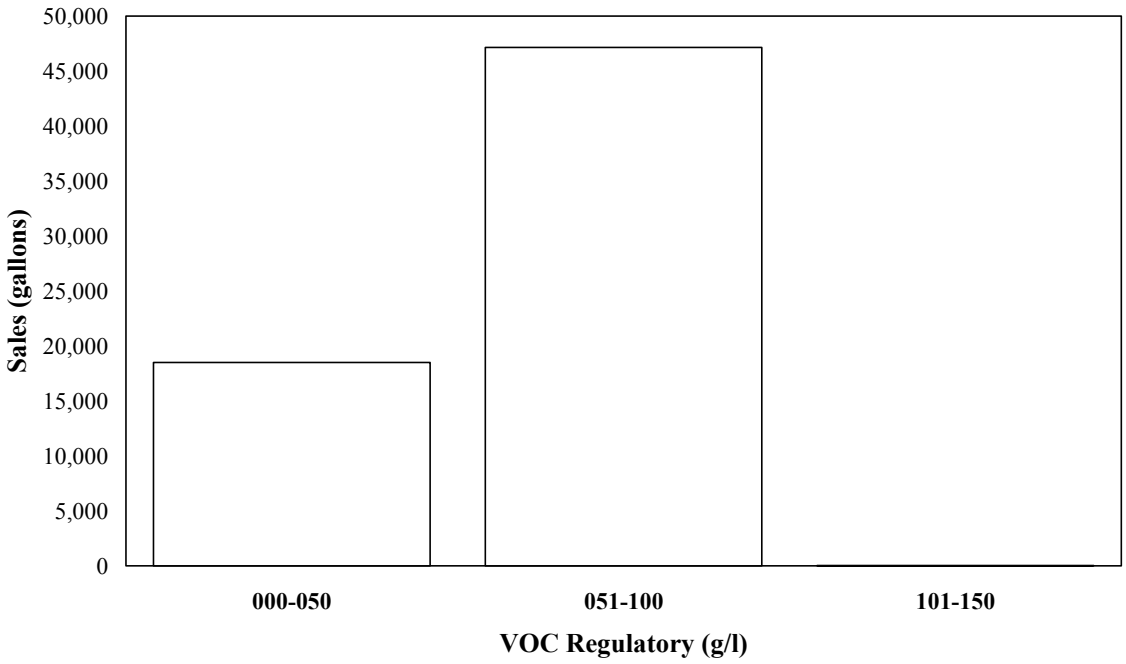
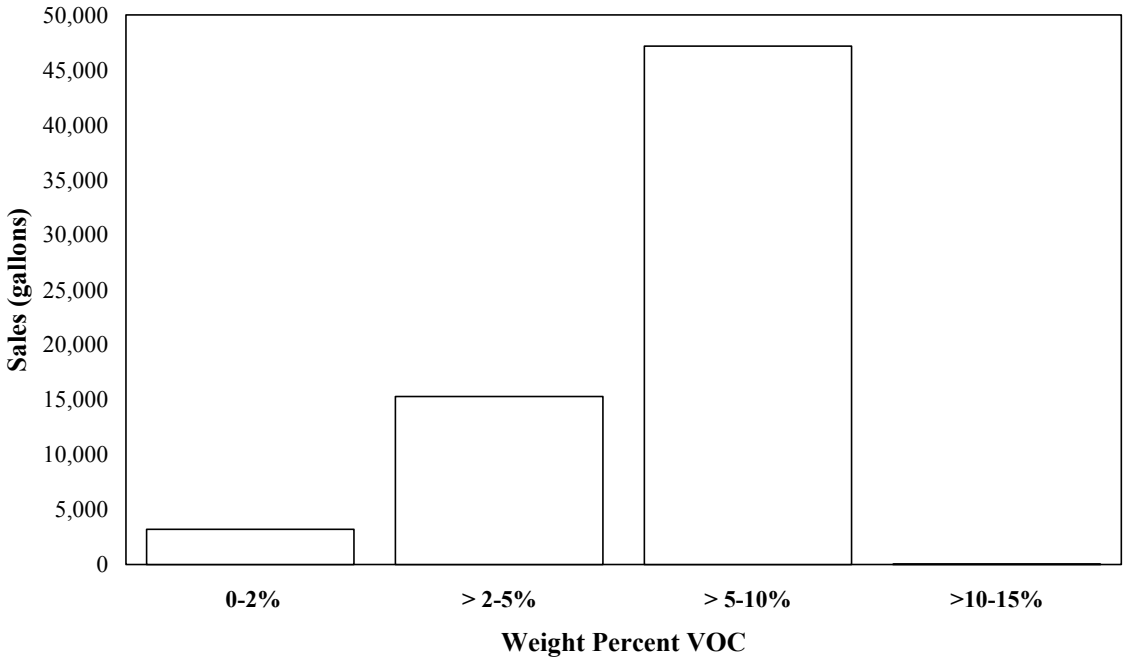


Figure 4-12b
Low Solids



No figures are provided for **Magnesite Cement** or **Mastic Texture** coatings, because sales data are protected.

Figure 4-13a
Metallic Pigmented

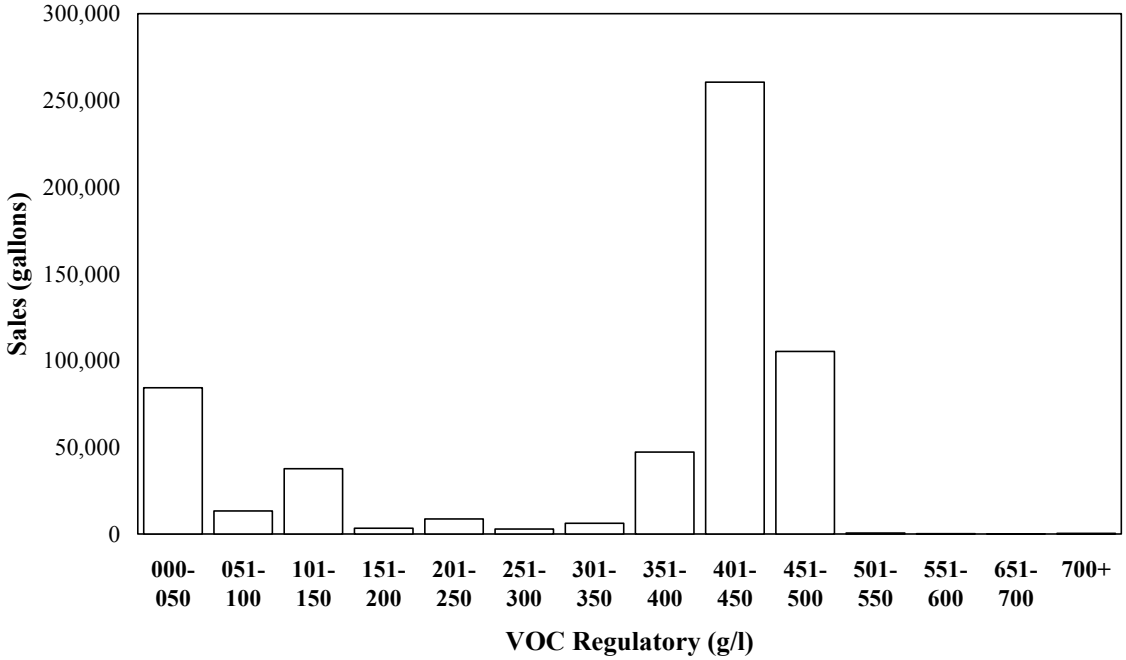
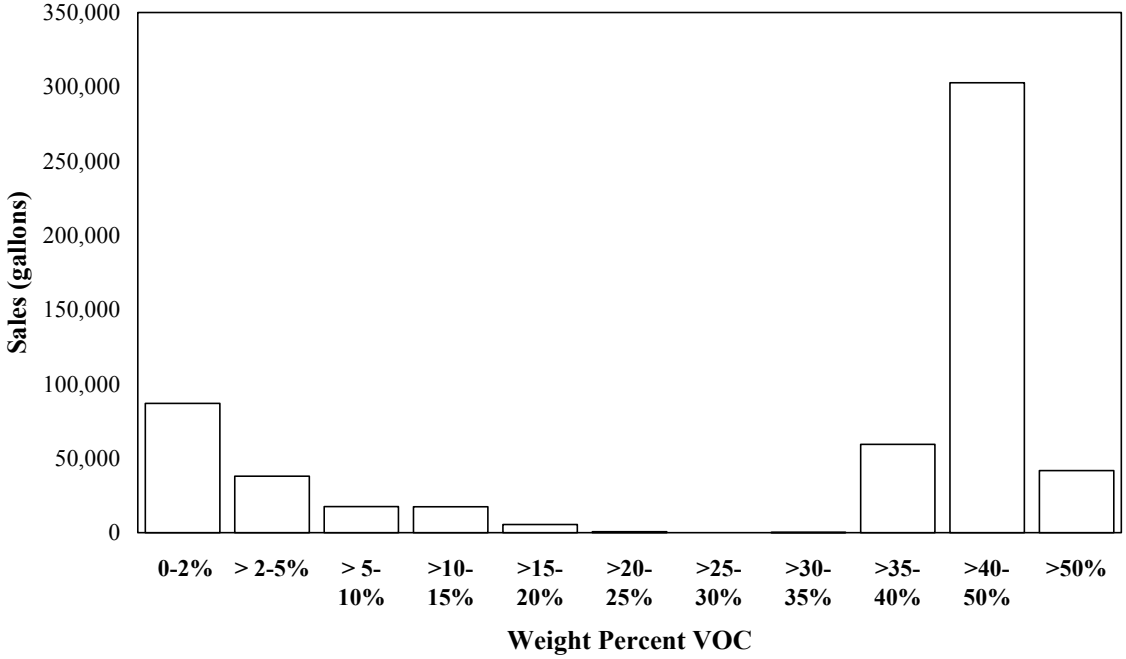


Figure 4-13b
Metallic Pigmented



No figures are provided for **Multi-Color** coatings, because sales data are protected.

Figure 4-14a
Nonflat – High Gloss

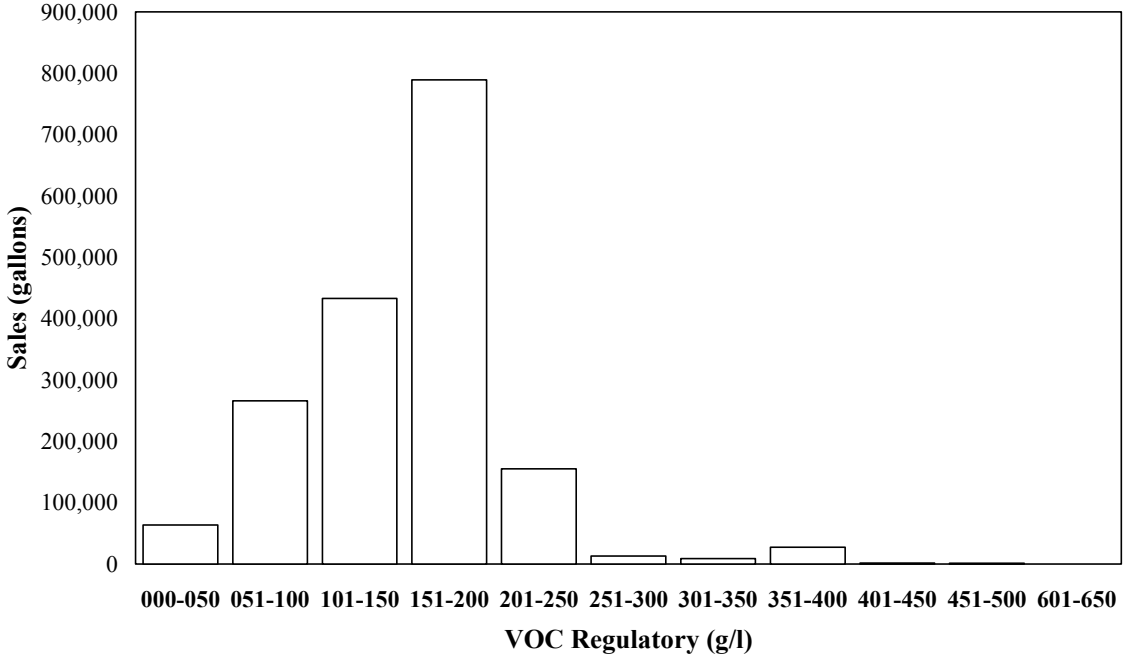


Figure 4-14b
Nonflat – High Gloss

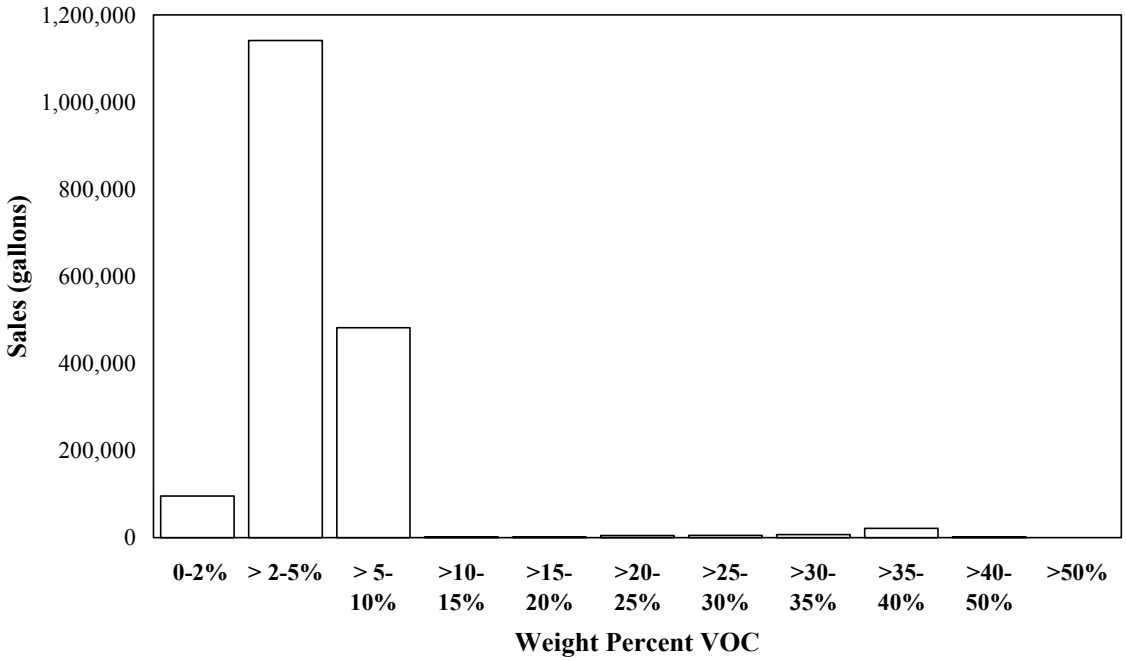


Figure 4-15a
Nonflat – Low Gloss

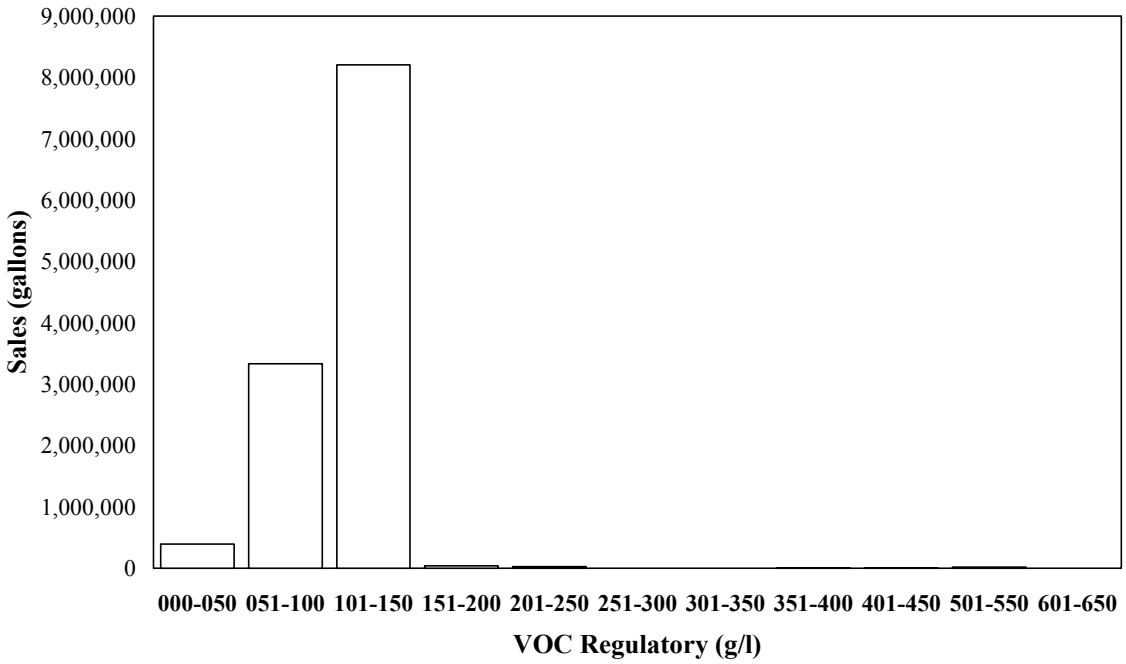


Figure 4-15b
Nonflat – Low Gloss

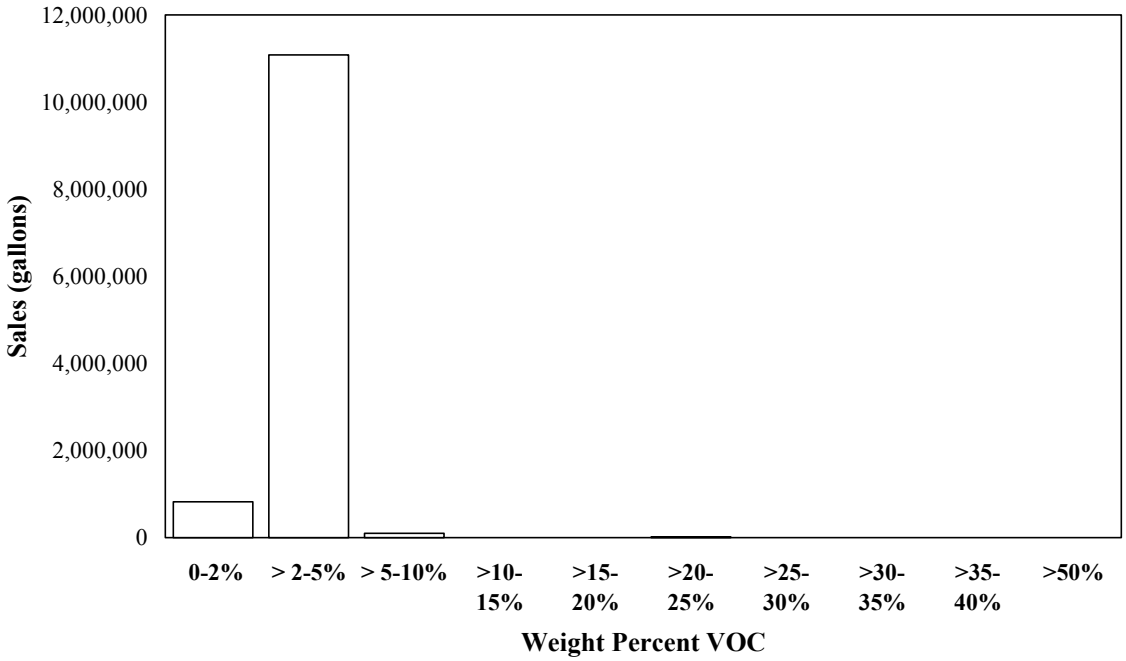


Figure 4-16a
Nonflat – Medium Gloss

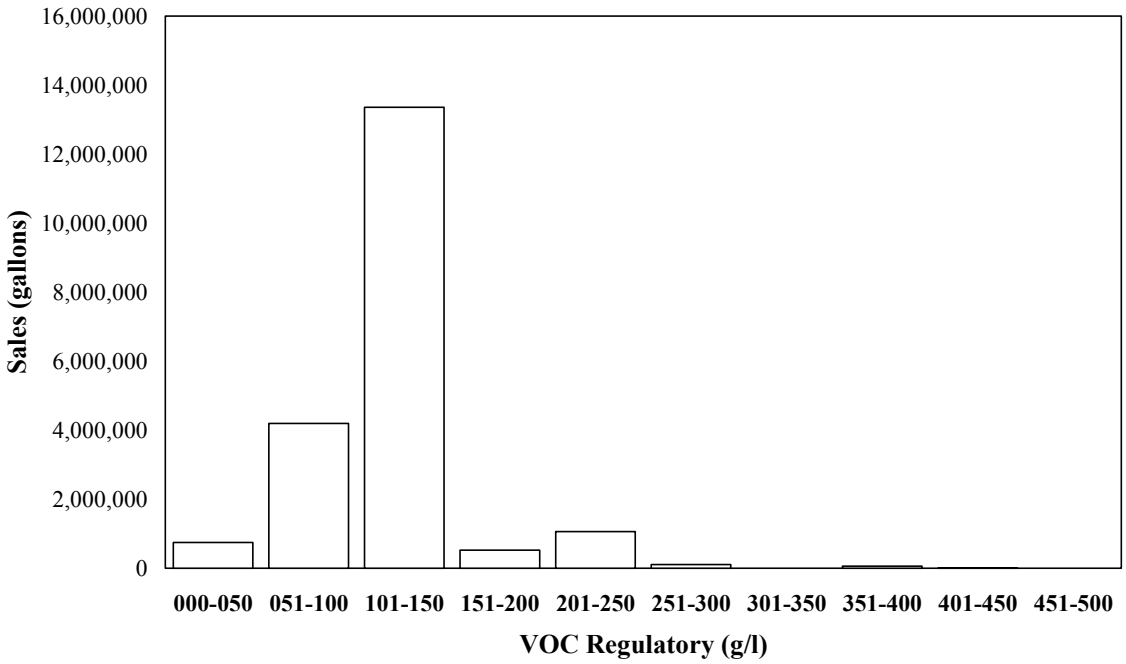


Figure 4-16b
Nonflat – Medium Gloss

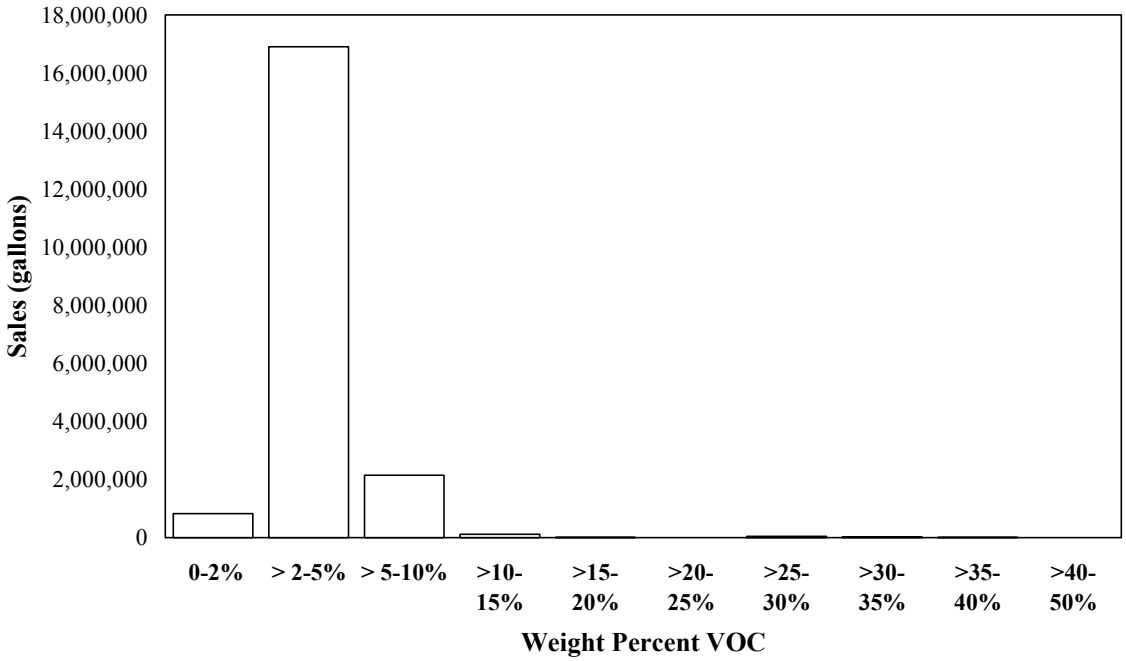


Figure 4-17a
Other

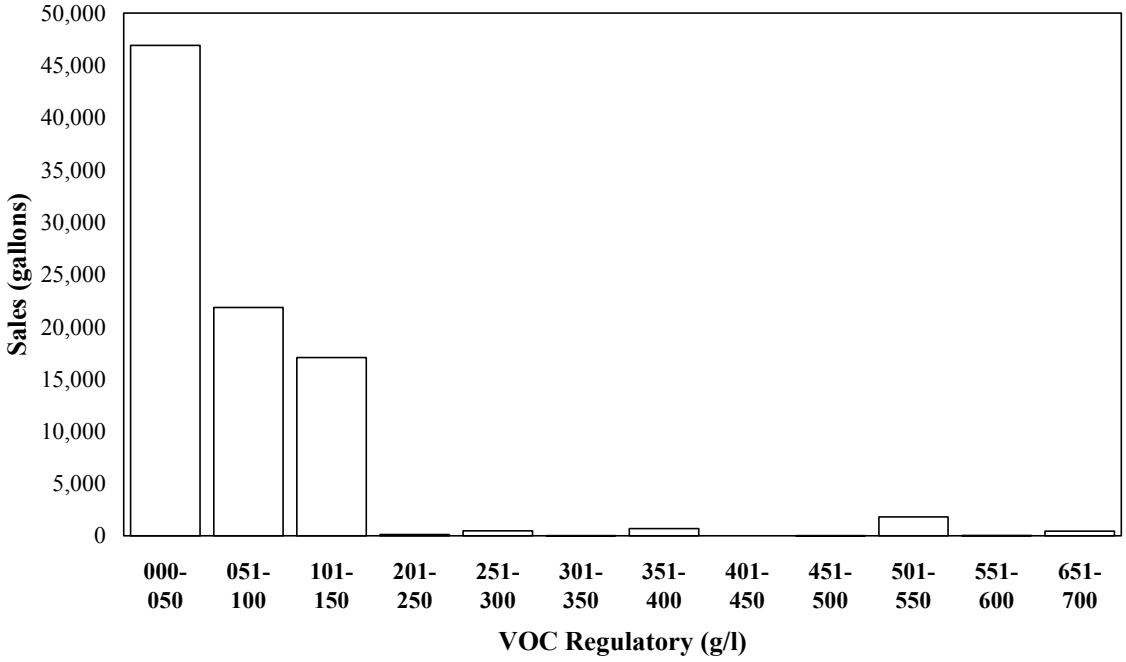
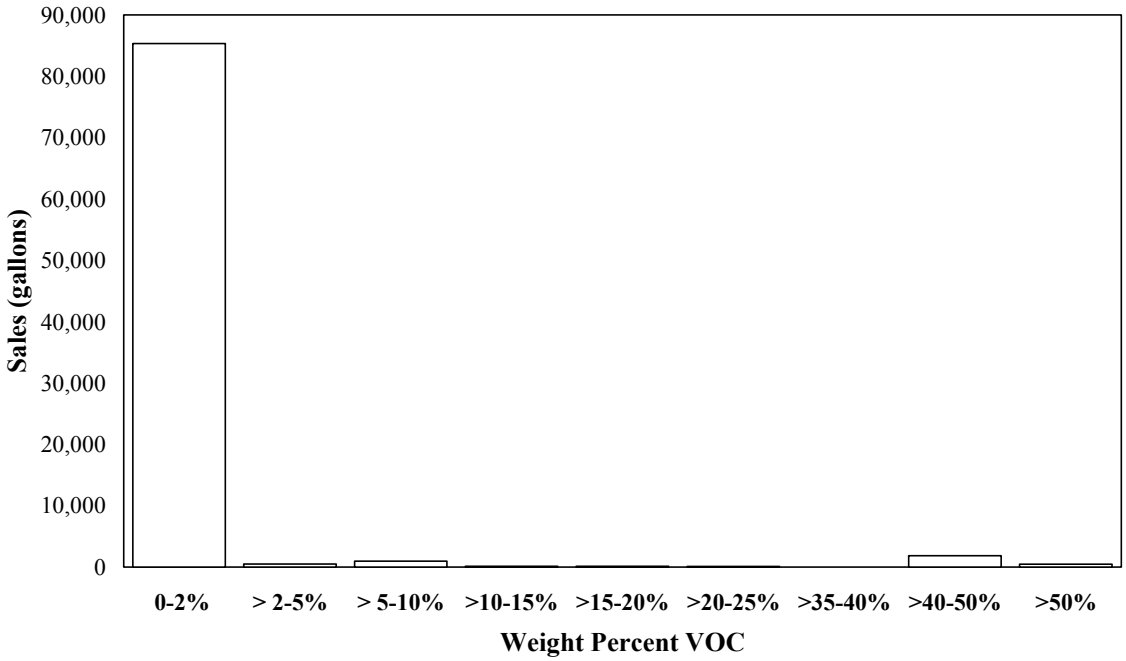


Figure 4-17b
Other



No figures are provided for **Pre-Treatment Wash Primer** coatings, because sales data are protected.

Figure 4-18a
Primer, Sealer and Undercoater

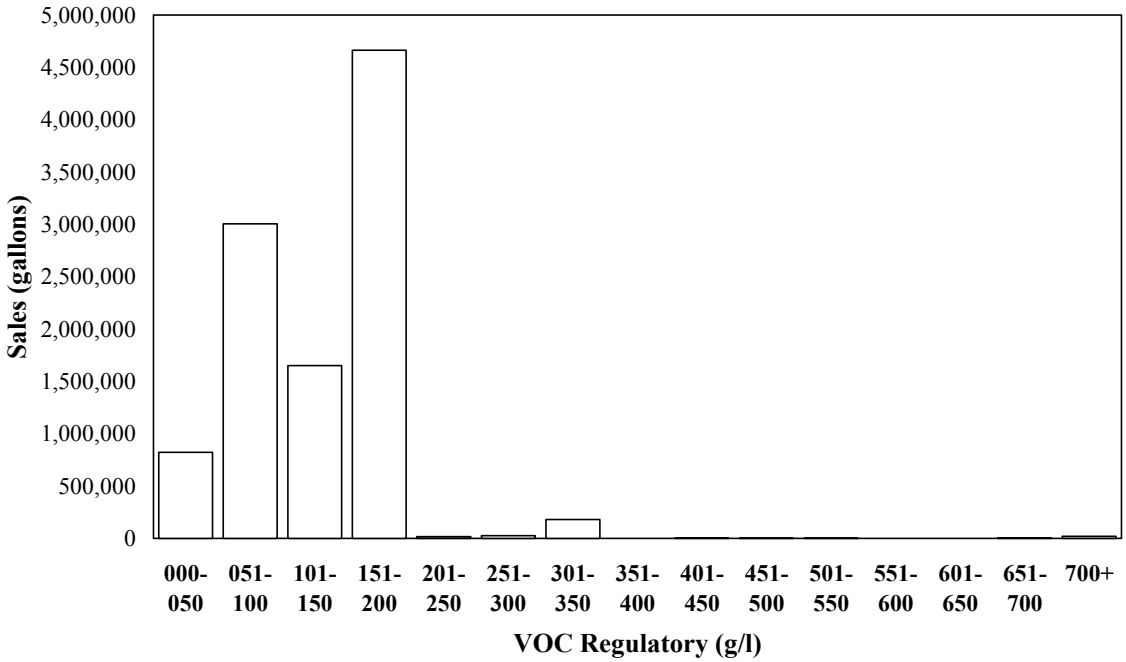


Figure 4-18b
Primer, Sealer and Undercoater

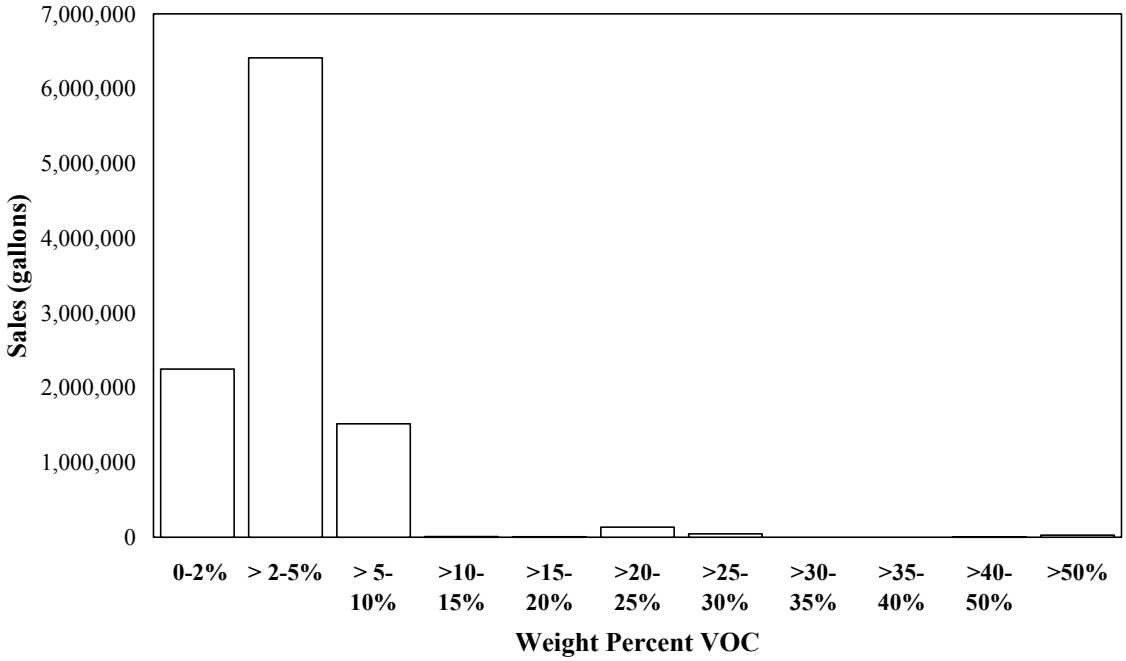


Figure 4-19a
Quick Dry Enamel

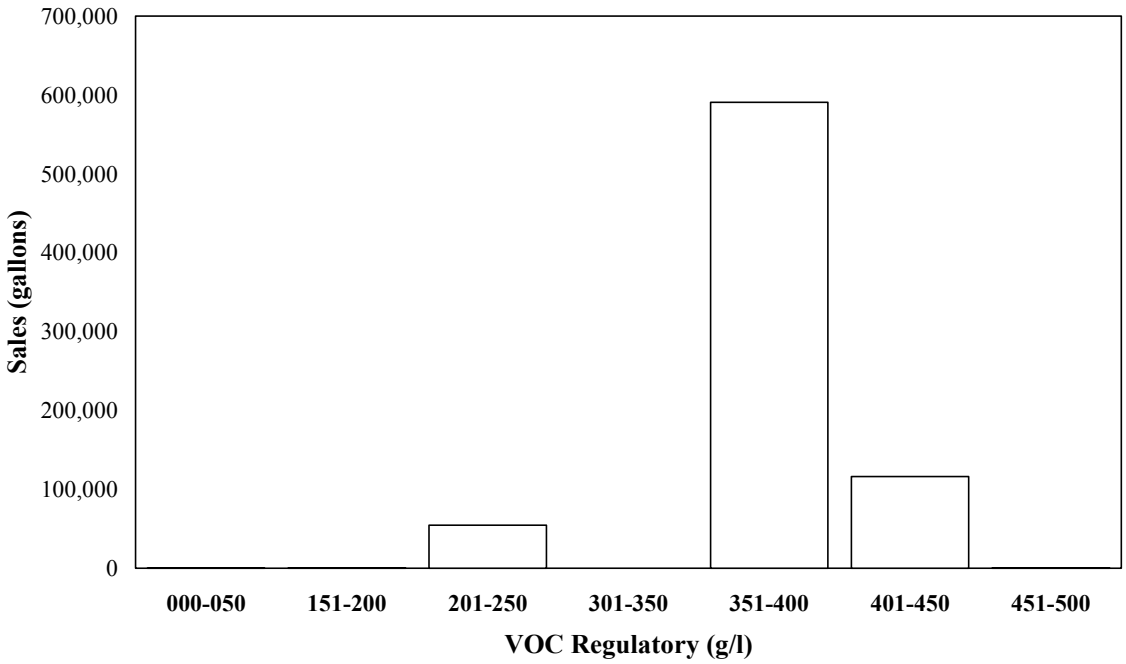


Figure 4-19b
Quick Dry Enamel

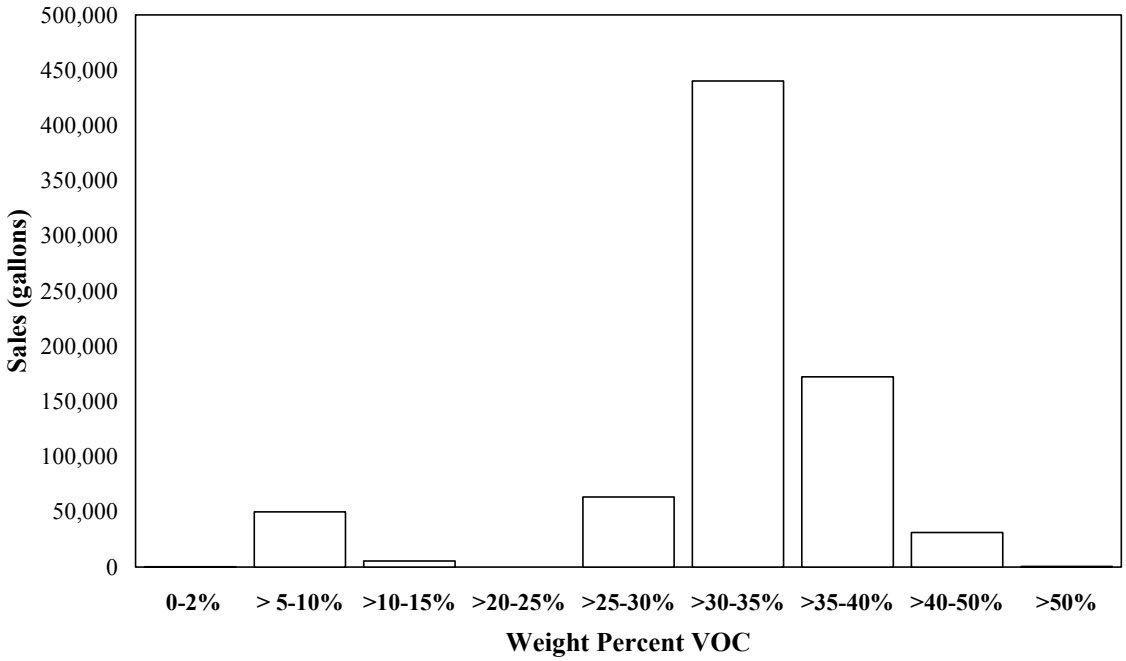


Figure 4-20a
Quick Dry Primer, Sealer and Undercoater

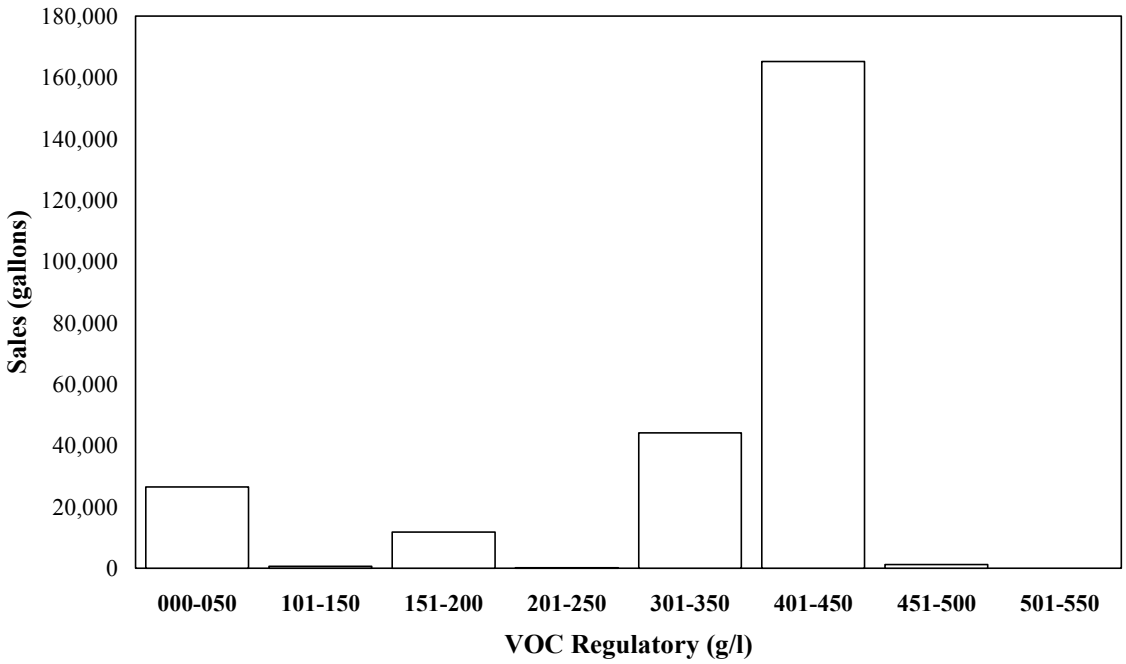
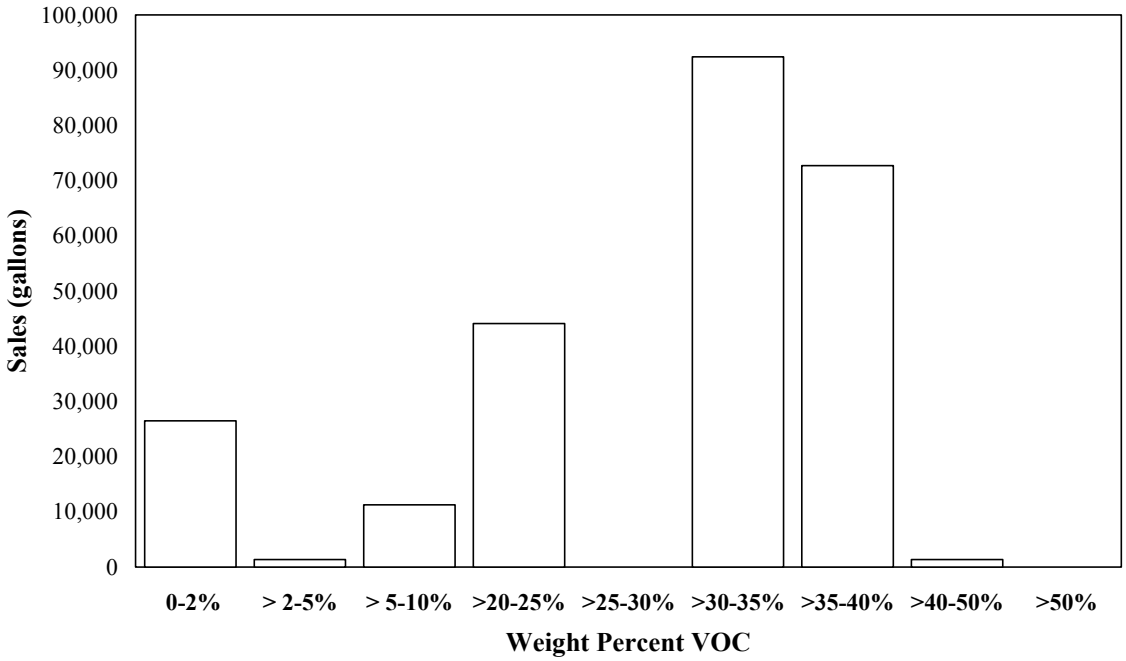


Figure 4-20b
Quick Dry Primer, Sealer and Undercoater



No figures are provided for **Recycled** coatings, because sales data are protected and weight percent data is incomplete, due to the lack of data for Recycled coatings.

Figure 4-21a
Roof

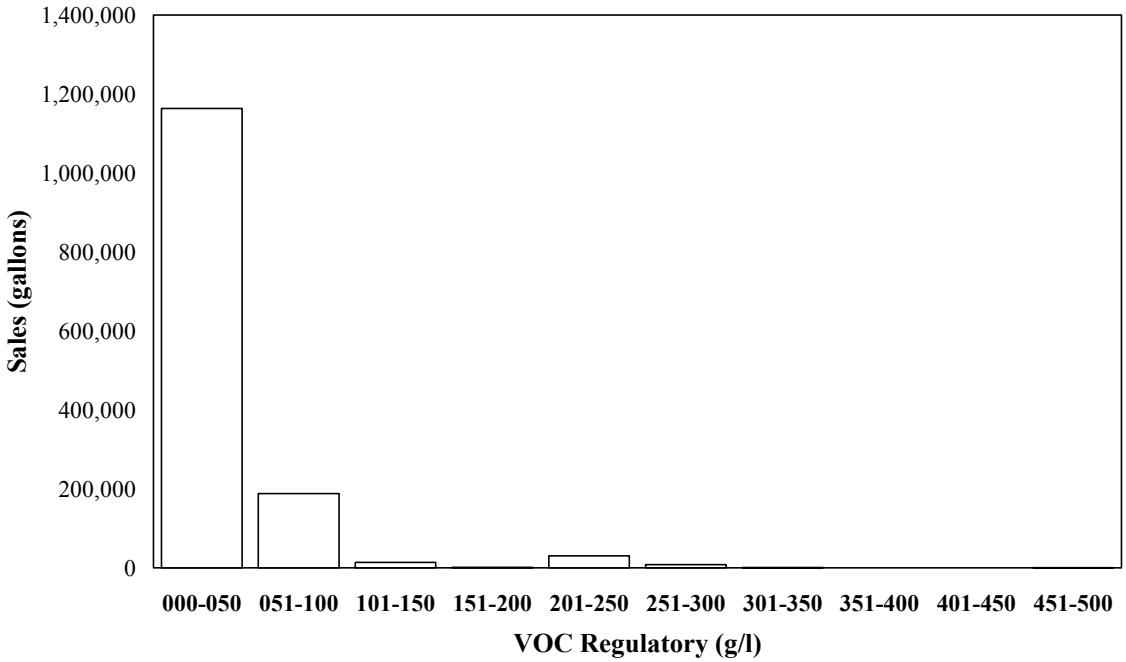


Figure 4-21b
Roof

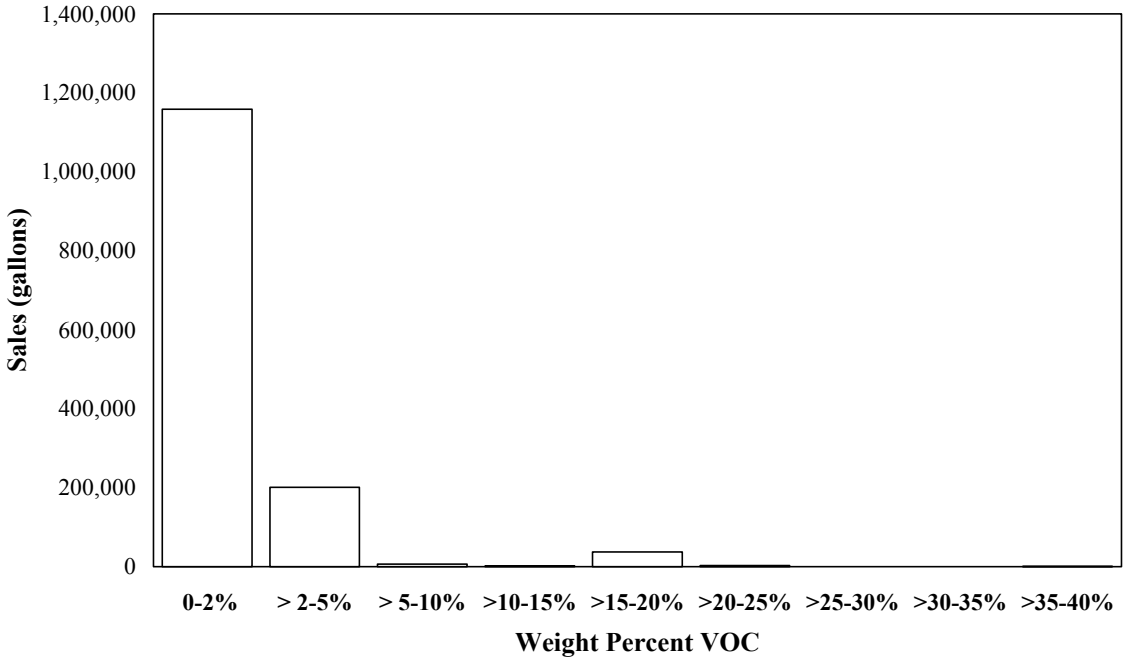


Figure 4-22a
Rust Preventative

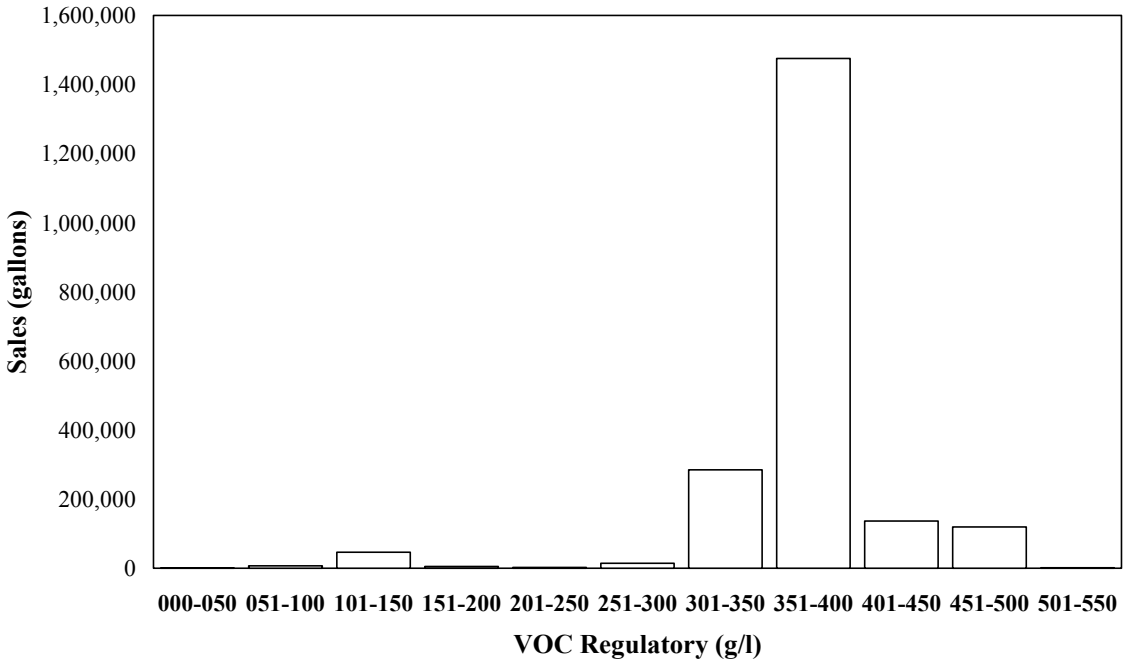


Figure 4-22b
Rust Preventative

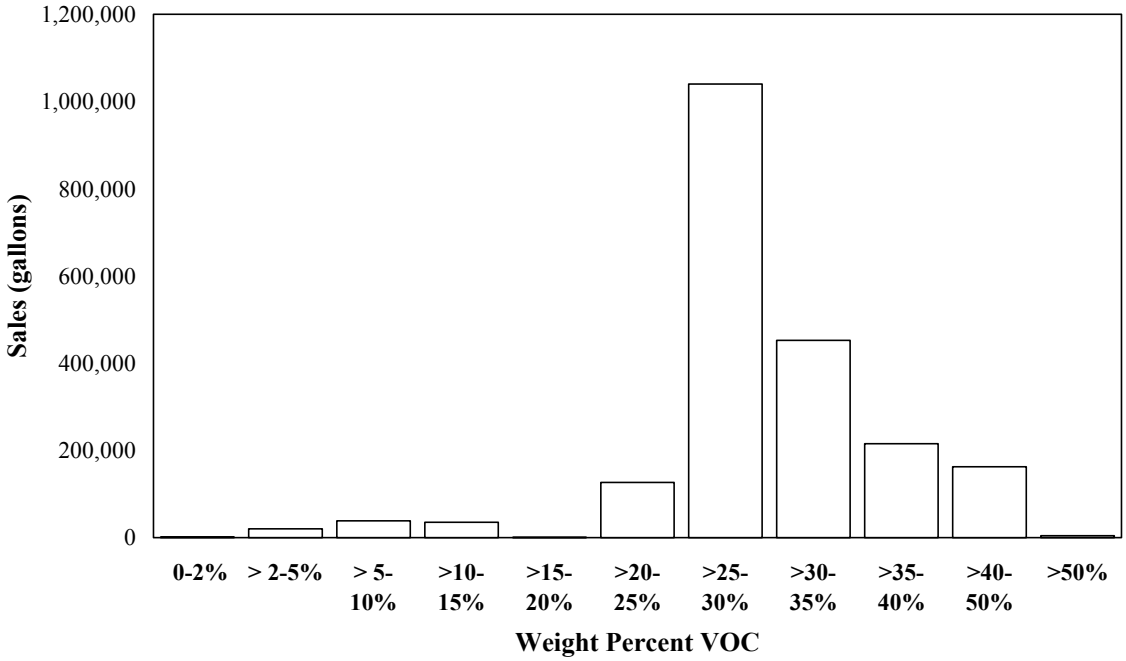


Figure 4-23a
Sanding Sealers

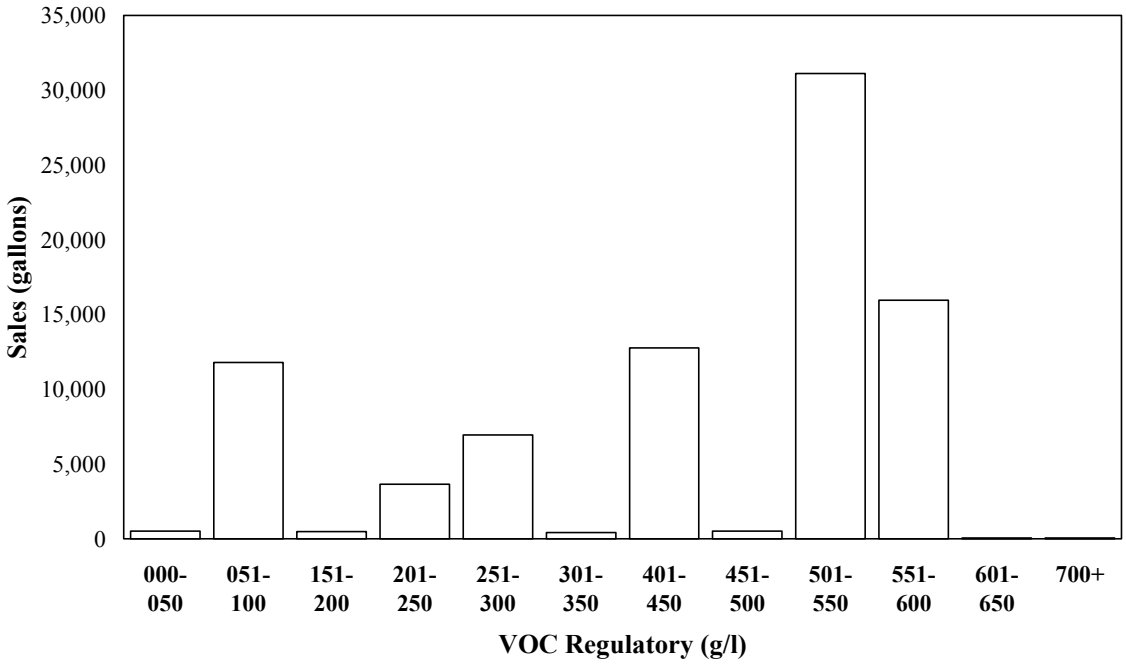
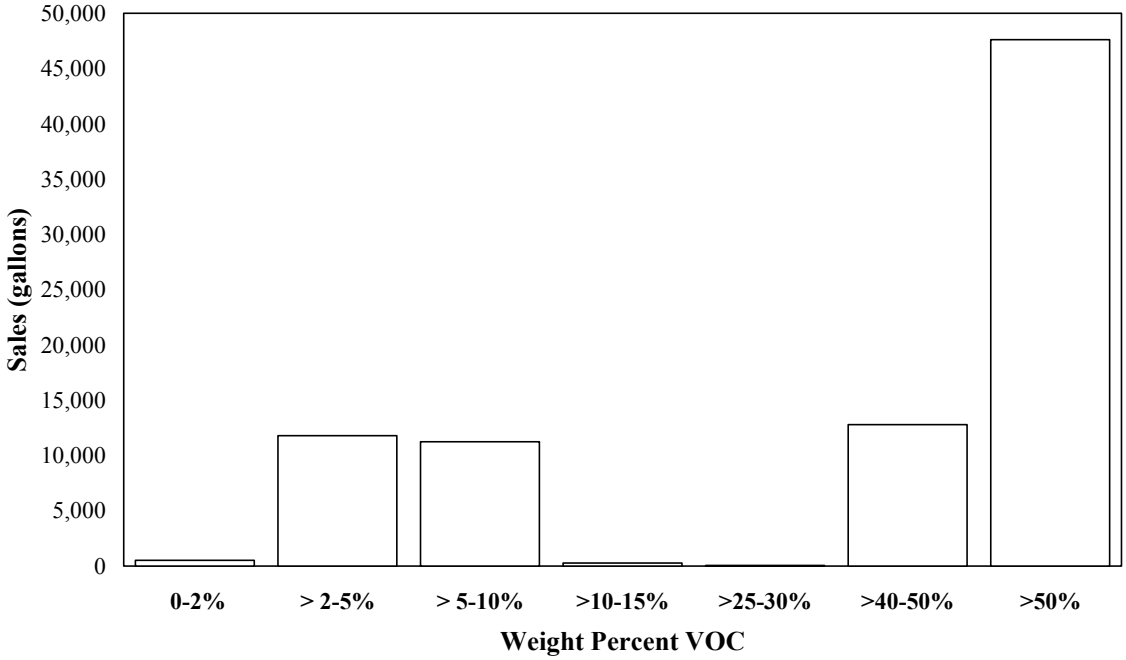


Figure 4-23b
Sanding Sealers



No figures are provided for **Shellacs (Clear or Opaque)**, because sales data are protected.

Figure 4-24a
Specialty Primer, Sealer and Undercoater

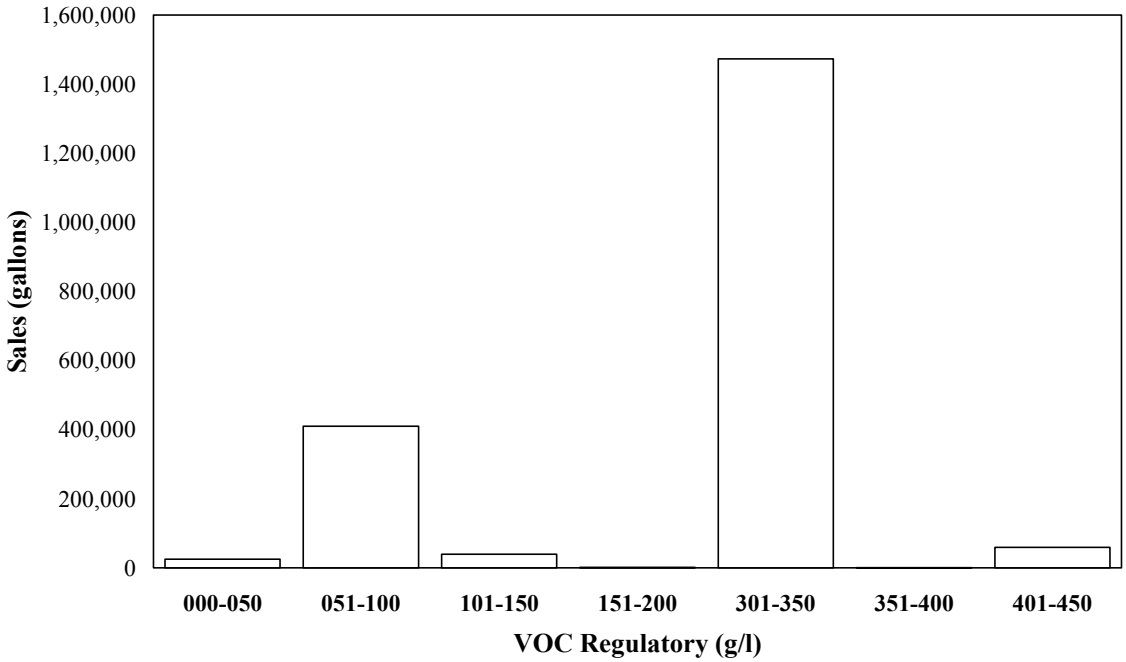


Figure 4-24b
Specialty Primer, Sealer and Undercoater

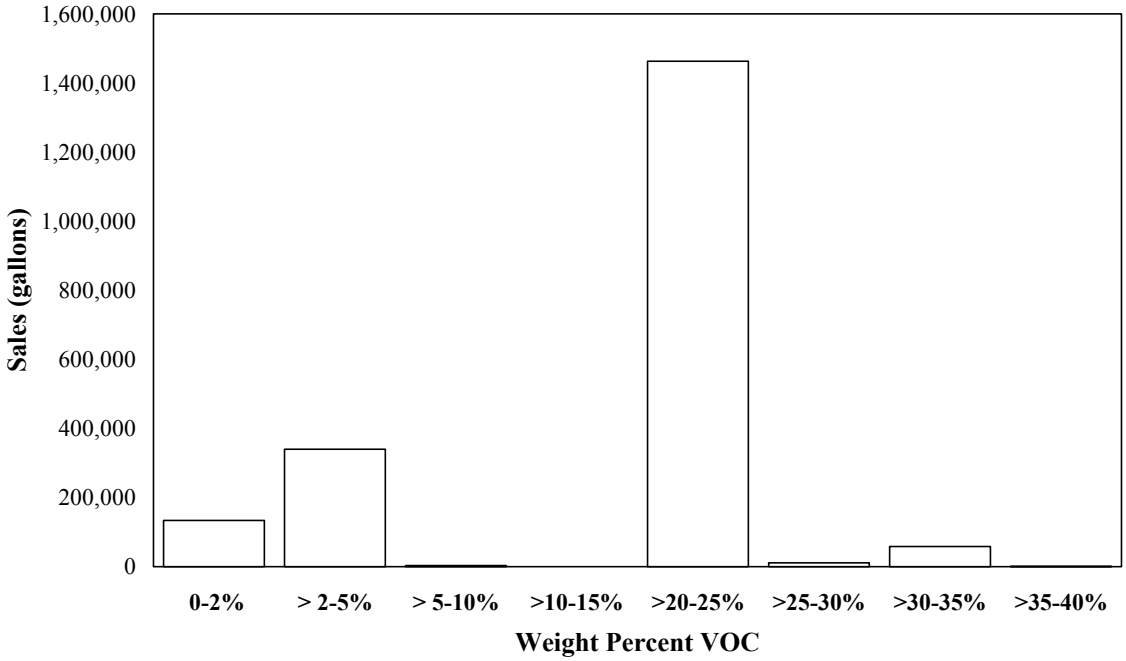


Figure 4-25a
Stains – Clear/Semitransparent

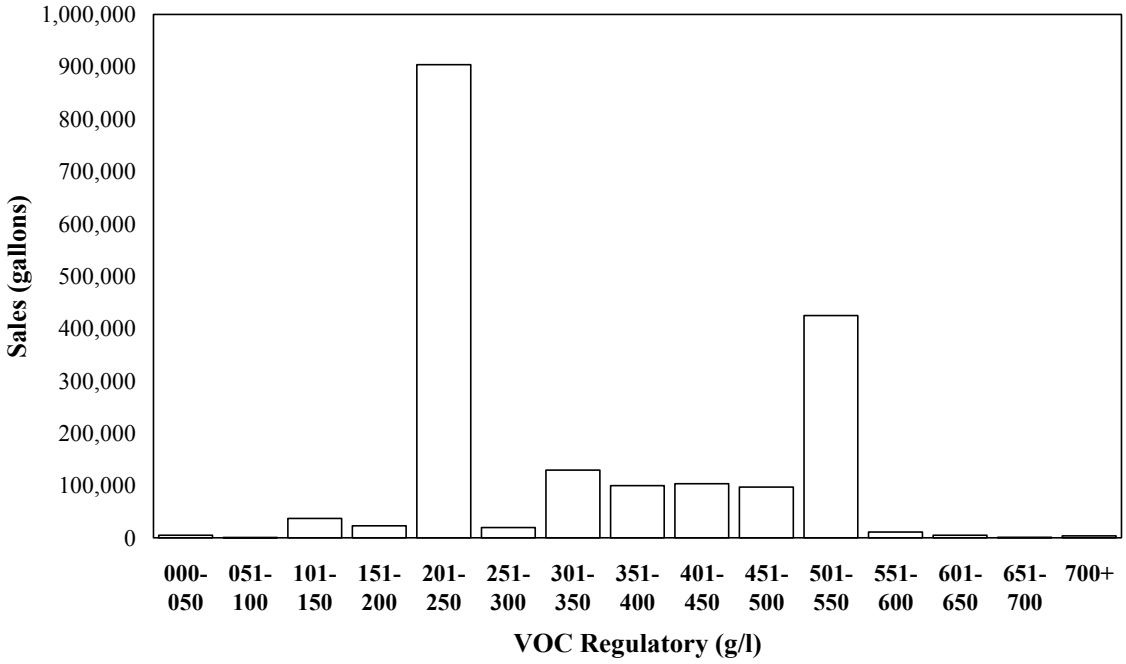


Figure 4-25b
Stains – Clear/Semitransparent

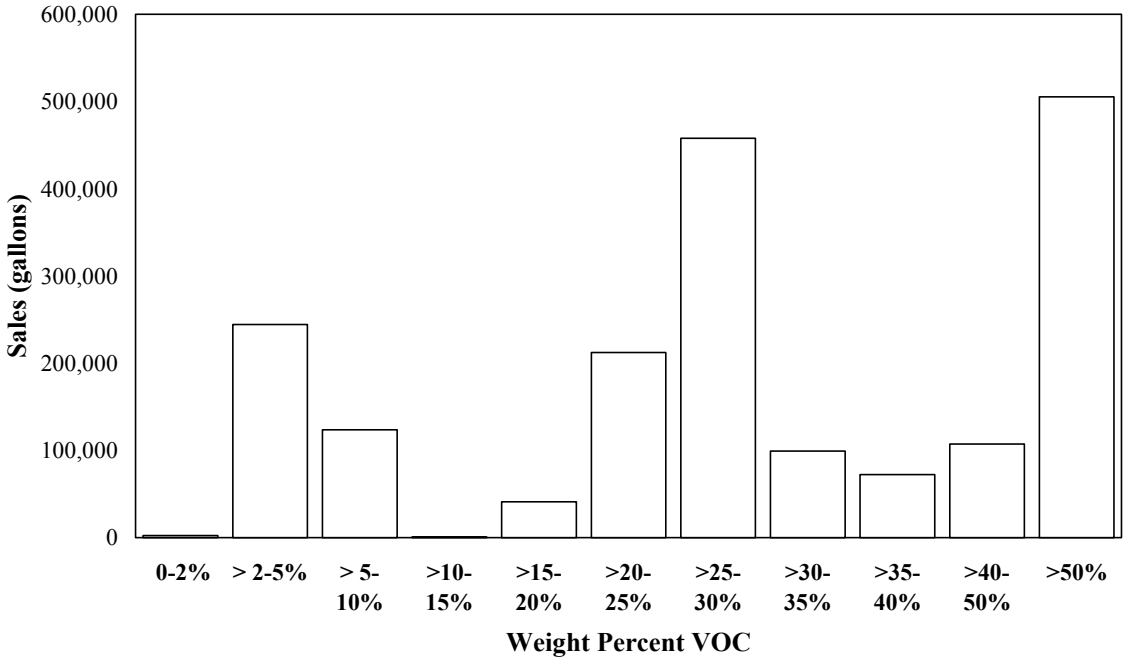


Figure 4-26a
Stains – Opaque

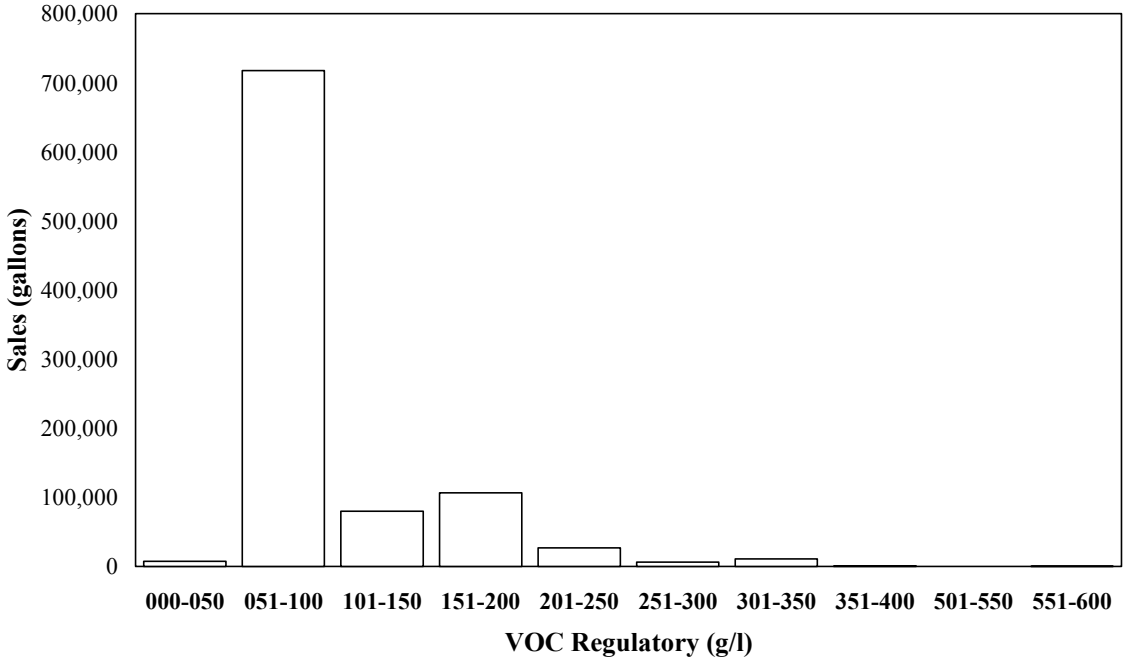
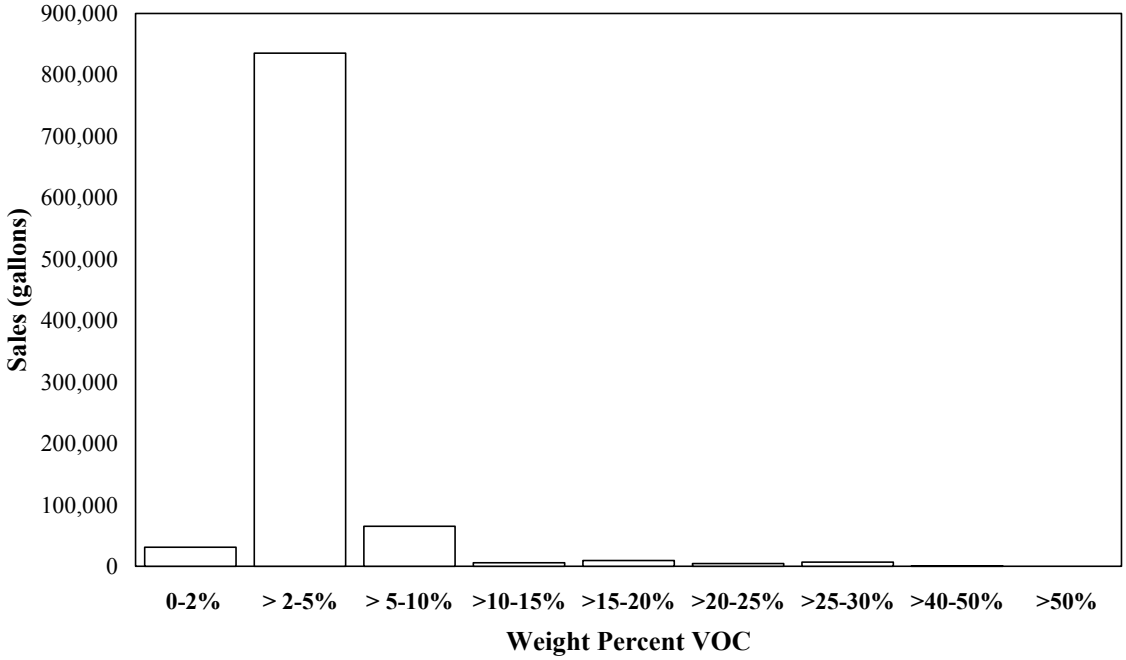


Figure 4-26b
Stains – Opaque



No figures are provided for **Swimming Pool** or **Swimming Pool Repair and Maintenance** coatings, because sales data are protected.

Figure 4-27a
Traffic Marking

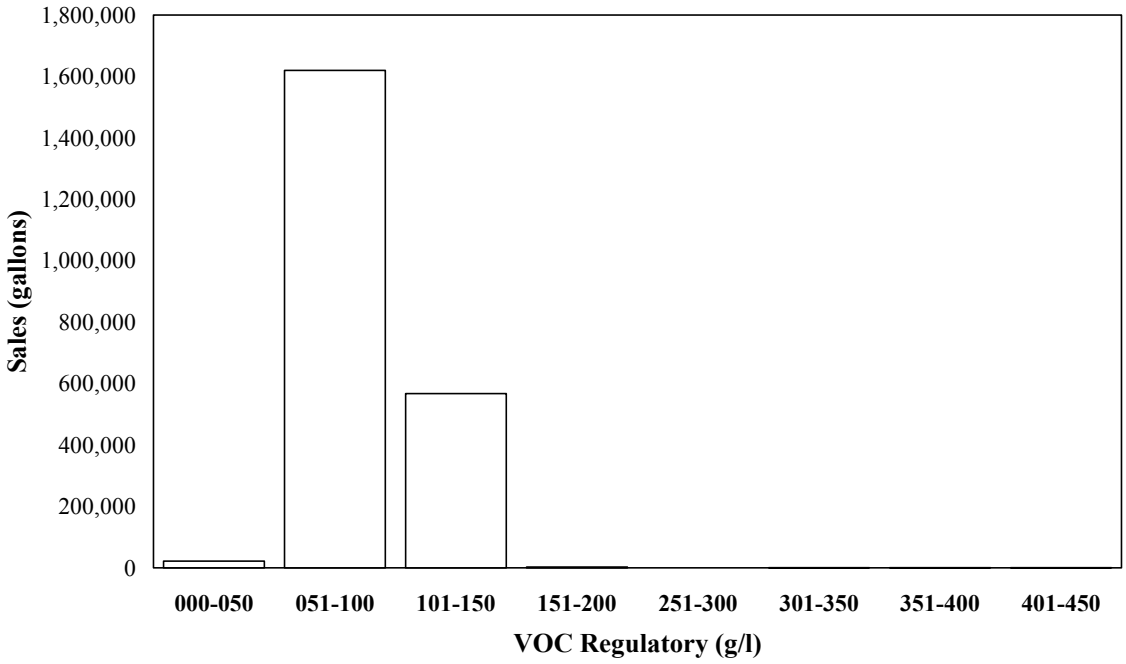


Figure 4-27b
Traffic Marking

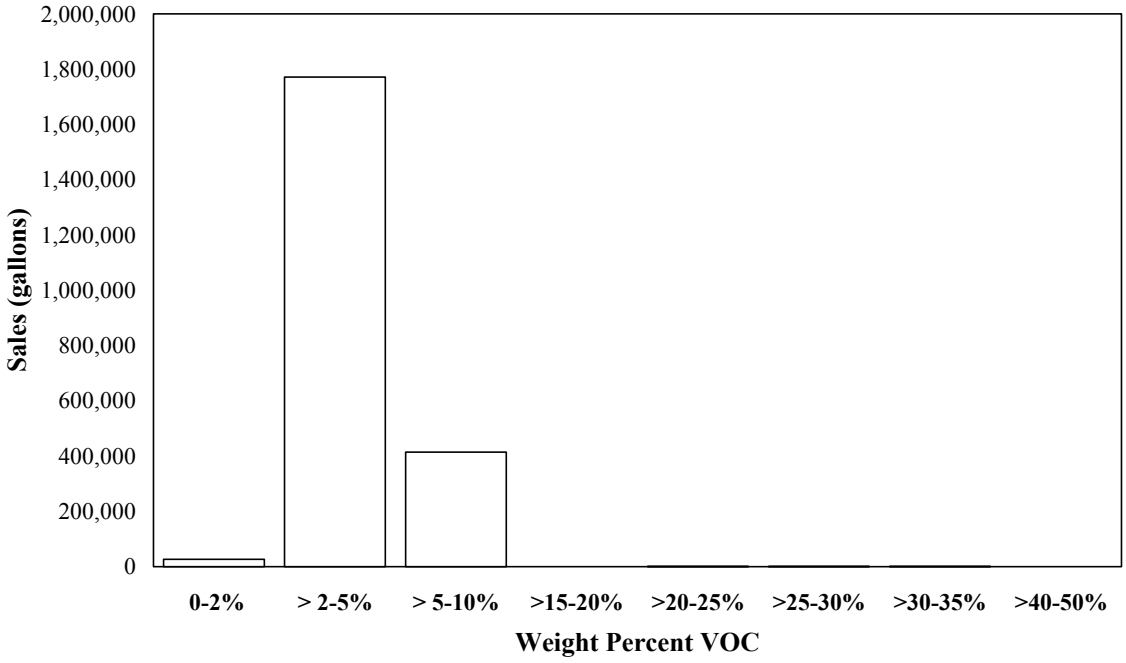


Figure 4-28a
Varnishes – Clear

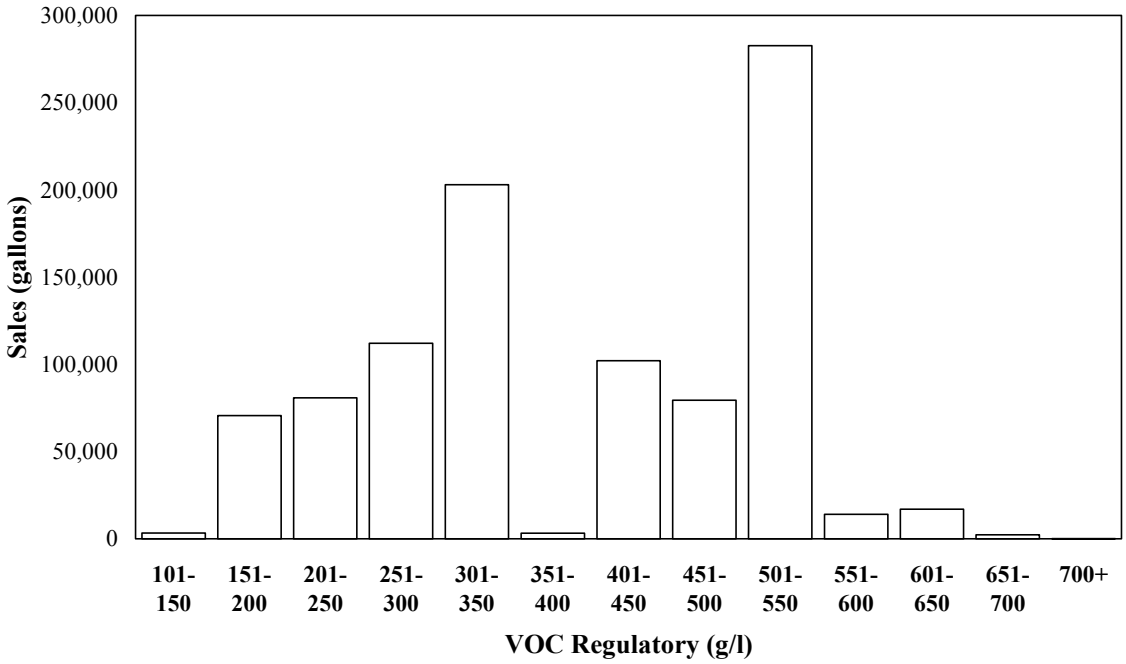


Figure 4-28b
Varnishes – Clear

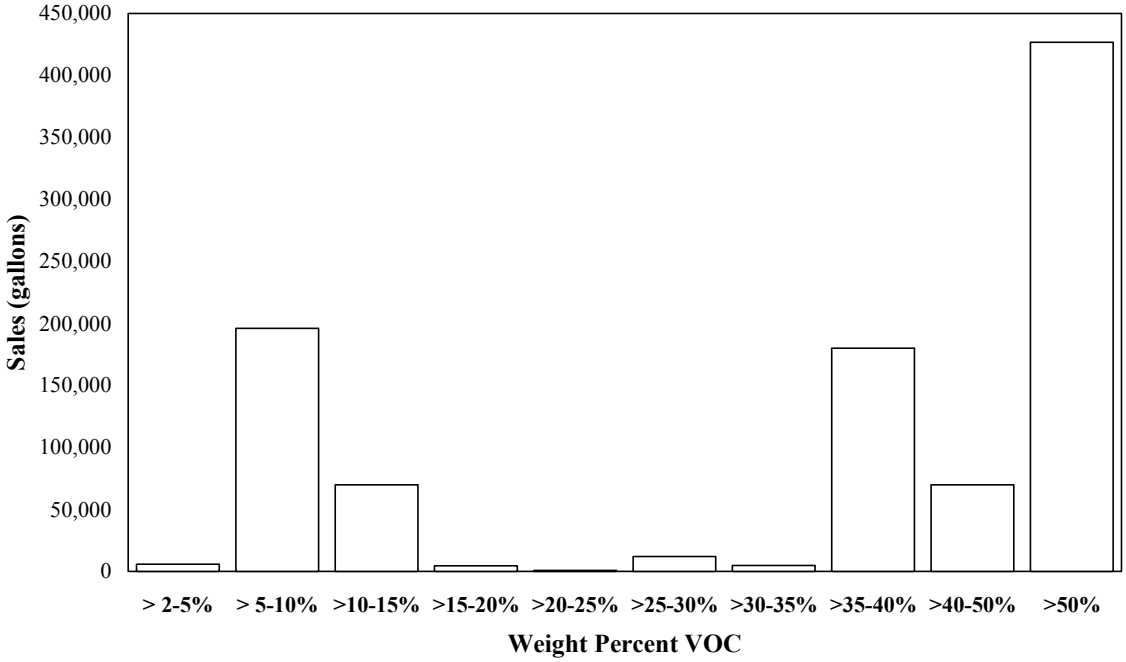


Figure 4-29a
Varnishes – Semitransparent

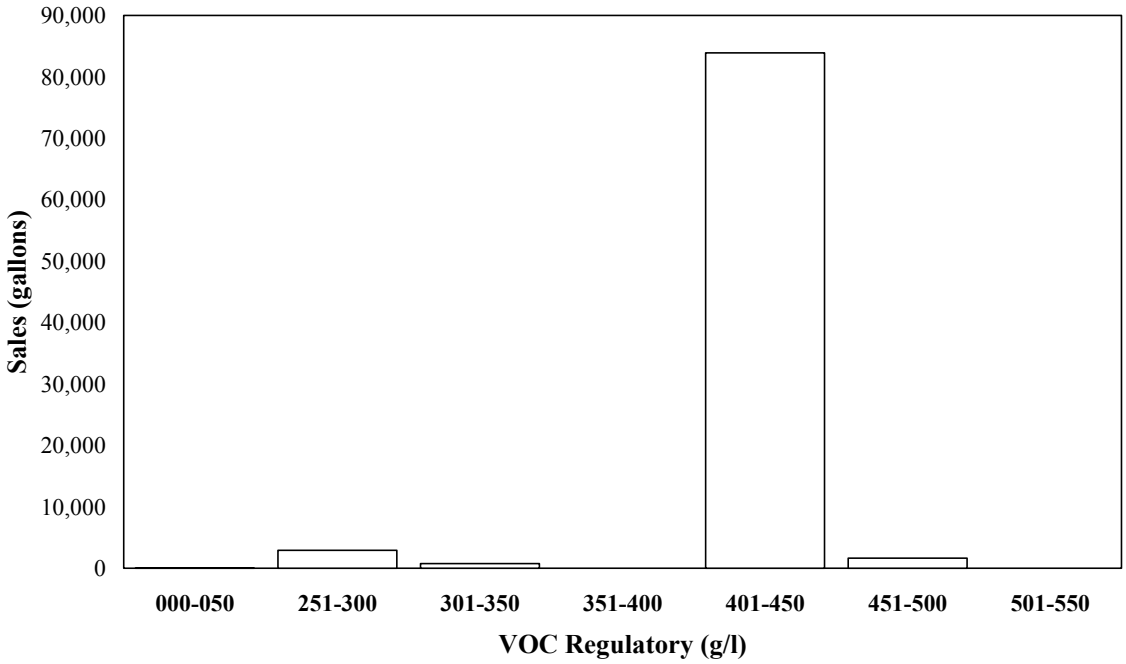


Figure 4-29b
Varnishes – Semitransparent

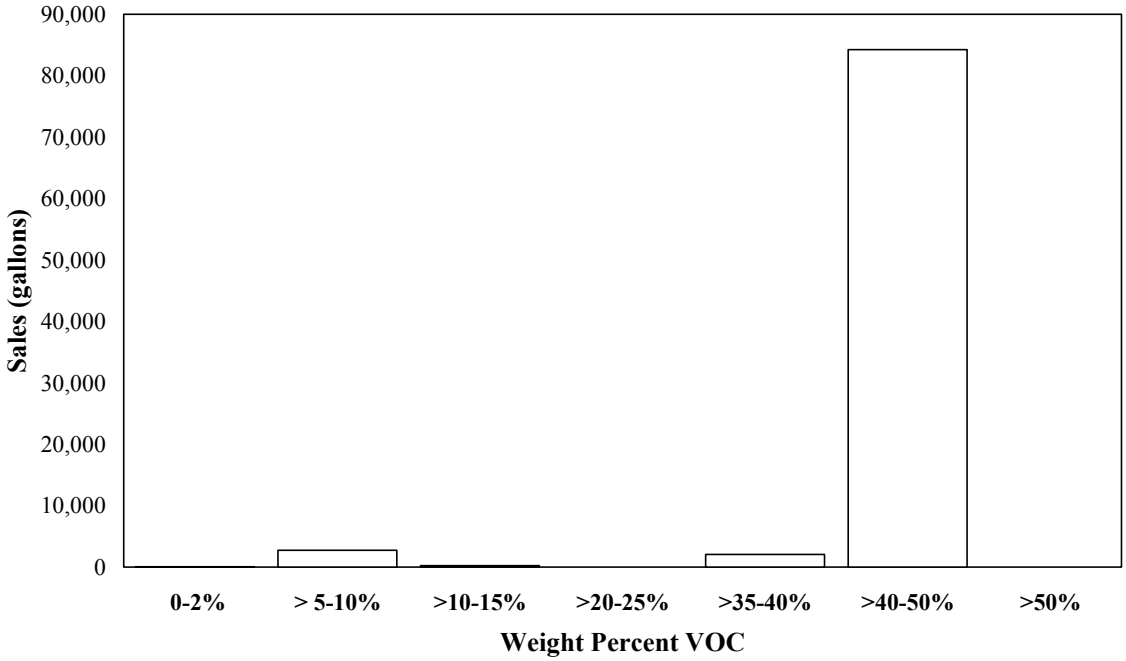


Figure 4-30a
Waterproofing Concrete/Masonry Sealers

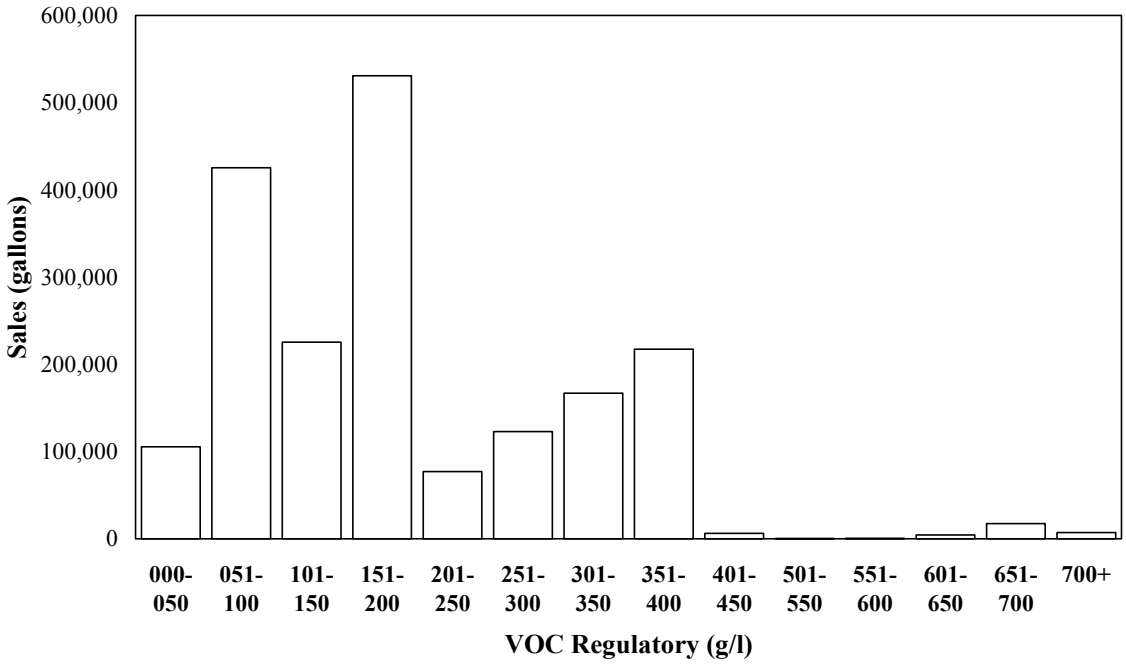


Figure 4-30b
Waterproofing Concrete/Masonry Sealers

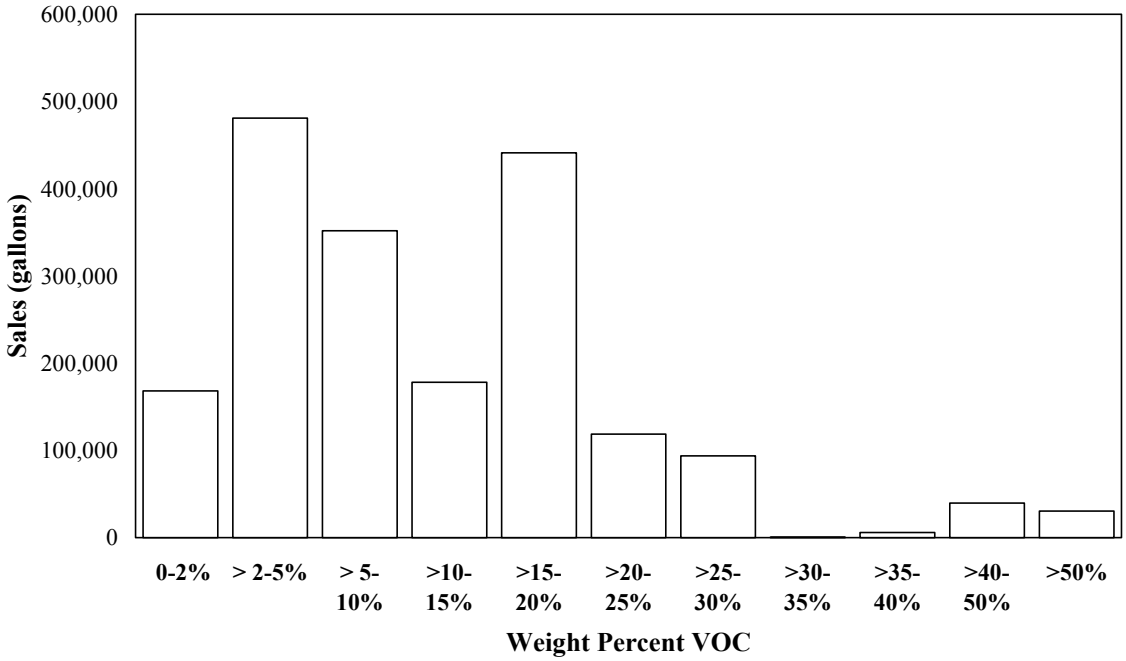


Figure 4-31a
Waterproofing Sealers

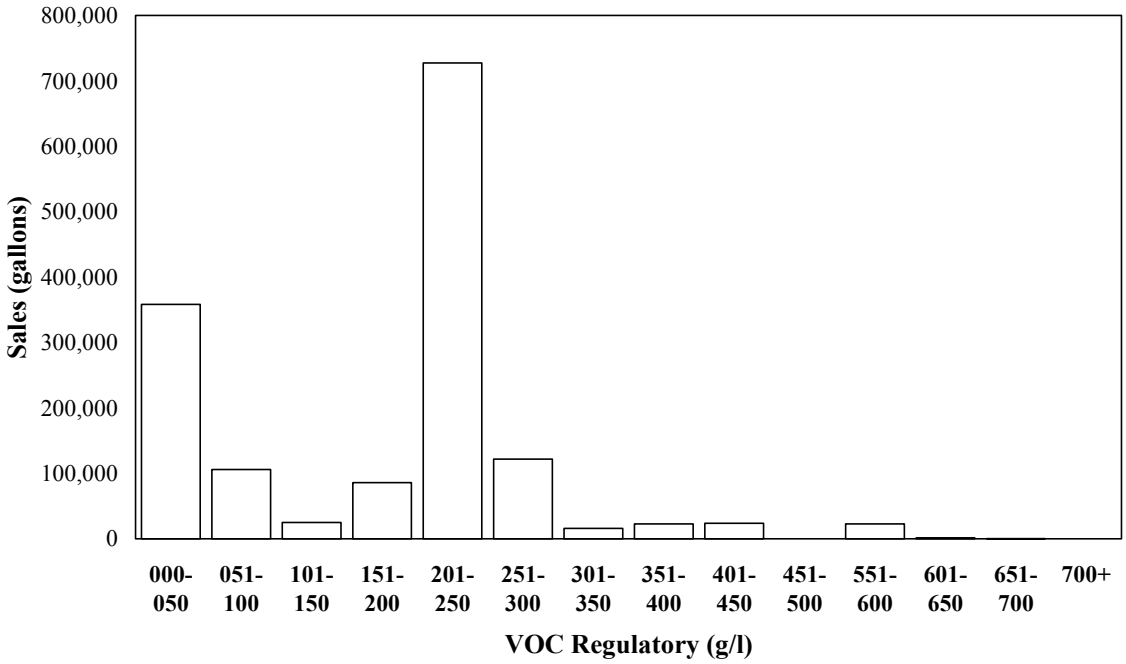


Figure 4-31b
Waterproofing Sealers

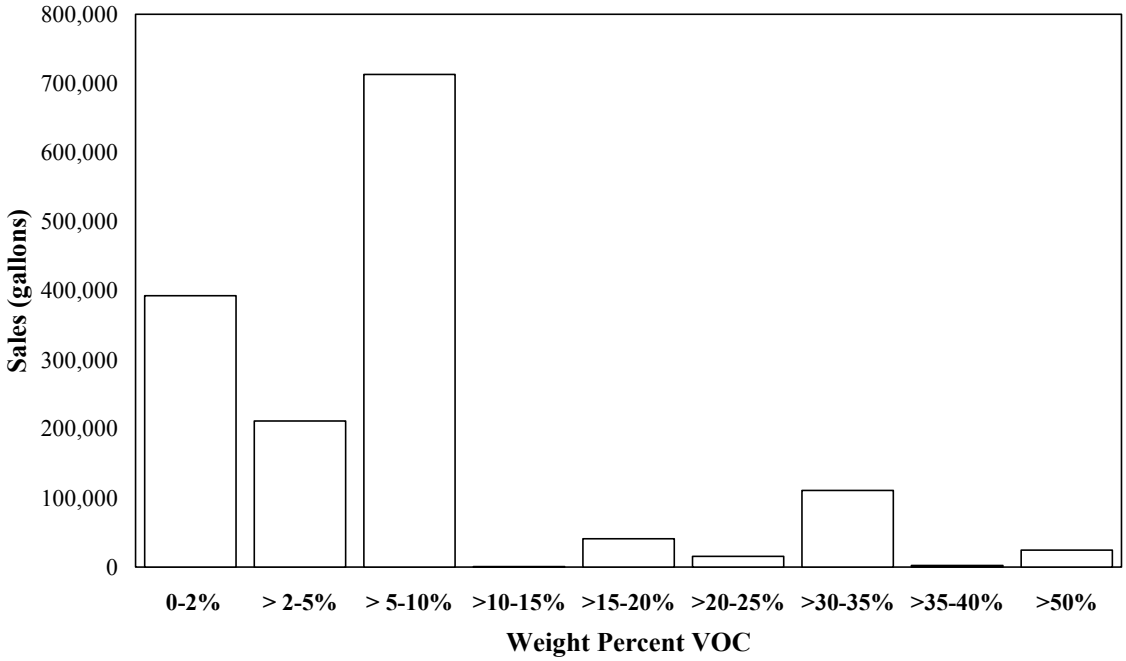


Figure 4-32a
Wood Preservatives

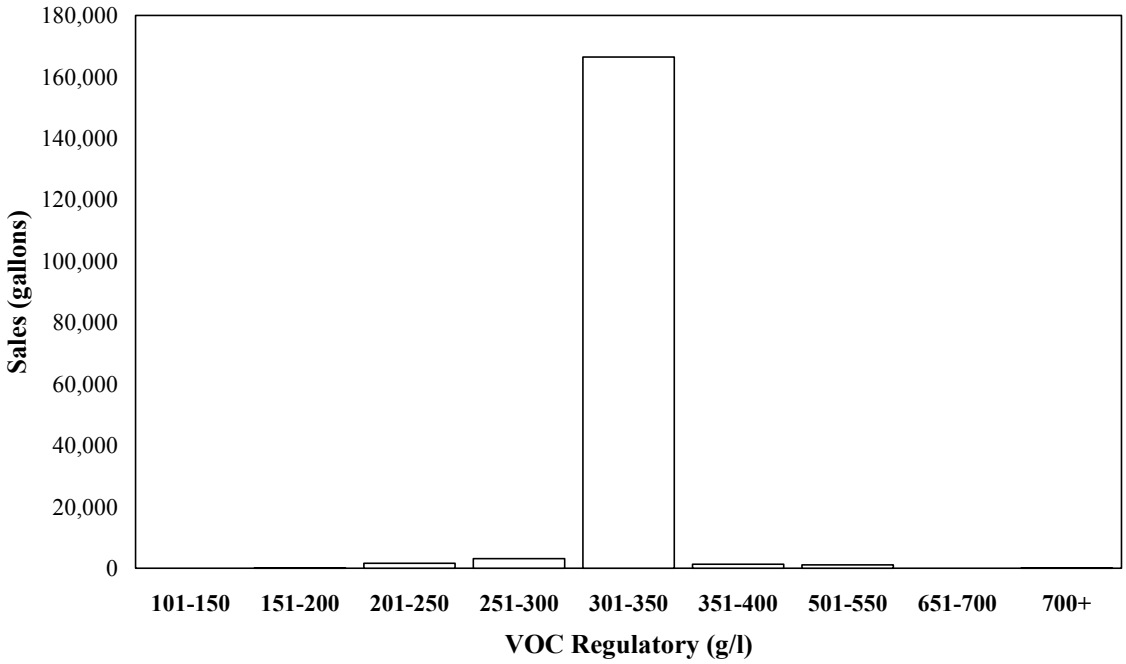
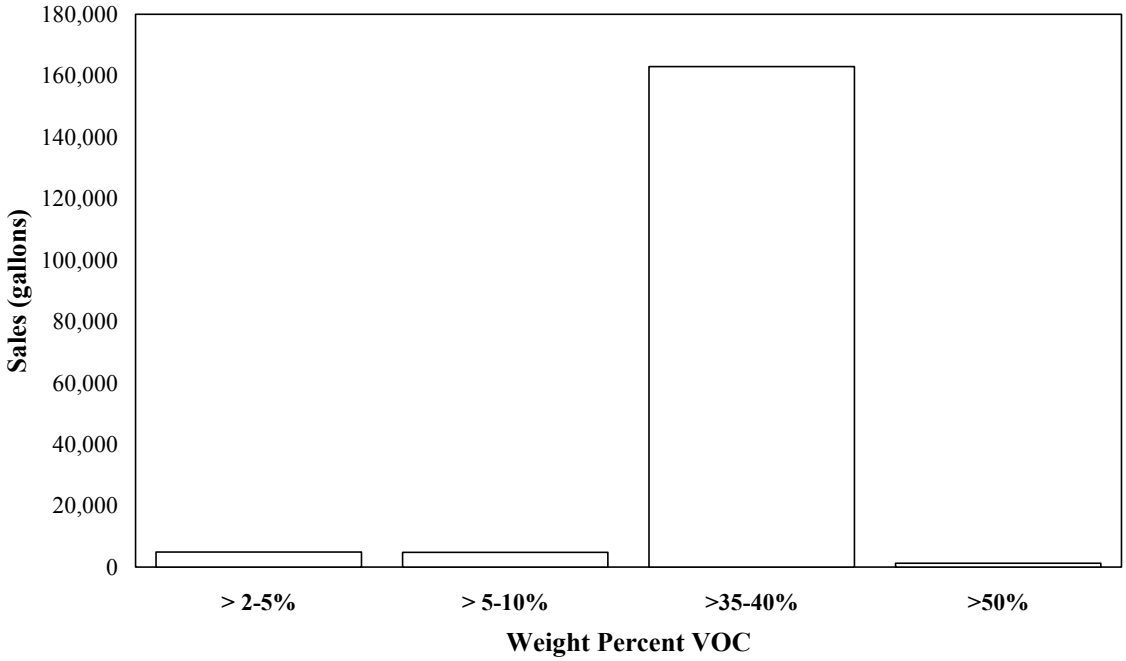


Figure 4-32b
Wood Preservatives



Chapter 5 – VOC Emissions

The 2005 survey collected data on VOC Actual values, which were then used to estimate VOC emissions from architectural coatings in calendar year 2004. VOC emissions were estimated using the following equation:

[VOC Emissions, tons/yr] = [VOC Actual, lb/gal][Sales, gals/yr]*[1 ton/2000 lbs]*

Estimated emissions from architectural coatings were almost **34,600** tons/yr or **95** tons/day, based on survey data. These quantities include emissions from small containers (1 quart or less), but they do not include emissions from thinning and cleanup associated with solvent-borne coatings.

Traditionally, for architectural coatings, ARB has estimated thinning and cleanup emissions by assuming that one pint of solvent (average density = 6.4 lb/gal) is used for each gallon of solvent-borne coating. The equation is provided below:

$$Thinning/Cleanup\ Emissions, \frac{tons}{day} = \left[Sales, \frac{gals\ SB\ coating}{yr}\right] * \left[\frac{1\ pint\ solvent}{gal\ SB\ coating}\right] * \left[\frac{1\ gal\ solvent}{8\ pints\ solvent}\right] * \left[\frac{6.4\ lbs}{gal\ solvent}\right] * \left[\frac{1\ ton}{2000\ lbs}\right] * \left[\frac{1\ yr}{365\ days}\right]$$

This traditional method is based on the assumption that no thinning or cleanup solvents are used when water-borne architectural coatings are applied. However, field surveys conducted by ARB staff revealed that this assumption may not be entirely correct. Water-borne coatings may be cleaned up with water, but some painters use organic solvents to conduct a final flush of their equipment to help prevent rusting. In addition, water-borne coatings may be thinned with water, but some painters use additives that contain VOCs to improve the coatings' performance (e.g., flow additives that extend open time and improve brushability and leveling.) Since water-borne coatings overwhelmingly dominate the architectural coating market, ARB staff believed that it was necessary to re-evaluate the methods used for estimating emissions from thinning and cleanup solvents.

In 2001, ARB sponsored a research project that was intended to improve ARB's emission inventory for a variety of coating categories, including the emission inventory for thinning and cleanup solvents associated with architectural coatings. This project was completed in 2004 and results are summarized in Appendix B. This project yielded new emission factors for estimating VOC emissions from the use of thinning solvents, cleanup solvents, and additives (see Table 5-1). In addition, ARB staff has adjusted the emission factor for cleanup to account for solvent that is collected by Household Hazardous Waste programs. VOC emissions for thinning and cleanup do not include the following roof coating categories: Bituminous Roof, Bituminous Roof Primer, and Roof. For these types of coatings, roofing contractors typically do not add thinning solvent and they discard their application materials rather than cleaning them.

The new method of estimating emissions for thinning, cleanup, and additives results in higher values than the traditional method. ARB staff believes that the new method

provides a more accurate estimate because it is supported by documented research which represents the current marketplace.

Table 5-1: ***New Emission Factors for Thinning, Cleanup & Additives***

	Coating Type	**Solvent/Additive Usage Ratio**		**VOC Content of Solvent or Additive** (lb VOC per gal of solvent or additive)	**Overall Emission Factor** (lb VOC/ gal coating)
Thinning	Solvent-borne	**0.0597**	gal thinning solvent per gallon SB coating	**5.92**	**0.353**
Additives	Water-borne	**0.0044**	gal additive per gallon WB coating	**0.92**	**0.004**
Cleanup	Solvent-borne & Water-borne	**0.0160**	gal cleanup solvent per gallon SB + WB coating	**5.92**	**0.095**

Note: See Appendix B for details of new thinning/cleanup estimation method.

Total estimated emissions from thinning solvents, cleanup solvents, and additives are more than **20** tons/day, including emissions from solvent usage associated with small containers. This estimate reflects the types of solvents that were in usage during 2004. In July 2005, the SCAQMD enacted requirements that lowered the VOC limit for solvents that are used for cleaning paint guns and other architectural coating application equipment. As of July 1, 2005 these cleaning solvents had to meet a VOC limit of 25 g/l for architectural coating operations conducted within the boundaries of the SCAQMD. ARB's emission inventory for 2005 and later will be adjusted accordingly.

This chapter includes the following data summaries:

Table 5-2: *VOC Emissions, Tons Per Year (sorted by category)*

Table 5-3: *VOC Emissions, Tons Per Day (sorted by category)*

Table 5-4: *VOC Emissions, Tons Per Day (sorted by emissions in descending order, excluding thinning and cleanup)*

Table 5-5: *VOC Emissions, Tons Per Day (by container size)*

Figure 5-1: *Solvent-borne and Water-borne Emissions*

Figure 5-2: *Top 10 Emission Categories*

Table 5-2 lists VOC emissions (tons per year) for each coating category, as well as subtotals for solvent-borne and water-borne emissions in each category. Table 5-3 is similar to Table 5-2, but it provides VOC emissions in units of tons per day. Table 5-4 lists VOC emissions, sorted in descending order based on tons per day. Table 5-5 provides VOC emissions based on container size, including subtotals for solvent-borne and water-borne emissions.

Table 5-2: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/YEAR)						
	SB	WB	TOTAL (without thinning, cleanup or additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup & additives)
Bituminous Roof	140	11	150	0	0	0	150
Bituminous Roof Primer	85	2	88	0	0	0	88
Bond Breakers	3	59	62	0	9	0	71
Clear Brushing Lacquer	192	0	192	12	3	0	207
Concrete Curing Compounds	41	116	157	8	36	2	202
Driveway Sealer	8	7	15	1	104	4	124
Dry Fog	250	48	298	33	9	0	340
Faux Finishing	7	118	125	1	14	1	141
Fire Resistive	6	0	6	1	0	0	7
Fire Retardant - Clear	2	0	2	0	0	0	2
Fire Retardant - Opaque	261	1	263	32	9	0	303
Flat	6	5,032	5,038	1	1,765	75	6,878
Floor	71	193	264	13	55	2	334
Form Release Compounds	287	5	292	50	13	0	356
Graphic Arts	5	0	6	1	0	0	7
High Temperature	18	0	18	2	1	0	20
Industrial Maintenance	1,318	236	1,555	251	67	1	1,875
Lacquers	1,222	93	1,314	166	44	1	1,525
Low Solids	0	16	16	0	3	0	20
Magnesite Cement	33	0	33	5	1	0	39
Mastic Texture	96	91	187	21	26	1	236
Metallic Pigmented	775	16	791	77	21	0	889
Multi-Color	0	1	2	0	1	0	2
Nonflat - High Gloss	63	426	490	7	81	3	582
Nonflat - Low Gloss	6	2,417	2,424	1	569	24	3,018
Nonflat - Medium Gloss	121	4,160	4,281	14	947	40	5,282
Other	5	4	9	0	4	0	14
Pre-Treatment Wash Primer	3	1	4	0	0	0	4
Primer, Sealer, and Undercoater	340	2,000	2,340	40	482	21	2,883
Quick Dry Enamel	1,157	22	1,179	126	34	0	1,339
Quick Dry Primer, Sealer, and Undercoater	372	1	373	39	10	0	423
Recycled	0	0	0	0	11	0	11

Table 5-2: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/YEAR)						
	SB	WB	TOTAL (without thinning, cleanup or additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup & additives)
Roof	41	103	144	0	0	0	144
Rust Preventative	3,134	33	3,167	354	95	0	3,616
Sanding Sealers	129	5	134	11	3	0	147
Shellacs - Clear	128	0	128	9	2	0	139
Shellacs - Opaque	297	0	297	26	7	0	329
Specialty Primer, Sealer, and Undercoater	2,192	83	2,275	271	73	1	2,620
Stains - Clear/Semitransparent	2,173	118	2,292	258	69	1	2,620
Stains - Opaque	25	152	177	4	44	2	227
Swimming Pool	12	4	16	2	0	0	18
Swimming Pool Repair and Maintenance	5	0	5	0	0	0	6
Traffic Marking	132	477	609	58	89	4	760
Varnishes - Clear	1,324	106	1,430	123	33	1	1,586
Varnishes - Semitransparent	158	1	159	15	4	0	178
Waterproofing Concrete/Masonry Sealers	817	207	1,025	169	45	2	1,240
Waterproofing Sealers	219	304	522	34	62	3	622
Wood Preservatives	224	2	226	29	8	0	262
TOTALS (tons/year)	**17,903**	**16,674**	**34,576**	**2,265**	**5,090**	**192**	**42,123**
% of Total Emissions (w/o thinning/cleanup):	**52%**	**48%**					
% of Total Emissions (with thinning/cleanup):	**43%**	**40%**		**5%**	**12%**	**0%**	

Notes:

1. This table includes VOC emissions from small containers (1 quart or less).
2. For Recycled coatings, emissions are zero because it is assumed that the emissions should be associated with the sales of the original product, prior to recycling.

Table 5-3: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/DAY)						
	SB	WB	TOTAL (without thinning, cleanup, additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup, additives)
Bituminous Roof	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Bituminous Roof Primer	0.2	0.0	0.2	0.0	0.0	0.0	0.2
Bond Breakers	0.0	0.2	0.2	0.0	0.0	0.0	0.2
Clear Brushing Lacquer	0.5	0.0	0.5	0.0	0.0	0.0	0.6
Concrete Curing Compounds	0.1	0.3	0.4	0.0	0.1	0.0	0.6

Table 5-3: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/DAY)						
	SB	WB	TOTAL (without thinning, cleanup, additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup, additives)
Driveway Sealer	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Dry Fog	0.7	0.1	0.8	0.1	0.0	0.0	0.9
Faux Finishing	0.0	0.3	0.3	0.0	0.0	0.0	0.4
Fire Resistive	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Opaque	0.7	0.0	0.7	0.1	0.0	0.0	0.8
Flat	0.0	13.8	13.8	0.0	4.8	0.2	18.8
Floor	0.2	0.5	0.7	0.0	0.2	0.0	0.9
Form Release Compounds	0.8	0.0	0.8	0.1	0.0	0.0	1.0
Graphic Arts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High Temperature	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Industrial Maintenance	3.6	0.6	4.3	0.7	0.2	0.0	5.1
Lacquers	3.3	0.3	3.6	0.5	0.1	0.0	4.2
Low Solids	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Magnesite Cement	0.1	0.0	0.1	0.0	0.0	0.0	0.1
Mastic Texture	0.3	0.3	0.5	0.1	0.1	0.0	0.6
Metallic Pigmented	2.1	0.0	2.2	0.2	0.1	0.0	2.4
Multi-Color	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonflat - High Gloss	0.2	1.2	1.3	0.0	0.2	0.0	1.6
Nonflat - Low Gloss	0.0	6.6	6.6	0.0	1.6	0.1	8.3
Nonflat - Medium Gloss	0.3	11.4	11.7	0.0	2.6	0.1	14.5
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-Treatment Wash Primer	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primer, Sealer, and Undercoater	0.9	5.5	6.4	0.1	1.3	0.1	7.9
Quick Dry Enamel	3.2	0.1	3.2	0.3	0.1	0.0	3.7
Quick Dry Primer, Sealer, and Undercoater	1.0	0.0	1.0	0.1	0.0	0.0	1.2
Recycled	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Roof	0.1	0.3	0.4	0.0	0.0	0.0	0.4
Rust Preventative	8.6	0.1	8.7	1.0	0.3	0.0	9.9
Sanding Sealers	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Shellacs - Clear	0.3	0.0	0.3	0.0	0.0	0.0	0.4
Shellacs - Opaque	0.8	0.0	0.8	0.1	0.0	0.0	0.9
Specialty Primer, Sealer, and Undercoater	6.0	0.2	6.2	0.7	0.2	0.0	7.2
Stains - Clear/Semitransparent	6.0	0.3	6.3	0.7	0.2	0.0	7.2
Stains - Opaque	0.1	0.4	0.5	0.0	0.1	0.0	0.6
Swimming Pool	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Swimming Pool Repair and Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traffic Marking	0.4	1.3	1.7	0.2	0.2	0.0	2.1
Varnishes - Clear	3.6	0.3	3.9	0.3	0.1	0.0	4.3

Table 5-3: ***VOC Emissions (sorted by category)***

Coating Category	VOC Emissions (Tons/DAY)						
	SB	**WB**	**TOTAL (without thinning, cleanup, additives)**	**Thinning**	**Cleanup**	**Additives**	**TOTAL (including thinning, cleanup, additives)**
Varnishes - Semitransparent	0.4	0.0	0.4	0.0	0.0	0.0	0.5
Waterproofing Concrete/Masonry Sealers	2.2	0.6	2.8	0.5	0.1	0.0	3.4
Waterproofing Sealers	0.6	0.8	1.4	0.1	0.2	0.0	1.7
Wood Preservatives	0.6	0.0	0.6	0.1	0.0	0.0	0.7
TOTALS (tons/day)	**49**	**46**	**95**	**6**	**14**	**1**	**115**
% of Total Emissions (w/o thinning/cleanup):	**52%**	**48%**					
% of Total Emissions (with thinning/cleanup):	**43%**	**40%**		**5%**	**12%**	**0%**	

Notes:
1. NA = Not applicable. No sales were reported for this category.
2. This table includes VOC emissions from small containers (1 quart or less).
3. For Recycled coatings, emissions are zero because it is assumed that the emissions should be associated with the sales of the original product, prior to recycling.

Table 5-4: ***VOC Emissions***
(sorted by emissions in descending order, excluding thinning, cleanup & additives)

Coating Category	VOC Emissions (Tons/DAY)						
	SB	**WB**	**TOTAL (without thinning, cleanup or additives)**	**Thinning**	**Cleanup**	**Additives**	**TOTAL (including thinning, cleanup & additives)**
Flat	0.0	13.8	13.8	0.0	4.8	0.2	18.8
Nonflat - Medium Gloss	0.3	11.4	11.7	0.0	2.6	0.1	14.5
Rust Preventative	8.6	0.1	8.7	1.0	0.3	0.0	9.9
Nonflat - Low Gloss	0.0	6.6	6.6	0.0	1.6	0.1	8.3
Primer, Sealer, and Undercoater	0.9	5.5	6.4	0.1	1.3	0.1	7.9
Stains - Clear/Semitransparent	6.0	0.3	6.3	0.7	0.2	0.0	7.2
Specialty Primer, Sealer, and Undercoater	6.0	0.2	6.2	0.7	0.2	0.0	7.2
Industrial Maintenance	3.6	0.6	4.3	0.7	0.2	0.0	5.1
Varnishes - Clear	3.6	0.3	3.9	0.3	0.1	0.0	4.3
Lacquers	3.3	0.3	3.6	0.5	0.1	0.0	4.2
Quick Dry Enamel	3.2	0.1	3.2	0.3	0.1	0.0	3.7
Waterproofing Concrete/Masonry Sealers	2.2	0.6	2.8	0.5	0.1	0.0	3.4
Metallic Pigmented	2.1	0.0	2.2	0.2	0.1	0.0	2.4
Traffic Marking	0.4	1.3	1.7	0.2	0.2	0.0	2.1

Table 5-4: *VOC Emissions*
(sorted by emissions in descending order, excluding thinning, cleanup & additives)

Coating Category	VOC Emissions (Tons/DAY)						
	SB	WB	TOTAL (without thinning, cleanup or additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup & additives)
Waterproofing Sealers	0.6	0.8	1.4	0.1	0.2	0.0	1.7
Nonflat - High Gloss	0.2	1.2	1.3	0.0	0.2	0.0	1.6
Quick Dry Primer, Sealer, and Undercoater	1.0	0.0	1.0	0.1	0.0	0.0	1.2
Dry Fog	0.7	0.1	0.8	0.1	0.0	0.0	0.9
Shellacs - Opaque	0.8	0.0	0.8	0.1	0.0	0.0	0.9
Form Release Compounds	0.8	0.0	0.8	0.1	0.0	0.0	1.0
Floor	0.2	0.5	0.7	0.0	0.2	0.0	0.9
Fire Retardant - Opaque	0.7	0.0	0.7	0.1	0.0	0.0	0.8
Wood Preservatives	0.6	0.0	0.6	0.1	0.0	0.0	0.7
Clear Brushing Lacquer	0.5	0.0	0.5	0.0	0.0	0.0	0.6
Mastic Texture	0.3	0.3	0.5	0.1	0.1	0.0	0.6
Stains - Opaque	0.1	0.4	0.5	0.0	0.1	0.0	0.6
Varnishes - Semitransparent	0.4	0.0	0.4	0.0	0.0	0.0	0.5
Concrete Curing Compounds	0.1	0.3	0.4	0.0	0.1	0.0	0.6
Bituminous Roof	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Roof	0.1	0.3	0.4	0.0	0.0	0.0	0.4
Sanding Sealers	0.4	0.0	0.4	0.0	0.0	0.0	0.4
Shellacs - Clear	0.3	0.0	0.3	0.0	0.0	0.0	0.4
Faux Finishing	0.0	0.3	0.3	0.0	0.0	0.0	0.4
Bituminous Roof Primer	0.2	0.0	0.2	0.0	0.0	0.0	0.2
Bond Breakers	0.0	0.2	0.2	0.0	0.0	0.0	0.2
Magnesite Cement	0.1	0.0	0.1	0.0	0.0	0.0	0.1
High Temperature	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Low Solids	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Swimming Pool	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Driveway Sealer	0.0	0.0	0.0	0.0	0.3	0.0	0.3
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Resistive	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Graphic Arts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Swimming Pool Repair and Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pre-Treatment Wash Primer	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multi-Color	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recycled	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 5-4: *VOC Emissions*
(sorted by emissions in descending order, excluding thinning, cleanup & additives)

Coating Category	VOC Emissions (Tons/DAY)						
	SB	WB	TOTAL (without thinning, cleanup or additives)	Thinning	Cleanup	Additives	TOTAL (including thinning, cleanup & additives)
TOTALS (tons/day):	**49**	**46**	**95**	**6**	**14**	**1**	**115**
% of Total Emissions (w/o thinning/cleanup):	**52%**	**48%**					
% of Total Emissions (with thinning/cleanup):	**43%**	**40%**		**5%**	**12%**	**0%**	

Notes:
1. This table includes VOC emissions from small containers (1 quart or less).
2. For Recycled coatings, emissions are zero because it is assumed that the emissions should be associated with the sales of the original product, prior to recycling.
3. For Driveway Sealers, emissions from equipment cleanup are more than emissions from coating usage, because cleanup emissions are associated with waterborne products that have very low VOC contents.

Table 5-5: *VOC Emissions (by container size)*

Coating Category	VOC Emissions (Tons/DAY)				
	TOTAL	Small Containers (≤ 1 quart)		Large Containers (> 1 quart)	
		SB	WB	SB	WB
Bituminous Roof	0.4	0.0	0.0	0.4	0.0
Bituminous Roof Primer	0.2	0.0	0.0	0.2	0.0
Bond Breakers	0.2	0.0	0.0	0.0	0.2
Clear Brushing Lacquer	0.5	0.1	0.0	0.4	0.0
Concrete Curing Compounds	0.4	0.0	0.0	0.1	0.3
Driveway Sealer	0.0	0.0	0.0	0.0	0.0
Dry Fog	0.8	0.0	0.0	0.7	0.1
Faux Finishing	0.3	0.0	0.1	0.0	0.2
Fire Resistive	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Clear	0.0	0.0	0.0	0.0	0.0
Fire Retardant - Opaque	0.7	0.0	0.0	0.7	0.0
Flat	13.8	0.0	0.2	0.0	13.5
Floor	0.7	0.0	0.0	0.2	0.5
Form Release Compounds	0.8	0.0	0.0	0.8	0.0
Graphic Arts	0.0	0.0	0.0	0.0	0.0
High Temperature	0.0	0.0	0.0	0.0	0.0
Industrial Maintenance	4.3	0.1	0.0	3.5	0.6
Lacquers	3.6	0.1	0.0	3.3	0.2
Low Solids	0.0	0.0	0.0	0.0	0.0
Magnesite Cement	0.1	0.0	0.0	0.1	0.0
Mastic Texture	0.5	0.0	0.0	0.3	0.3
Metallic Pigmented	2.2	0.0	0.0	2.1	0.0
Multi-Color	0.0	0.0	0.0	0.0	0.0
Nonflat - High Gloss	1.3	0.1	0.0	0.1	1.1
Nonflat - Low Gloss	6.6	0.0	0.2	0.0	6.4
Nonflat - Medium Gloss	11.7	0.2	0.5	0.2	10.9

Table 5-5: ***VOC Emissions (by container size)***

Coating Category	VOC Emissions (Tons/DAY)				
		Small Containers (≤ 1 quart)		Large Containers (> 1 quart)	
	TOTAL	SB	WB	SB	WB
Other	0.0	0.0	0.0	0.0	0.0
Pre-Treatment Wash Primer	0.0	0.0	0.0	0.0	0.0
Primer, Sealer, and Undercoater	6.4	0.2	0.1	0.7	5.4
Quick Dry Enamel	3.2	0.1	0.0	3.1	0.1
Quick Dry Primer, Sealer, and Undercoater	1.0	0.0	0.0	1.0	0.0
Recycled	0.0	0.0	0.0	0.0	0.0
Roof	0.4	0.0	0.0	0.1	0.3
Rust Preventative	8.7	1.1	0.0	7.5	0.1
Sanding Sealers	0.4	0.3	0.0	0.1	0.0
Shellacs - Clear	0.3	0.1	0.0	0.3	0.0
Shellacs - Opaque	0.8	0.0	0.0	0.8	0.0
Specialty Primer, Sealer, and Undercoater	6.2	0.2	0.0	5.9	0.2
Stains - Clear/Semitransparent	6.3	2.8	0.1	3.2	0.3
Stains - Opaque	0.5	0.0	0.0	0.1	0.4
Swimming Pool	0.0	0.0	0.0	0.0	0.0
Swimming Pool Repair and Maintenance	0.0	0.0	0.0	0.0	0.0
Traffic Marking	1.7	0.0	0.0	0.4	1.3
Varnishes - Clear	3.9	2.7	0.0	0.9	0.3
Varnishes - Semitransparent	0.4	0.4	0.0	0.0	0.0
Waterproofing Concrete/Masonry Sealers	2.8	0.0	0.0	2.2	0.6
Waterproofing Sealers	1.4	0.0	0.0	0.6	0.8
Wood Preservatives	0.6	0.1	0.0	0.6	0.0
TOTALS (tons/day):	**94.7**	**8.6**	**1.4**	**40.5**	**44.2**
% of Total Emissions:		**9%**	**2%**	**43%**	**47%**

Notes:

1. This table includes VOC emissions from small containers (1 quart or less).
2. For Recycled coatings, emissions are zero because it is assumed that the emissions should be associated with the sales of the original product, prior to recycling.

The breakdown between solvent-borne and water-borne emission data is graphically illustrated in Figure 5-1, while Figure 5-2 is a chart that highlights the top ten coating categories, based on VOC emissions.

Figure 5-1
Water-borne and Solvent-borne Emissions
(Without Thinning and Cleanup)

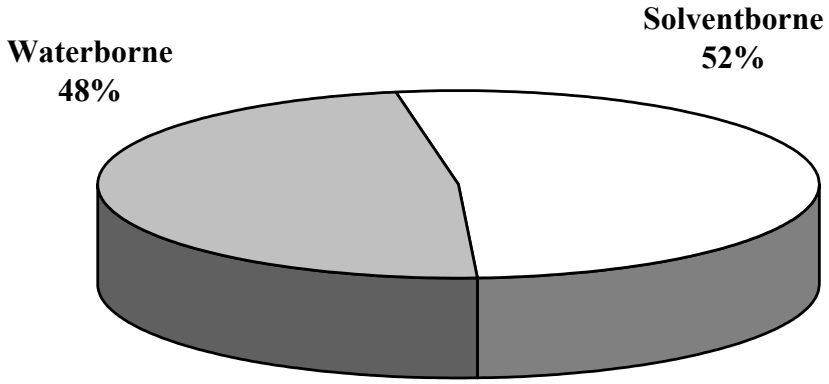
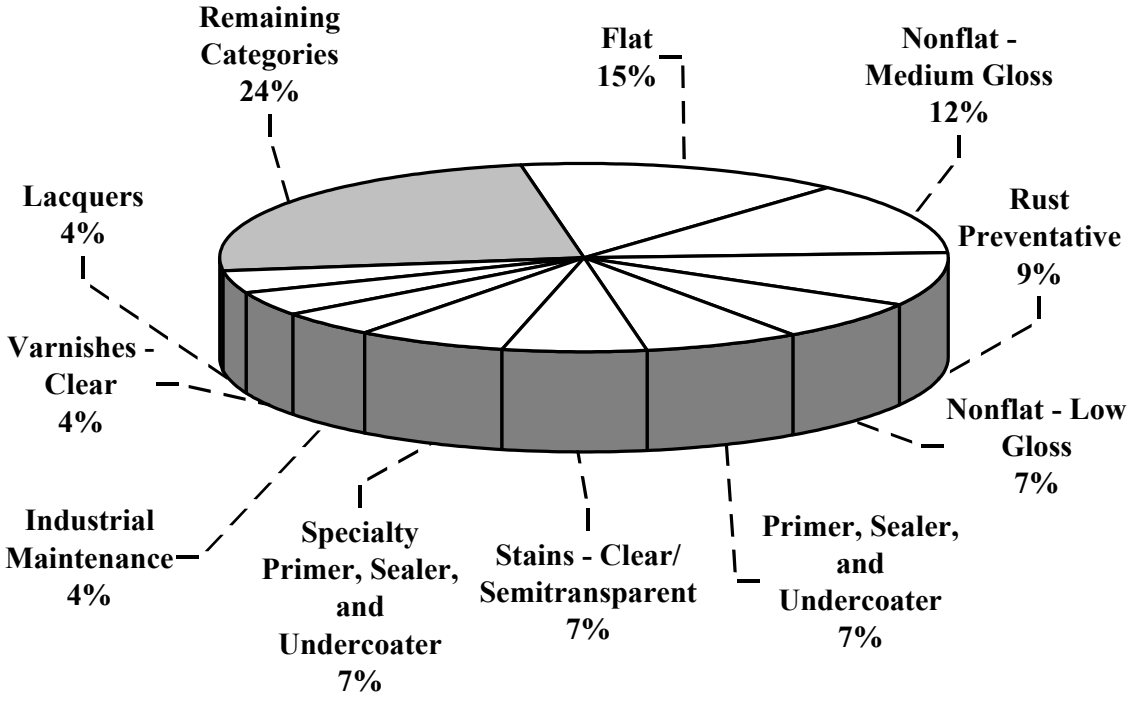


Figure 5-2
Top 10 Emission Categories



Top 10 categories account for 76% of total emissions.

Chapter 6 -- Complying Marketshares

In June 2000, the ARB approved a Suggested Control Measure (SCM) for Architectural Coatings. The 2000 SCM serves as a model rule that local air districts can adopt to achieve emission reductions. To date, 20 districts have adopted rules based on the 2000 SCM, with VOC limits that took effect in 2003 and 2004. Data from the 2005 survey were analyzed to determine what percentage of coating sales volumes complied with the VOC limits in the 2000 SCM. For comparison purposes, data were also analyzed to determine the percentage of sales volume that would comply with the South Coast Air Quality Management District's future Rule 1113 VOC limits that will become effective in or before 2008. When conducting these analyses for most of the tables in this chapter, we did not include the sales of small containers (i.e., one quart or less), because the SCM contains an exemption from VOC limits for small containers. Rule 1113 also contained a general small container exemption in 2004. However, data are also provided for small containers only.

Complying marketshares from the 2005 survey were compared with results from the previous 2001 survey. In most cases, the percent complying marketshare from the 2005 survey had improved or was approximately the same, when compared to the 2001 survey data. However, there were a few categories where the complying marketshare declined noticeably, as discussed later in this chapter.

This chapter includes the following data summaries:

Table 6-1: *2005 Survey Complying Marketshares – 2000 SCM Limits (large containers only)*

Table 6-2: *Previous 2001 Survey Complying Marketshares –2000 SCM Limits (large containers only)*

Table 6-3: *2005 Survey Complying Marketshares – 2000 SCM Limits (small containers only)*

Table 6-4: *2005 Survey Complying Marketshares (Interior/Exterior/Dual) – 2000 SCM Limits (large containers only)*

Table 6-5: *2005 Survey Complying Marketshares – Future SCAQMD Limits (large containers only)*

Table 6-6: *Previous 2001 Survey Complying Marketshares – Future SCAQMD Limits (large containers only)*

Table 6-7: *2005 Survey Complying Marketshares – Future SCAQMD Limits (small containers only)*

Table 6-8: *2005 Survey Complying Marketshares (Interior/Exterior/Dual) – Future SCAQMD Limits (large containers only)*

Figure 6-1: *Comparison of SCM Complying Marketshares – 2005 vs. 2001 (Part I)*

Figure 6-2: *Comparison of SCM Complying Marketshares – 2005 vs. 2001 (Part II)*

Table 6-1: *2005 Survey Complying Marketshares – 2000 SCM Limits*

(does not include small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof	300	26	77	73	95%	1,461,037	1,456,009	100%
Bituminous Roof Primer	350	324	31	15	48%	68,092	53,861	79%
Bond Breakers	350	302	13	9	69%	187,785	137,200	73%
Clear Brushing Lacquer	680	666	4	4	100%	PD	PD	100%
Concrete Curing Compounds	350	166	114	102	89%	793,566	783,785	99%
Driveway Sealer	100	3	41	38	93%	2,205,366	2,201,011	100%
Dry Fog	400	235	70	70	100%	373,042	373,042	100%
Faux Finishing	350	204	273	261	96%	235,239	229,547	98%
Fire Resistive	350	123	9	8	89%	12,577	12,432	99%
Fire Retardant - Clear	650	531	4	4	100%	PD	PD	100%
Fire Retardant - Opaque	350	317	10	10	100%	199,538	199,538	100%
Flat	100	81	2,435	2,129	87%	36,693,348	33,056,944	90%
Floor	250	105	335	250	75%	1,230,431	1,216,257	99%
Form Release Compounds	250	233	39	34	87%	323,612	314,477	97%
Graphic Arts	500	314	91	91	100%	PD	PD	100%
High Temperature	420	366	81	57	70%	8,116	7,296	90%
Industrial Maintenance	250	204	3,030	1,660	55%	2,111,917	1,464,332	69%
Lacquers	550	458	713	407	57%	1,257,596	847,074	67%
Low Solids	120	60	32	32	100%	65,290	65,290	100%
Magnesite Cement	450	446	16	16	100%	PD	PD	100%
Mastic Texture	300	101	62	61	98%	677,063	665,808	98%
Metallic Pigmented	500	343	188	182	97%	557,593	556,947	100%
Multi-Color	250	94	12	9	75%	13,372	13,362	100%
Nonflat - High Gloss	250	149	312	192	62%	1,712,804	1,679,619	98%
Nonflat - Low Gloss	150	118	1,117	1,067	96%	11,600,922	11,526,738	99%
Nonflat - Medium Gloss	150	127	1,946	1,717	88%	19,261,669	17,718,295	92%
Other	100	66	46	21	46%	88,880	68,250	77%
Pre-Treatment Wash Primer	420	137	4	2	50%	3,909	3,877	99%
Primer, Sealer, and Undercoater	200	126	606	507	84%	10,218,660	9,998,293	98%
Quick Dry Enamel	250	380	126	46	37%	747,005	55,317	7%
Quick Dry Primer, Sealer, and Undercoater	200	364	27	5	19%	241,115	37,192	15%
Recycled	250	193	7	7	100%	223,381	223,381	100%

Table 6-1: ***2005 Survey Complying Marketshares – 2000 SCM Limits***

(does not include small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Roof	250	46	199	187	94%	1,402,289	1,392,756	99%
Rust Preventative	400	362	387	313	81%	1,863,110	1,753,383	94%
Sanding Sealers	350	290	37	14	38%	39,796	23,403	59%
Shellacs - Clear	730	617	8	8	100%	PD	PD	100%
Shellacs - Opaque	550	521	2	2	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater	350	283	97	84	87%	1,962,149	1,913,485	98%
Stains - Clear/ Semitransparent	250	279	766	308	40%	1,326,001	958,201	72%
Stains - Opaque	250	106	427	327	77%	954,075	936,390	98%
Swimming Pool	340	250	37	29	78%	20,364	20,163	99%
Swimming Pool Repair and Maintenance	340	588	3	0	0%	PD	PD	0%
Traffic Marking	150	101	245	214	87%	2,214,326	2,209,864	100%
Varnishes - Clear	350	308	407	214	53%	466,229	420,522	90%
Varnishes - Semitransparent	350	335	40	16	40%	5,143	3,478	68%
Waterproofing Concrete/Masonry Sealers	400	193	321	300	93%	1,897,416	1,864,706	98%
Waterproofing Sealers	250	186	190	133	70%	1,507,208	1,299,812	86%
Wood Preservatives	350	325	29	26	90%	158,810	156,260	98%
TOTALS:			**15,066**	**11,261**	**75%**	**106,652,963**	**98,178,538**	**92%**

Notes:

1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the 2000 SCM VOC limits that were effective during 2004.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.

Notes on specific coating categories:

Low Solids: For Low Solids coatings, VOC Regulatory is equal to VOC Actual.

Other: For the "Other" category, the VOC Limit varies according to the gloss level of the coating. Therefore, we used the minimum possible VOC Limit of 100 g/l to estimate complying marketshare percentages. For the 2005 Survey, the complying marketshare for the "Other" category was 77%, which is a substantial decline from the 2001 Survey value of 100%. This decline was due to a change in the types of coatings that were included in the "Other" category. In the 2001 Survey, the "Other" category consisted primarily of Driveway Sealers which had a 100% complying marketshare. In the 2005

Survey, Driveway Sealers were pulled out as a separate category. The products that remained in the "Other" category had a lower complying marketshare.

Quick Dry Enamel: Most of the reported Quick Dry Enamels were solvent-borne products that exceeded the VOC limit, but were included in averaging programs. Therefore, the complying marketshare is low. Quick Dry Enamel coatings can be replaced by Nonflat – High Gloss products.

Quick Dry Primer, Sealer, Undercoater: A significant portion of the Quick Dry PSUs were solvent-borne products that exceeded the VOC limit, but were included in averaging programs. Therefore, the complying marketshare is low. Quick Dry PSUs can be replaced by regular PSUs or Specialty PSUs.

Swimming Pool Repair and Maintenance: Swimming Pool Repair and Maintenance coatings can be replaced by regular Swimming Pool coatings.

For comparison purposes, Table 6-2 contains the complying marketshares from the previous 2001 Survey.

Table 6-2*: Previous 2001 Survey Complying Marketshares – 2000 SCM Limits*
(does not include small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Antenna	530	434	6	6	100%	PD	PD	100%
Bituminous Roof	300	120	193	165	85%	3,239,994	3,156,045	97%
Bituminous Roof Primer	350	211	28	14	50%	170,520	125,163	73%
Bond Breakers	350	244	11	10	91%	93,896	89,936	96%
Clear Brushing Lacquer	680	667	3	3	100%	PD	PD	100%
Concrete Curing Compounds	350	145	108	100	93%	692,285	686,935	99%
Dry Fog	400	258	89	86	97%	459,756	456,909	99%
Faux Finishing	350	220	78	41	53%	128,949	128,718	100%
Fire Resistive	350	45	2	2	100%	PD	PD	100%
Fire Retardant - Clear	650	4	9	9	100%	PD	PD	100%
Fire Retardant - Opaque	350	94	20	17	85%	PD	PD	99%
Flat	100	96	3514	2503	71%	34,405,612	25,845,396	75%
Floor	250	99	715	540	76%	1,403,122	1,338,891	95%
Flow	420	412	1	1	100%	PD	PD	100%
Form Release Compounds	250	213	33	29	88%	255,724	255,208	100%
Graphic Arts	500	232	117	102	87%	19,913	19,788	99%
High Temperature	420	400	93	60	65%	PD	PD	90%

Table 6-2: *Previous 2001 Survey Complying Marketshares – 2000 SCM Limits*

(does not include small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Industrial Maintenance	250	293	3751	1189	32%	4,527,107	1,373,092	30%
Lacquers	550	579	437	125	29%	427,182	119,716	28%
Low Solids	120	59	4	4	100%	13,284	13,284	100%
Magnesite Cement	450	443	18	18	100%	PD	PD	100%
Mastic Texture	300	133	62	61	98%	628,585	584,515	93%
Metallic Pigmented	500	408	166	155	93%	613,031	611,521	100%
Multi-Color	250	221	17	6	35%	PD	PD	78%
Nonflat - High Gloss	250	243	842	498	59%	1,781,198	1,385,550	78%
Nonflat - Low Gloss	150	128	1375	959	70%	6,449,909	5,098,147	79%
Nonflat - Medium Gloss	150	169	2569	1243	48%	17,468,318	8,354,426	48%
Other	100	1	53	38	72%	1,505,551	1,501,057	100%
Pre-Treatment Wash Primer	420	175	21	15	71%	25,420	23,802	94%
Primer, Sealer, and Undercoater	200	152	905	534	59%	7,941,252	6,455,286	81%
Quick Dry Enamel	250	358	166	62	37%	PD	PD	12%
Quick Dry Primer, Sealer, and Undercoater	200	365	121	28	23%	1,611,339	361,287	22%
Recycled	250	204	6	4	67%	323,216	264,382	82%
Roof	250	68	176	155	88%	1,134,869	1,092,124	96%
Rust Preventative	400	330	81	74	91%	180,522	178,700	99%
Sanding Sealers	350	425	40	18	45%	16,098	6,853	43%
Shellacs - Clear	730	596	9	9	100%	PD	PD	100%
Shellacs - Opaque	550	538	3	3	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater	350	119	46	30	65%	369,187	352,121	95%
Stains - Clear/ Semitransparent	250	318	1175	138	12%	1,732,923	285,155	16%
Stains - Opaque	250	179	568	322	57%	1,079,339	799,004	74%
Swimming Pool	340	276	32	28	88%	21,835	20,263	93%
Swimming Pool Repair and Maintenance	340	573	7	0	0%	15,046	0	0%
Traffic Marking	150	116	270	211	78%	3,338,767	3,240,573	97%
Varnishes - Clear	350	304	414	177	43%	662,630	546,775	83%
Varnishes - Semitransparent	350	291	13	6	46%	1,784	1,571	88%
Waterproofing Concrete/Masonry Sealers	400	206	127	114	90%	700,028	639,275	91%

Table 6-2*: Previous 2001 Survey Complying Marketshares – 2000 SCM Limits*
(does not include small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Waterproofing Sealers	250	250	234	111	47%	1,006,632	405,414	40%
Wood Preservatives	350	347	96	66	69%	164,950	148,315	90%
TOTALS:			**18,824**	**10,089**	**54%**	**95,441,859**	**66,264,654**	**69%**

Notes:
1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the 2000 SCM VOC limits that were effective in 2004.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.

Table 6-3 contains a "quarts only" evaluation of complying marketshare, based on the 2000 SCM VOC limits. Sales of large containers were not included when calculating the values in this table. If a particular coating category did not have any sales of small containers, it was not included in Table 6-3. Architectural coating regulations generally have an exemption from VOC limits for small containers. However, this exemption is periodically reviewed and the SCAQMD Rule 1113 eliminated the small container exemption for clear wood finishes in 2006.

Table 6-3: *2005 Survey Complying Marketshares (small containers only)– 2000 SCM Limits*
(only includes small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof	300	143	16	16	100%	3,289	3,289	100%
Clear Brushing Lacquer	680	666	4	4	100%	PD	PD	100%
Dry Fog	400	49	1	1	100%	PD	PD	100%
Faux Finishing	350	439	535	310	58%	68,571	40,283	59%
Fire Retardant - Clear	650	536	1	1	100%	PD	PD	100%
Fire Retardant - Opaque	350	350	1	1	100%	PD	PD	100%
Flat	100	90	897	734	82%	571,525	432,882	76%
Floor	250	212	180	125	69%	9,461	6,203	66%
Graphic Arts	500	361	131	131	100%	PD	PD	100%
High Temperature	420	499	16	0	0%	3,620	0	0%
Industrial Maintenance	250	310	388	158	41%	25,855	11,139	43%
Lacquers	550	342	154	55	36%	33,975	31,021	91%
Low Solids	120	77	3	3	100%	390	390	100%
Metallic Pigmented	500	376	56	43	77%	13,384	12,691	95%
Multi-Color	250	551	1	0	0%	PD	PD	0%

Table 6-3: ***2005 Survey Complying Marketshares (small containers only)– 2000 SCM Limits***
(only includes small containers ≤ 1 quart)

Coating Category	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Nonflat - High Gloss	250	258	305	136	45%	47,655	27,777	58%
Nonflat - Low Gloss	150	125	646	558	86%	422,156	407,437	97%
Nonflat - Medium Gloss	150	160	1,123	835	74%	811,163	586,141	72%
Other	100	85	18	4	22%	593	508	86%
Pre-Treatment Wash Primer	420	747	6	0	0%	PD	PD	0%
Primer, Sealer, and Undercoater	200	230	239	167	70%	183,359	145,657	79%
Quick Dry Enamel	250	391	59	20	34%	16,261	251	2%
Quick Dry Primer, Sealer, and Undercoater	200	354	20	4	20%	8,595	1,744	20%
Roof	250	64	12	11	92%	4,600	4,537	99%
Rust Preventative	400	420	400	194	49%	232,389	83,971	36%
Sanding Sealers	350	533	28	3	11%	44,477	413	1%
Shellacs - Clear	730	618	3	3	100%	PD	PD	100%
Shellacs - Opaque	550	521	2	2	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater	350	301	71	56	79%	47,315	36,293	77%
Stains - Clear/Semitransparent	250	488	880	105	12%	539,236	11,803	2%
Stains - Opaque	250	215	90	75	83%	3,431	2,314	67%
Traffic Marking	150	122	1	1	100%	PD	PD	100%
Varnishes - Clear	350	479	430	131	30%	504,466	49,383	10%
Varnishes - Semitransparent	350	439	112	37	33%	84,160	237	0%
Waterproofing Concrete/Masonry Sealers	400	380	43	38	88%	10,962	7,145	65%
Waterproofing Sealers	250	187	17	8	47%	4,703	3,157	67%
Wood Preservatives	350	323	6	6	100%	PD	PD	100%
TOTALS:			**6,895**	**3,976**	**58%**	**3,754,758**	**1,964,521**	**52%**

Notes:
1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the 2000 SCM VOC limits that were effective in 2004.
3. Sales of large containers (greater than 1 quart) were not included when determining complying marketshare percentages.

Table 6-4 provides complying marketshares based on recommended exposures (interior, exterior, or dual). In many cases, manufacturers create different formulations for interior and exterior applications, because different exposures require different coating properties. As a result, VOC levels and complying marketshares may vary for different exposures. Architectural coating regulations do not generally contain VOC limits based on exposure, but SCAQMD Rule 1113 has different VOC limits for Interior and Exterior/Dual Stains.

Table 6-4: *2005 Survey Complying Marketshares (Int/Ext/Dual) – 2000 SCM Limits*

(does not include small containers ≤ 1 quart)

Coating Category	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof	Ext	300	26	77	73	95%	1,461,037	1,456,009	100%
Bituminous Roof Primer	Ext	350	324	31	15	48%	68,092	53,861	79%
Bond Breakers	Ext	350	302	13	9	69%	187,785	137,200	73%
Clear Brushing Lacquer	Dual	680	612	1	1	100%	PD	PD	100%
	Int	680	666	3	3	100%	PD	PD	100%
Concrete Curing Compounds	Dual	350	136	76	67	88%	515,781	512,626	99%
	Ext	350	222	37	35	95%	277,755	271,159	98%
	Int	350	560	1	0	0%	PD	PD	0%
Driveway Sealer	Ext	100	3	41	38	93%	2,205,366	2,201,011	100%
Dry Fog	Dual	400	384	6	6	100%	8,730	8,730	100%
	Ext	400	80	2	2	100%	PD	PD	100%
	Int	400	233	62	62	100%	360,467	360,467	100%
Faux Finishing	Dual	350	277	32	32	100%	PD	PD	100%
	Int	350	202	241	229	95%	228,537	222,845	98%
Fire Resistive	Dual	350	60	5	5	100%	PD	PD	100%
	Int	350	130	4	3	75%	11,425	11,280	99%
Fire Retardant - Clear	Dual	650	536	1	1	100%	PD	PD	100%
	Int	650	527	3	3	100%	PD	PD	100%
Fire Retardant - Opaque	Dual	350	57	2	2	100%	PD	PD	100%
	Int	350	318	8	8	100%	199,038	199,038	100%
Flat	Dual	100	87	361	302	84%	5,643,736	5,464,937	97%
	Ext	100	80	789	713	90%	13,305,083	13,191,061	99%
	Int	100	81	1,285	1,114	87%	17,744,529	14,400,946	81%
Floor	Dual	250	106	312	228	73%	1,143,011	1,128,853	99%
	Ext	250	154	7	6	86%	PD	PD	100%
	Int	250	83	16	16	100%	83,250	83,250	100%
Form Release Compounds	Dual	250	238	34	29	85%	310,321	301,186	97%
	Ext	250	100	5	5	100%	PD	PD	100%
Graphic Arts	Dual	500	314	91	91	100%	PD	PD	100%
High Temperature	Dual	420	380	79	55	70%	7,048	6,228	88%
	Int	420	279	2	2	100%	PD	PD	100%
Industrial Maintenance	Dual	250	212	2,051	1,039	51%	1,639,078	1,145,792	70%
	Ext	250	234	341	132	39%	189,242	90,232	48%
	Int	250	137	638	489	77%	283,597	228,308	81%
Lacquers	Dual	550	166	8	6	75%	70,699	70,683	100%
	Ext	550	145	2	2	100%	PD	PD	100%
	Int	550	476	703	399	57%	1,185,800	775,294	65%

Table 6-4: *2005 Survey Complying Marketshares (Int/Ext/Dual) – 2000 SCM Limits*

(does not include small containers ≤ 1 quart)

Coating Category	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Comply-ing Products	% of Comply-ing Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Comply-ing Sales
Low Solids	Dual	120	26	8	8	100%	7,642	7,642	100%
	Ext	120	65	21	21	100%	57,388	57,388	100%
	Int	120	28	3	3	100%	PD	PD	100%
Magnesite Cement	Ext	450	446	16	16	100%	PD	PD	100%
Mastic Texture	Dual	300	193	37	37	100%	153,813	153,813	100%
	Ext	300	74	25	24	96%	523,250	511,995	98%
Metallic Pigmented	Dual	500	254	81	78	96%	45,905	45,645	99%
	Ext	500	352	99	96	97%	508,456	508,070	100%
	Int	500	176	8	8	100%	3,232	3,232	100%
Multi-Color	Int	250	94	12	9	75%	13,372	13,362	100%
Nonflat - High Gloss	Dual	250	153	207	124	60%	976,268	944,635	97%
	Ext	250	148	55	28	51%	10,183	8,813	87%
	Int	250	142	50	40	80%	726,353	726,171	100%
Nonflat - Low Gloss	Dual	150	126	155	143	92%	2,095,883	2,062,278	98%
	Ext	150	106	312	297	95%	1,710,710	1,700,491	99%
	Int	150	118	650	627	96%	7,794,329	7,763,969	100%
Nonflat - Medium Gloss	Dual	150	145	500	391	78%	5,979,169	4,719,247	79%
	Ext	150	122	471	452	96%	2,555,259	2,549,446	100%
	Int	150	119	975	874	90%	10,727,241	10,449,602	97%
Other	Dual	100	10	13	8	62%	15,824	15,248	96%
	Ext	100	70	10	9	90%	22,040	21,932	100%
	Int	100	82	23	4	17%	51,016	31,070	61%
Pre-Treatment Wash Primer	Dual	420	137	4	2	50%	3,909	3,877	99%
Primer, Sealer, and Undercoater	Dual	200	134	175	150	86%	5,286,401	5,203,078	98%
	Ext	200	139	128	97	76%	1,078,749	962,283	89%
	Int	200	110	303	260	86%	3,853,510	3,832,932	99%
Quick Dry Enamel	Dual	250	380	85	39	46%	422,225	46,608	11%
	Ext	250	391	7	1	14%	96,663	5,460	6%
	Int	250	375	34	6	18%	228,117	3,249	1%
Quick Dry Primer, Sealer, and Undercoater	Dual	200	300	14	5	36%	130,840	37,192	28%
	Ext	200	439	1	0	0%	PD	PD	0%
	Int	200	440	12	0	0%	110,250	0	0%
Recycled	Dual	250	175	3	3	100%	120,124	120,124	100%
	Ext	250	213	4	4	100%	PD	PD	100%
Roof	Ext	250	46	199	187	94%	1,402,289	1,392,756	99%
Rust Preventative	Dual	400	366	295	228	77%	1,167,436	1,064,992	91%
	Ext	400	306	52	49	94%	116,991	116,334	99%
	Int	400	365	40	36	90%	578,683	572,057	99%
Sanding Sealers	Dual	350	248	1	1	100%	PD	PD	100%
	Int	350	290	36	13	36%	39,771	23,378	59%
Shellacs - Clear	Int	730	617	8	8	100%	PD	PD	100%
Shellacs - Opaque	Dual	550	521	2	2	100%	PD	PD	100%

Table 6-4: *2005 Survey Complying Marketshares (Int/Ext/Dual) – 2000 SCM Limits*

(does not include small containers ≤ 1 quart)

Coating Category	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Comply-ing Products	% of Comply-ing Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Comply-ing Sales
Specialty Primer, Sealer, and Undercoater	Dual	350	285	46	44	96%	1,802,973	1,757,249	97%
	Ext	350	295	29	27	93%	120,676	120,581	100%
	Int	350	115	22	13	59%	38,500	35,655	93%
Stains - Clear/ Semitransparent	Dual	250	306	57	20	35%	285,976	152,802	53%
	Ext	250	267	452	233	52%	1,003,083	798,670	80%
	Int	250	387	257	55	21%	36,942	6,729	18%
Stains - Opaque	Dual	250	144	51	42	82%	19,160	18,157	95%
	Ext	250	106	376	285	76%	934,915	918,233	98%
Swimming Pool	Dual	340	242	15	12	80%	15,568	15,547	100%
	Ext	340	273	22	17	77%	4,796	4,616	96%
Swimming Pool Repair and Maintenance	Dual	340	590	1	0	0%	PD	PD	0%
	Ext	340	587	2	0	0%	PD	PD	0%
Traffic Marking	Dual	150	92	30	28	93%	81,953	81,493	99%
	Ext	150	101	215	186	87%	2,132,373	2,128,371	100%
Varnishes - Clear	Dual	350	347	61	25	41%	43,133	34,181	79%
	Ext	350	319	52	31	60%	69,274	66,673	96%
	Int	350	301	294	158	54%	353,822	319,668	90%
Varnishes - Semitransparent	Ext	350	271	14	13	93%	3,265	3,263	100%
	Int	350	445	26	3	12%	1,878	215	11%
Waterproofing Concrete/Masonry Sealers	Dual	400	204	154	141	92%	1,211,369	1,184,683	98%
	Ext	400	175	157	149	95%	677,053	671,029	99%
	Int	400	46	10	10	100%	8,994	8,994	100%
Waterproofing Sealers	Dual	250	72	80	64	80%	443,561	424,717	96%
	Ext	250	236	99	60	61%	1,025,442	839,191	82%
	Int	250	180	11	9	82%	38,206	35,904	94%
Wood Preservatives	Dual	350	917	1	0	0%	PD	PD	0%
	Ext	350	325	28	26	93%	158,683	156,260	98%
Dual Subtotals:				**5,135**	**3,459**	**67%**	**29,799,872**	**26,883,956**	**90%**
Exterior Subtotals:				**4,191**	**3,338**	**80%**	**32,059,309**	**31,094,075**	**97%**
Interior Subtotals:				**5,740**	**4,464**	**78%**	**44,793,781**	**40,200,507**	**90%**
TOTALS:				**15,066**	**11,261**	**75%**	**106,652,963**	**98,178,538**	**92%**

Notes:

1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the 2000 SCM VOC limits that were effective in 2004.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.
4. Int = Interior; Ext = Exterior; Dual = Both Interior and Exterior Exposures

Table 6-5 contains an evaluation of complying marketshares, based on the future limits in SCAQMD Rule 1113 that will take effect in or before 2008. Since the 2005 Survey represents coatings that were sold in 2004, it is not expected that coatings had yet been reformulated to meet the 2005-2008 VOC limits. Therefore, some of the complying marketshares are quite low, but they provide an indication of how much of the market will need to be reformulated to meet the upcoming limits.

Table 6-5: *2005 Survey Complying Marketshares – Future SCAQMD Limits*

(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof (Roof)	50	26	77	35	45%	1,461,037	1,318,676	90%
Bituminous Roof Primer (Roof Primers, Bituminous)	350	324	31	15	48%	68,092	53,861	79%
Bond Breakers	350	302	13	9	69%	PD	PD	73%
Clear Brushing Lacquer	275	666	4	0	0%	PD	PD	0%
Concrete Curing Compounds	100	166	114	40	35%	793,566	313,428	39%
Driveway Sealer (Traffic)	100	3	41	38	93%	PD	PD	100%
Dry Fog	150	235	70	31	44%	373,042	157,802	42%
Faux Finishing (Japans/Faux Finishing)	350	204	273	261	96%	235,239	229,547	98%
Fire Resistive (Fire-Proofing Exterior)	350	123	9	8	89%	PD	PD	99%
Fire Retardant - Clear	650	531	4	4	100%	PD	PD	100%
Fire Retardant - Opaque (Fire Retardant - Pigmented)	350	317	10	10	100%	PD	PD	100%
Flat	50	81	2435	358	15%	36,693,348	2,385,114	7%
Floor	50	105	335	4	1%	1,230,431	5,276	0%
Form Release Compounds (Default)	250	233	39	34	87%	323,612	314,477	97%
Graphic Arts	500	314	91	91	100%	PD	PD	100%
High Temperature (High Temperature IM)	420	366	81	57	70%	8,116	7,296	90%
Industrial Maintenance	100	204	3030	733	24%	2,111,917	444,131	21%
Lacquers (Clear Wood Finishes - Lacquer; Pigmented Lacquer)	275	458	713	146	20%	1,257,596	352,759	28%
Low Solids	120	60	32	32	100%	65,290	65,290	100%
Magnesite Cement	450	446	16	16	100%	PD	PD	100%
Mastic Texture (Mastic)	300	101	62	61	98%	PD	PD	98%

Table 6-5: *2005 Survey Complying Marketshares – Future SCAQMD Limits*

(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Metallic Pigmented	500	343	188	182	97%	557,593	556,947	100%
Multi-Color	250	94	12	9	75%	PD	PD	100%
Nonflat - High Gloss	50	149	312	3	1%	1,712,804	63,745	4%
Nonflat - Low Gloss (Nonflat Coating)	50	118	1117	82	7%	11,600,922	383,376	3%
Nonflat - Medium Gloss (Nonflat Coating)	50	127	1946	179	9%	19,261,669	721,543	4%
Other (Default)	250	66	46	27	59%	88,880	85,386	96%
Pre-Treatment Wash Primer	420	137	4	2	50%	PD	PD	99%
Primer, Sealer, and Undercoater	100	126	606	312	51%	10,218,660	3,796,714	37%
Quick Dry Enamel	50	380	126	1	1%	747,005	215	0%
Quick Dry Primer, Sealer, and Undercoater	100	364	27	1	4%	241,115	25,253	10%
Recycled	250	193	7	7	100%	223,381	223,381	100%
Roof	50	46	199	112	56%	1,402,289	1,159,971	83%
Rust Preventative	100	362	387	11	3%	1,863,110	7,909	0%
Sanding Sealers	275	290	37	12	32%	39,796	21,953	55%
Shellacs - Clear	730	617	8	8	100%	PD	PD	100%
Shellacs - Opaque (Shellac - Pigmented)	550	521	2	2	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater (Specialty Primers)	100	283	97	25	26%	1,962,149	425,393	22%
Stains, Exterior/Dual	100	204	936	101	11%	2,243,135	729,321	33%
Stains, Interior	250	387	257	55	21%	36,942	6,729	18%
Swimming Pool (Swimming Pool - Other)	340	250	37	29	78%	20,364	20,163	99%
Swimming Pool Repair and Maintenance (Swimming Pool - Repair)	340	588	3	0	0%	PD	PD	0%
Traffic Marking (Traffic)	100	101	245	158	64%	2,214,326	1,642,189	74%
Varnishes - Clear (Varnish)	275	308	407	110	27%	466,229	166,706	36%

Table 6-5: *2005 Survey Complying Marketshares – Future SCAQMD Limits*

(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Varnishes - Semitransparent (Varnish)	275	335	40	10	25%	5,143	2,657	52%
Waterproofing Concrete/Masonry Sealers	100	193	321	103	32%	1,897,416	530,799	28%
Waterproofing Sealers	100	186	190	69	36%	1,507,208	461,498	31%
Wood Preservatives	350	325	29	26	90%	158,810	156,260	98%
TOTALS:			**15,066**	**3,619**	**24%**	**106,652,963**	**20,277,299**	**19%**

Notes:

1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the SCAQMD VOC limits that become effective in or before 2008.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.

Notes on specific coating categories:

Metallic Pigmented: The complying marketshare for the "Metallic Pigmented" category is probably too high, when compared to SCAQMD limits, because ARB and SCAQMD have different definitions for "Metallic Pigmented". ARB's definition includes aluminum roof coatings and the products reported in the survey under "Metallic Pigmented" seem to be primarily aluminum roof coatings. ARB's SCM has a VOC limit of 500 g/l for "Metallic Pigmented" (including aluminum roof coatings) and the complying marketshare is very high for this limit. SCAQMD has a separate category called "Roof Coatings, Aluminum" which has a much lower 100 g/l VOC limit that became effective January 1, 2005, so it is expected that the complying marketshare for the SCAQMD limit is very low, based on the SWA VOC value.

Specialty Primer, Sealer, Undercoater: The complying marketshare for the "Specialty PSU" category may not be representative, when compared to SCAQMD limits, because ARB and SCAQMD have different definitions for "Specialty PSU". ARB's definition includes primers with stain-blocking properties, but SCAQMD's does not. Many of the products reported in the survey under "Specialty PSU" only claim stain-blocking properties, so they probably would not qualify as a Specialty PSU under the SCAQMD definition. ARB's SCM has a VOC limit of 350 g/l for "Specialty PSU" while SCAQMD had a VOC limit of 250 g/l, effective July 1, 2006, and a VOC limit of 100 g/l, effective July 1, 2007.

For comparison purposes, Table 6-6 contains the complying marketshares from the previous 2001 Survey, based on future SCAQMD VOC limits that take effect in or before

2008. Since the 2001 Survey represented coatings that were sold in 2000, it is not expected that coatings had yet been reformulated to meet the 2005-2008 VOC limits.

Table 6-6*: Previous 2001 Survey Complying Marketshares – Future SCAQMD Limits*
(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Antenna (Industrial Maintenance)	100	434	6	0	0%	PD	PD	0%
Bituminous Roof (Roof)	50	120	193	49	25%	3,239,994	1,712,939	53%
Bituminous Roof Primer (Roof Primers, Bituminous)	350	211	28	14	50%	170,520	125,163	73%
Bond Breakers	350	244	11	10	91%	93,896	89,936	96%
Clear Brushing Lacquer	275	667	3	0	0%	PD	PD	0%
Concrete Curing Compounds	100	145	108	41	38%	692,285	335,591	48%
Dry Fog	150	258	89	37	42%	459,756	154,288	34%
Faux Finishing (Japans/Faux Finishing)	350	220	78	41	53%	128,949	128,718	100%
Fire Resistive (Fire-Proofing Exterior)	350	45	2	2	100%	PD	PD	100%
Fire Retardant - Clear	650	4	9	9	100%	PD	PD	100%
Fire Retardant - Opaque (Fire Retardant - Pigmented)	350	94	20	17	85%	PD	PD	99%
Flat	50	96	3514	367	10%	34,405,612	2,839,654	8%
Floor	50	99	715	111	16%	1,403,122	688,922	49%
Flow (Industrial Maintenance)	100	412	1	0	0%	PD	PD	0%
Form Release Compounds (Default)	250	213	33	29	88%	255,724	255,208	100%
Graphic Arts	500	232	117	102	87%	19,913	19,788	99%
High Temperature (High Temperature IM)	420	400	93	60	65%	PD	PD	90%
Industrial Maintenance	100	293	3751	312	8%	4,527,107	517,868	11%

Table 6-6: *Previous 2001 Survey Complying Marketshares – Future SCAQMD Limits*

(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Lacquers (Clear Wood Finishes - Lacquer; Pigmented Lacquer)	275	579	437	36	8%	427,182	31,529	7%
Low Solids	120	59	4	4	100%	13,284	13,284	100%
Magnesite Cement	450	443	18	18	100%	PD	PD	100%
Mastic Texture (Mastic)	300	133	62	61	98%	628,585	584,515	93%
Metallic Pigmented	500	408	166	155	93%	613,031	611,521	100%
Multi-Color	250	221	17	6	35%	PD	PD	78%
Nonflat - High Gloss	50	243	842	1	0%	1,781,198	944	0%
Nonflat - Low Gloss (Nonflat Coating)	50	128	1375	77	6%	6,449,909	218,113	3%
Nonflat - Medium Gloss (Nonflat Coating)	50	169	2569	75	3%	17,468,318	102,741	1%
Other (Default)	250	1	53	44	83%	1,505,551	1,503,741	100%
Pre-Treatment Wash Primer	420	175	21	15	71%	25,420	23,802	94%
Primer, Sealer, and Undercoater	100	152	905	283	31%	7,941,252	2,626,489	33%
Quick Dry Enamel	50	358	166	0	0%	PD	PD	0%
Quick Dry Primer, Sealer, and Undercoater	100	365	121	3	2%	1,611,339	39,442	2%
Recycled	250	204	6	4	67%	323,216	264,382	82%
Roof	50	68	176	56	32%	1,134,869	503,271	44%
Rust Preventative	100	330	81	3	4%	180,522	1,047	1%
Sanding Sealers	275	425	40	15	38%	16,098	5,831	36%
Shellacs - Clear	730	596	9	9	100%	PD	PD	100%
Shellacs - Opaque (Shellac - Pigmented)	550	538	3	3	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater (Specialty Primers)	100	119	46	10	22%	369,187	296,685	80%
Stains, Exterior/Dual	100	263	1315	126	10%	2,741,425	313,266	11%
Stains, Interior	250	348	428	8	2%	70,837	4,015	6%
Swimming Pool (Swimming Pool - Other)	340	276	32	28	88%	21,835	20,263	93%

Table 6-6*: Previous 2001 Survey Complying Marketshares – Future SCAQMD Limits*
(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Swimming Pool Repair and Maintenance (Swimming Pool - Repair)	340	573	7	0	0%	15,046	0	0%
Traffic Marking (Traffic)	100	116	270	129	48%	3,338,767	1,080,400	32%
Varnishes - Clear (Varnish)	275	304	414	83	20%	662,630	235,508	36%
Varnishes - Semitransparent (Varnish)	275	291	13	4	31%	1,784	1,049	59%
Waterproofing Concrete/Masonry Sealers	100	206	127	61	48%	700,028	285,206	41%
Waterproofing Sealers	100	250	234	76	32%	1,006,632	256,122	25%
Wood Preservatives	350	347	96	66	69%	164,950	148,315	90%
TOTALS:			**18,824**	**2,660**	**14%**	**95,441,859**	**16,219,471**	**17%**

Notes:
1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the SCAQMD VOC limits that become effective in or before 2008.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.

Table 6-7 contains a "quarts only" evaluation of complying marketshare, based on future SCAQMD VOC limits that take effect in or before 2008. Sales of large containers were not included when calculating the values in this table. If a particular coating category did not have any sales of small containers, it was not included in Table 6-7. Architectural coating regulations generally have an exemption from VOC limits for small containers. However, this exemption is periodically reviewed and the SCAQMD Rule 1113 eliminated the small container exemption for clear wood finishes in 2006.

Table 6-7: *2005 Survey Complying Marketshares (small containers only) – Future SCAQMD Limits*
(only includes small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof (Roof)	50	143	16	15	94%	3,289	1,105	34%
Clear Brushing Lacquer	275	666	4	0	0%	PD	PD	0%

Table 6-7: ***2005 Survey Complying Marketshares (small containers only) – Future SCAQMD Limits***
(only includes small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Dry Fog	150	49	1	1	100%	PD	PD	100%
Faux Finishing (Japans/Faux Finishing)	350	439	535	310	58%	68,571	40,283	59%
Fire Retardant - Clear	650	536	1	1	100%	PD	PD	100%
Fire Retardant - Opaque (Fire Retardant - Pigmented)	350	350	1	1	100%	PD	PD	100%
Flat	50	90	897	48	5%	571,525	18,980	3%
Floor	50	212	180	0	0%	9,461	0	0%
Graphic Arts	500	361	131	131	100%	PD	PD	100%
High Temperature (High Temperature IM)	420	499	16	0	0%	3,620	0	0%
Industrial Maintenance	100	310	388	73	19%	25,855	1,058	4%
Lacquers (Clear Wood Finishes - Lacquer; Pigmented Lacquer)	275	342	154	21	14%	33,975	23,519	69%
Low Solids	120	77	3	3	100%	390	390	100%
Metallic Pigmented	500	376	56	43	77%	13,384	12,691	95%
Multi-Color	250	551	1	0	0%	PD	PD	0%
Nonflat - High Gloss	50	258	305	2	1%	47,655	24	0%
Nonflat - Low Gloss (Nonflat Coating)	50	125	646	31	5%	422,156	11,671	3%
Nonflat - Medium Gloss (Nonflat Coating)	50	160	1123	64	6%	811,163	27,711	3%
Other (Default)	250	85	18	7	39%	593	556	94%
Pre-Treatment Wash Primer	420	747	6	0	0%	PD	PD	0%
Primer, Sealer, and Undercoater	100	230	239	87	36%	183,359	31,174	17%
Quick Dry Enamel	50	391	59	0	0%	16,261	0	0%
Quick Dry Primer, Sealer, and Undercoater	100	354	20	1	5%	8,595	1,221	14%
Roof	50	64	12	6	50%	4,600	3,211	70%
Rust Preventative	100	420	400	1	0%	232,389	411	0%
Sanding Sealers	275	533	28	1	4%	44,477	1	0%
Shellacs - Clear	730	618	3	3	100%	PD	PD	100%

Table 6-7: ***2005 Survey Complying Marketshares (small containers only) – Future SCAQMD Limits***
(only includes small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Shellacs - Opaque (Shellac - Pigmented)	550	521	2	2	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater (Specialty Primers)	100	301	71	14	20%	47,315	9,381	20%
Stains, Exterior/Dual	100	451	412	9	2%	94,356	487	1%
Stains, Interior	250	494	558	18	3%	448,311	3,366	1%
Traffic Marking (Traffic)	100	122	1	0	0%	PD	PD	0%
Varnishes - Clear (Varnish)	275	479	430	85	20%	504,466	27,019	5%
Varnishes - Semitransparent (Varnish)	275	439	112	32	29%	84,160	105	0%
Waterproofing Concrete/Masonry Sealers	100	380	43	16	37%	10,962	150	1%
Waterproofing Sealers	100	187	17	4	24%	4,703	2,922	62%
Wood Preservatives	350	323	6	6	100%	PD	PD	100%
TOTALS:			**6,895**	**1,036**	**15%**	**3,754,758**	**258,679**	**7%**

Notes:
1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the SCAQMD VOC limits that become effective in or before 2008.
3. Sales of large containers (greater than 1 quart) were not included when determining complying marketshare percentages.

Table 6-8 provides complying marketshares based on recommended exposures (interior, exterior, or dual) and the future SCAQMD VOC limits that take effect in or before 2008. In many cases, manufacturers create different formulations for interior and exterior applications, because different exposures require different coating properties. As a result, VOC levels and complying marketshares may vary for different exposures. Architectural coating regulations do not generally contain VOC limits based on exposure, but SCAQMD Rule 1113 has different VOC limits for Interior and Exterior/Dual Stains.

Table 6-8: ***2005 Survey Complying Marketshares (Int/Ext/Dual) – Future SCAQMD Limits***
(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Bituminous Roof (Roof)	Ext	50	26	77	35	45%	1,461,037	1,318,676	90%
Bituminous Roof Primer (Roof Primers, Bituminous)	Ext	350	324	31	15	48%	68,092	53,861	79%
Bond Breakers	Ext	350	302	13	9	69%	PD	PD	73%
Clear Brushing Lacquer	Dual	275	612	1	0	0%	PD	PD	0%
	Int	275	666	3	0	0%	PD	PD	0%
Concrete Curing Compounds	Dual	100	136	76	29	38%	515,781	262,358	51%
	Ext	100	222	37	11	30%	277,755	51,070	18%
	Int	100	560	1	0	0%	PD	PD	0%
Driveway Sealer (Traffic)	Ext	100	3	41	38	93%	PD	PD	100%
Dry Fog	Dual	150	384	6	0	0%	8,730	0	0%
	Ext	150	80	2	2	100%	PD	PD	100%
	Int	150	233	62	29	47%	360,467	153,957	43%
Faux Finishing (Japans/Faux Finishing)	Dual	350	277	32	32	100%	PD	PD	100%
	Int	350	202	241	229	95%	228,537	222,845	98%
Fire Resistive (Fire-Proofing Exterior)	Dual	350	60	5	5	100%	PD	PD	100%
	Int	350	130	4	3	75%	PD	PD	99%
Fire Retardant - Clear	Dual	650	536	1	1	100%	PD	PD	100%
	Int	650	527	3	3	100%	PD	PD	100%
Fire Retardant - Opaque (Fire Retardant - Pigmented)	Dual	350	57	2	2	100%	PD	PD	100%
	Int	350	318	8	8	100%	PD	PD	100%
Flat	Dual	50	87	361	24	7%	5,643,736	296,854	5%
	Ext	50	80	789	78	10%	13,305,083	532,419	4%
	Int	50	81	1285	256	20%	17,744,529	1,555,841	9%
Floor	Dual	50	106	312	4	1%	1,143,011	5,276	0%
	Ext	50	154	7	0	0%	PD	PD	0%
	Int	50	83	16	0	0%	83,250	0	0%
Form Release Compounds (Default)	Dual	250	238	34	29	85%	310,321	301,186	97%
	Ext	250	100	5	5	100%	PD	PD	100%
Graphic Arts	Dual	500	314	91	91	100%	PD	PD	100%
High Temperature (High Temperature IM)	Dual	420	380	79	55	70%	7,048	6,228	88%
	Int	420	279	2	2	100%	PD	PD	100%
Industrial Maintenance	Dual	100	212	2051	352	17%	1,639,078	247,614	15%
	Ext	100	234	341	31	9%	189,242	44,825	24%
	Int	100	137	638	350	55%	283,597	151,692	53%

Table 6-8: ***2005 Survey Complying Marketshares (Int/Ext/Dual) – Future SCAQMD Limits***
(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Lacquers (Clear Wood Finishes - Lacquer; Pigmented Lacquer)	Dual	275	166	8	6	75%	70,699	70,683	100%
	Ext	275	145	2	2	100%	PD	PD	100%
	Int	275	476	703	138	20%	1,185,800	280,979	24%
Low Solids	Dual	120	26	8	8	100%	7,642	7,642	100%
	Ext	120	65	21	21	100%	57,388	57,388	100%
	Int	120	28	3	3	100%	PD	PD	100%
Magnesite Cement	Ext	450	446	16	16	100%	PD	PD	100%
Mastic Texture (Mastic)	Dual	300	193	37	37	100%	PD	PD	100%
	Ext	300	74	25	24	96%	PD	PD	98%
Metallic Pigmented	Dual	500	254	81	78	96%	45,905	45,645	99%
	Ext	500	352	99	96	97%	508,456	508,070	100%
	Int	500	176	8	8	100%	3,232	3,232	100%
Multi-Color	Int	250	94	12	9	75%	PD	PD	100%
Nonflat - High Gloss	Dual	50	153	207	3	1%	976,268	63,745	7%
	Ext	50	148	55	0	0%	10,183	0	0%
	Int	50	142	50	0	0%	726,353	0	0%
Nonflat - Low Gloss (Nonflat Coating)	Dual	50	126	155	0	0%	2,095,883	0	0%
	Ext	50	106	312	14	4%	1,710,710	83,607	5%
	Int	50	118	650	68	10%	7,794,329	299,769	4%
Nonflat - Medium Gloss (Nonflat Coating)	Dual	50	145	500	10	2%	5,979,169	40,884	1%
	Ext	50	122	471	50	11%	2,555,259	136,350	5%
	Int	50	119	975	119	12%	10,727,241	544,309	5%
Other (Default)	Dual	250	10	13	12	92%	15,824	15,819	100%
	Ext	250	70	10	9	90%	22,040	21,932	100%
	Int	250	82	23	6	26%	51,016	47,635	93%
Pre-Treatment Wash Primer	Dual	420	137	4	2	50%	PD	PD	99%
Primer, Sealer, and Undercoater	Dual	100	134	175	81	46%	5,286,401	1,196,681	23%
	Ext	100	139	128	49	38%	1,078,749	362,461	34%
	Int	100	110	303	182	60%	3,853,510	2,237,572	58%
Quick Dry Enamel	Dual	50	380	85	0	0%	422,225	0	0%
	Ext	50	391	7	0	0%	96,663	0	0%
	Int	50	375	34	1	3%	228,117	215	0%
Quick Dry Primer, Sealer, and Undercoater	Dual	100	300	14	1	7%	130,840	25,253	19%
	Ext	100	439	1	0	0%	PD	PD	0%
	Int	100	440	12	0	0%	110,250	0	0%
Recycled	Dual	250	175	3	3	100%	120,124	120,124	100%
	Ext	250	213	4	4	100%	PD	PD	100%
Roof	Ext	50	46	199	112	56%	1,402,289	1,159,971	83%
Rust Preventative	Dual	100	366	295	4	1%	1,167,436	7,104	1%
	Ext	100	306	52	6	12%	116,991	610	1%
	Int	100	365	40	1	3%	578,683	195	0%
Sanding Sealers	Dual	275	248	1	1	100%	PD	PD	100%
	Int	275	290	36	11	31%	39,771	21,928	55%

Table 6-8: ***2005 Survey Complying Marketshares (Int/Ext/Dual) – Future SCAQMD Limits***
(does not include small containers ≤ 1 quart)

ARB Category (SCAQMD Corresponding Category)	Dual Ext Int	VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales
Shellacs - Clear	Int	730	617	8	8	100%	PD	PD	100%
Shellacs - Opaque (Shellac - Pigmented)	Dual	550	521	2	2	100%	PD	PD	100%
Specialty Primer, Sealer, and Undercoater (Specialty Primers)	Dual	100	285	46	16	35%	1,802,973	399,734	22%
	Ext	100	295	29	4	14%	120,676	4,865	4%
	Int	100	115	22	5	23%	38,500	20,794	54%
Stains, Exterior/Dual	Dual	100	296	108	21	19%	305,136	8,496	3%
	Ext	100	189	828	80	10%	1,937,998	720,825	37%
Stains, Interior	Int	250	387	257	55	21%	36,942	6,729	18%
Swimming Pool (Swimming Pool - Other)	Dual	340	242	15	12	80%	15,568	15,547	100%
	Ext	340	273	22	17	77%	4,796	4,616	96%
Swimming Pool Repair and Maintenance (Swimming Pool - Repair)	Dual	340	590	1	0	0%	PD	PD	0%
	Ext	340	587	2	0	0%	PD	PD	0%
Traffic Marking (Traffic)	Dual	100	92	30	20	67%	81,953	52,227	64%
	Ext	100	101	215	138	64%	2,132,373	1,589,962	75%
Varnishes - Clear (Varnish)	Dual	275	347	61	12	20%	43,133	6,102	14%
	Ext	275	319	52	24	46%	69,274	21,644	31%
	Int	275	301	294	74	25%	353,822	138,960	39%
Varnishes - Semitransparent (Varnish)	Ext	275	271	14	10	71%	3,265	2,657	81%
	Int	275	445	26	0	0%	1,878	0	0%
Waterproofing Concrete/Masonry Sealers	Dual	100	204	154	52	34%	1,211,369	243,652	20%
	Ext	100	175	157	45	29%	677,053	279,299	41%
	Int	100	46	10	6	60%	8,994	7,848	87%
Waterproofing Sealers	Dual	100	72	80	44	55%	443,561	360,582	81%
	Ext	100	236	99	21	21%	1,025,442	99,078	10%
	Int	100	180	11	4	36%	38,206	1,838	5%
Wood Preservatives	Dual	350	917	1	0	0%	PD	PD	0%
	Ext	350	325	28	26	93%	158,683	156,260	98%
Dual Subtotals:				**5,135**	**1,049**	**20%**	**29,799,872**	**4,108,838**	**14%**
Exterior Subtotals:				**4,191**	**992**	**24%**	**32,059,309**	**10,208,184**	**32%**
Interior Subtotals:				**5,740**	**1,578**	**27%**	**44,793,781**	**5,960,277**	**13%**
TOTALS:				**15,066**	**3,619**	**24%**	**106,652,963**	**20,277,299**	**19%**

Notes:
1. PD = Protected Data. Fewer than three companies reported sales.
2. "% of Complying Sales" represents the percent (by sales volume in gallons) that complied with the SCAQMD VOC limits that become effective in or before 2008.
3. Sales of exempt small containers (1 quart or less) were NOT included when determining complying marketshare percentages.
4. Int = Interior; Ext = Exterior; Dual = Both Interior and Exterior Exposures

Figures 6-1 and 6-2 contain comparisons of the complying marketshares for the 2001 and 2005 surveys. Sales of small containers (1 quart or less) were not included when determining complying marketshare percentages.

Figure 6-1:
Comparison of Complying Marketshares – 2000 SCM Limits
2005 Survey vs. 2001 Survey (Part I)

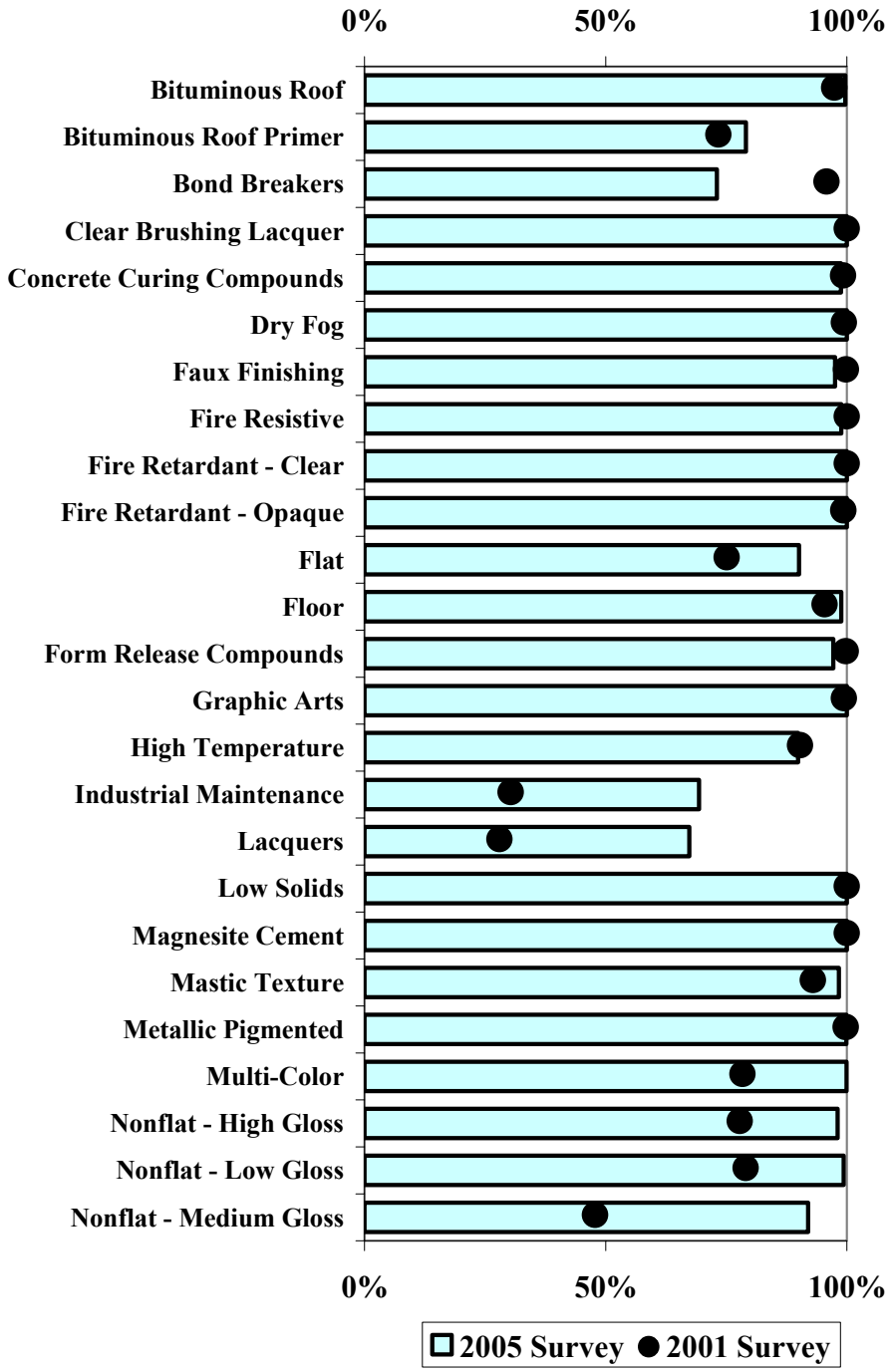
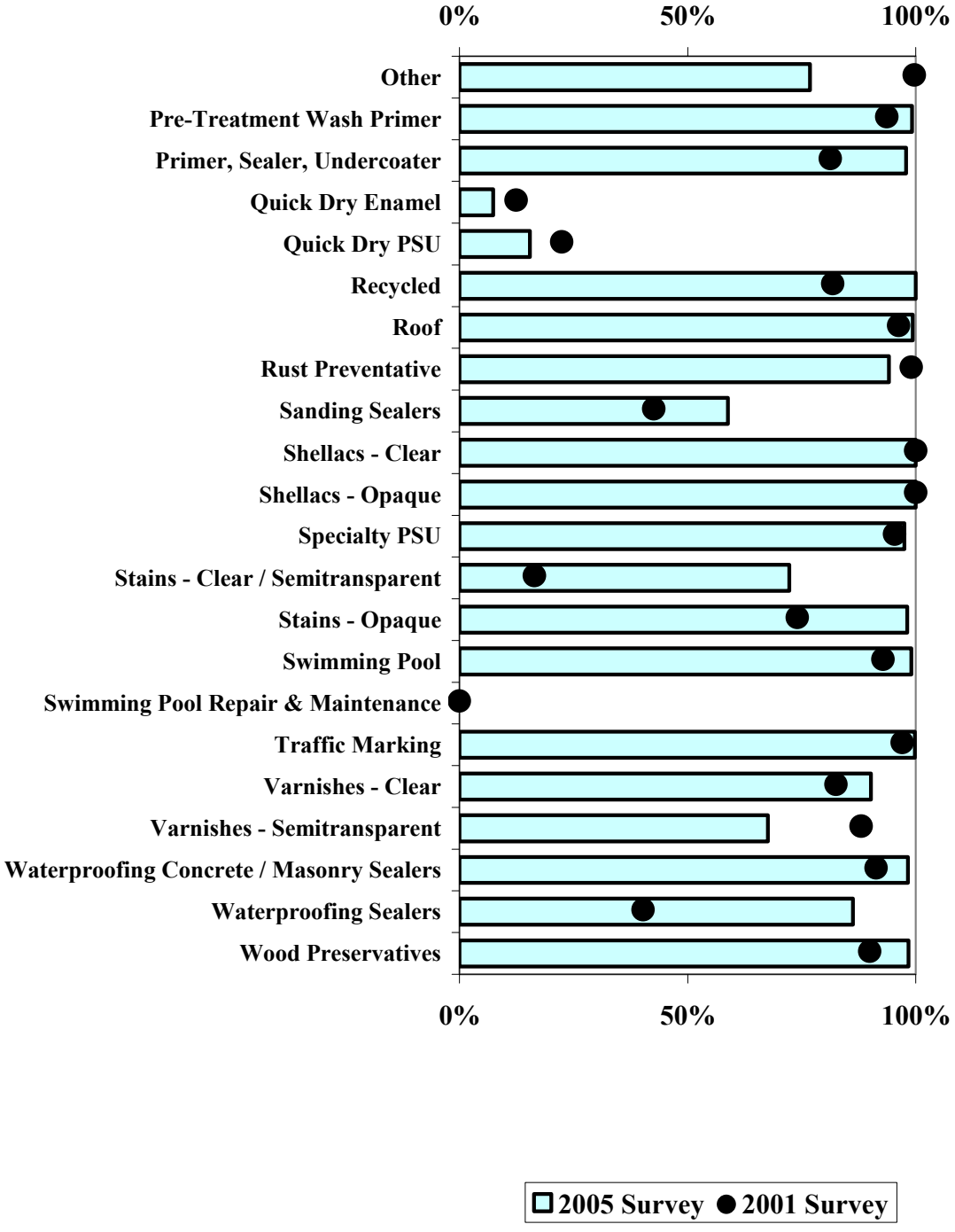


Figure 6-2:
Comparison of Complying Marketshares – 2000 SCM Limits
2005 Survey vs. 2001 Survey (Part II)



For most categories, the complying marketshare improved in the 2005 survey or remained approximately the same, as compared to the previous 2001 survey. However, the following categories experienced noticeable declines of more than 5% -

Bond Breakers – For the 2005 survey, sales increased substantially for a product that has a VOC value that is just slightly higher than the VOC limit. The increase in the noncomplying product caused a decline in the complying marketshare from 96% in the 2001 survey to 73% in the 2005 survey.

Other: For the 2005 Survey, the complying marketshare for the "Other" category was 77%, which is a substantial decline from the 2001 Survey value of 100%. This decline was due to a change in the types of coatings that were included in the "Other" category. In the 2001 Survey, the "Other" category consisted primarily of Driveway Sealers which had a 100% complying marketshare. In the 2005 Survey, Driveway Sealers were pulled out as a separate category. The products that remained in the "Other" category had a lower complying marketshare.

Varnishes – Semitransparent: The complying marketshare for semitransparent varnishes declined from 88% in the 2001 Survey to 68% in the 2005 Survey. Almost all of the products in this category are sold in small containers, so there is a relatively small volume in large containers that was used to calculate the complying marketshare for Figure 6-2. For the 2005 Survey, there were only eight companies that reported products in the semitransparent varnishes category and four of those companies did not report these products in the 2001 Survey. In addition, a product with a relatively large sales volume was reported as a clear varnish in the 2001 Survey, but was reclassified as a semitransparent varnish in the 2005 Survey. The difference in the companies and types of products reported resulted in a decline in the complying marketshare for the 2005 Survey.

Chapter 7 -- Cumulative Percent Graphs of Sales Volume vs. VOC Content

The following cumulative percent graphs were generated for each of the coatings categories with reported sales to depict the percent of sales volume versus the VOC Regulatory level. These graphs were provided to complement the VOC distribution histograms in Chapter 4. The dotted line on the graphs denotes the 2000 SCM VOC limit for each coating category. The sales volumes represented by these graphs include small containers (1 quart or less.)

This chapter includes the following data summaries:

Figure 7-1 through Figure 7-48: *Cumulative Percentages of Sales Volume vs. VOC*

Figure 7-1
Bituminous Roof

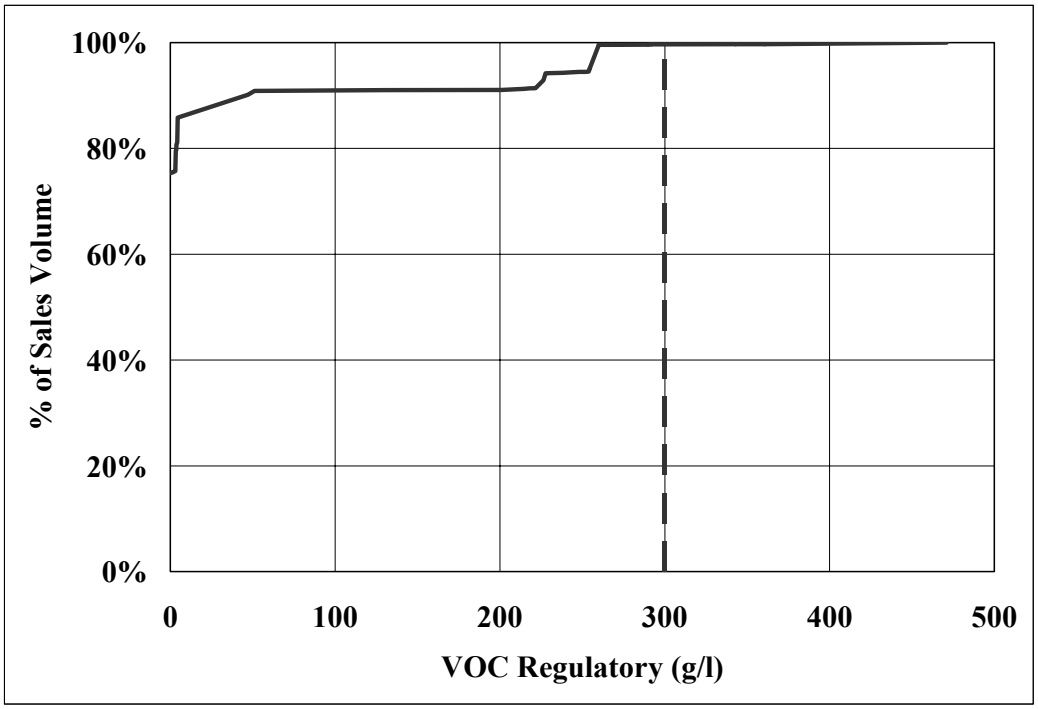


Figure 7-2
Bituminous Roof Primer

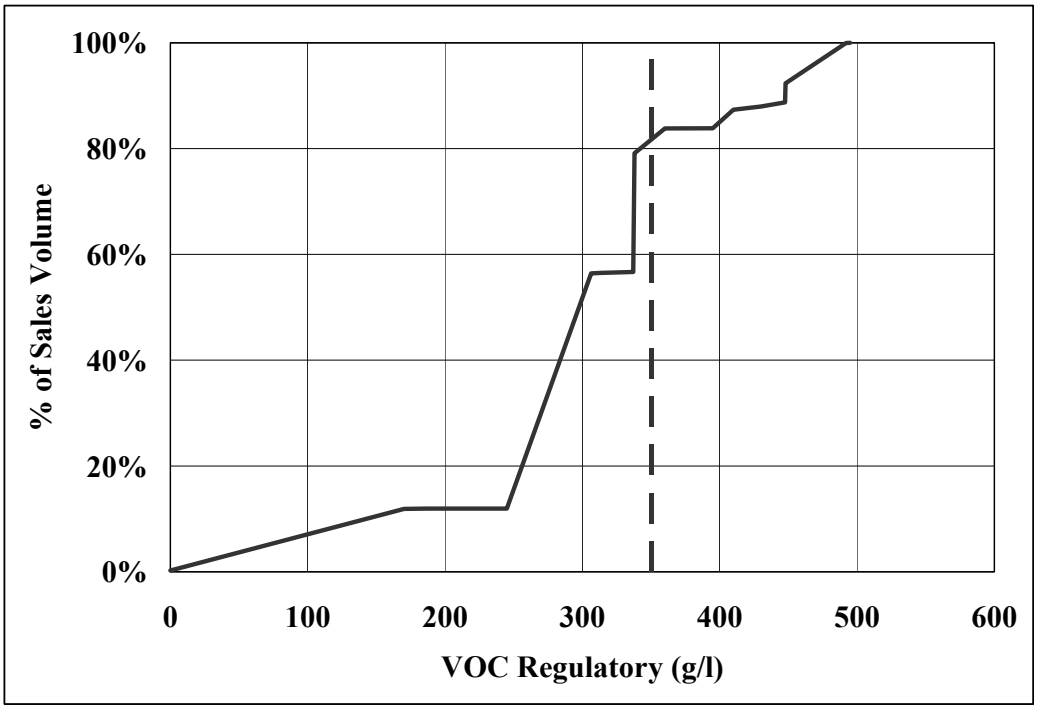


Figure 7-3
Bond Breakers

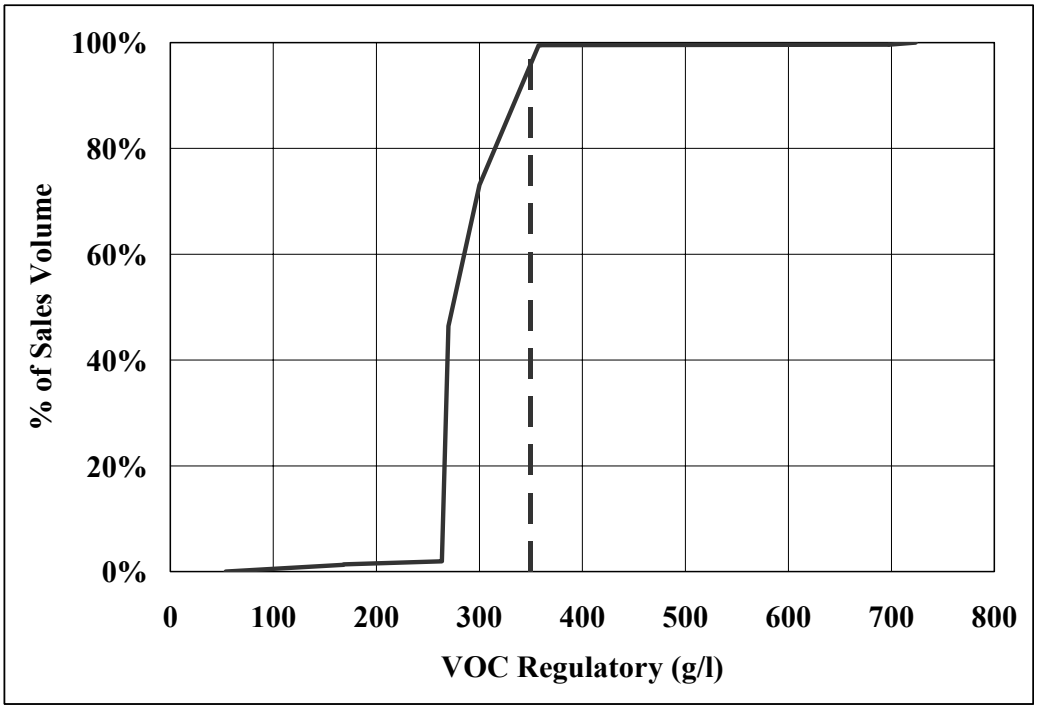


Figure 7-4
Clear Brushing Lacquer

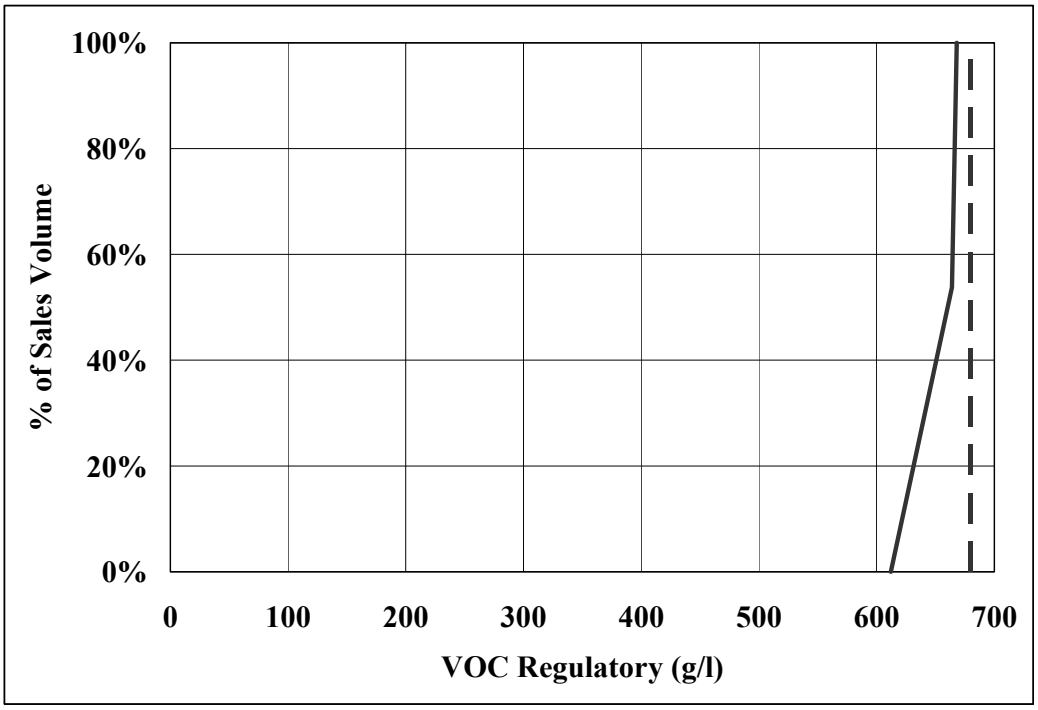


Figure 7-5
Concrete Curing Compounds

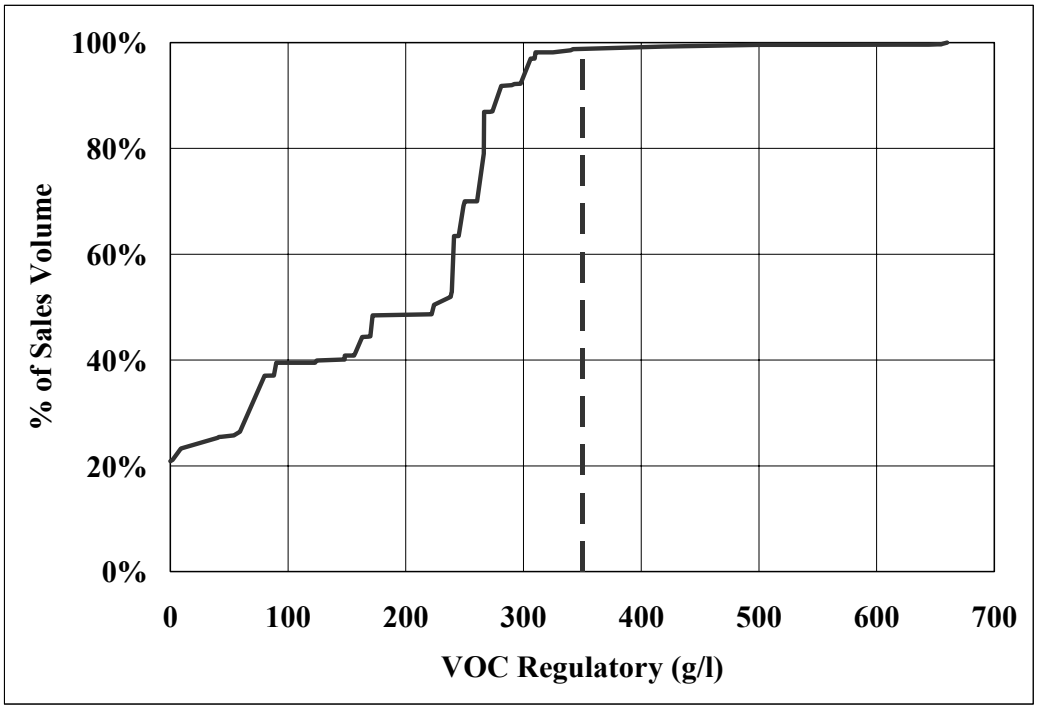


Figure 7-6
Driveway Sealers

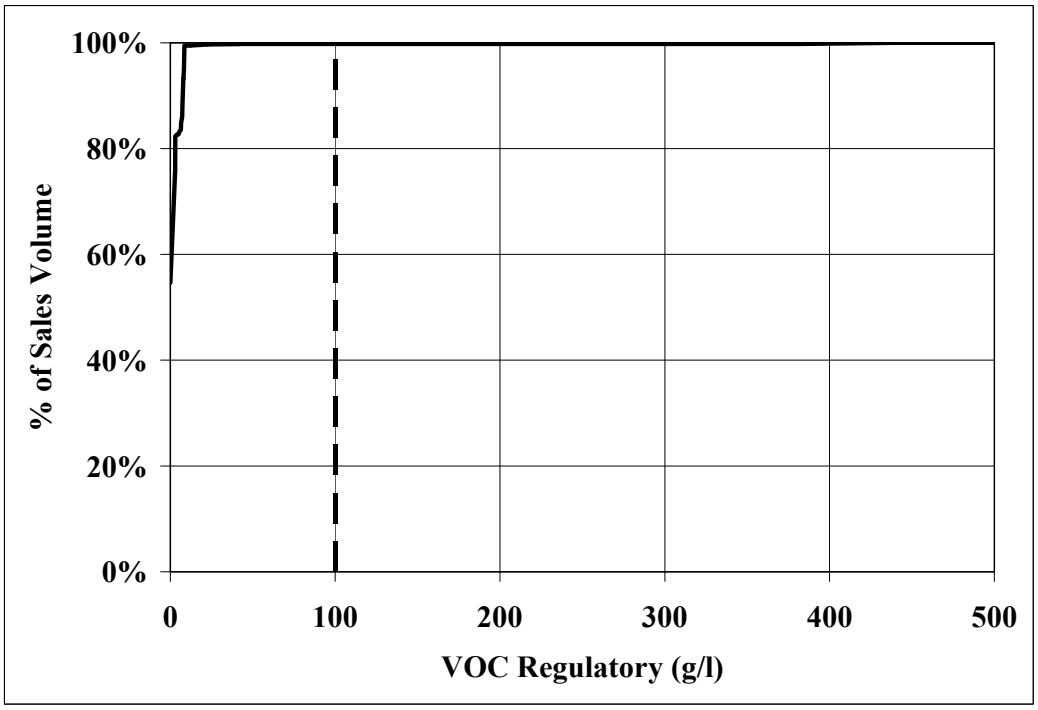


Figure 7-7
Dry Fog

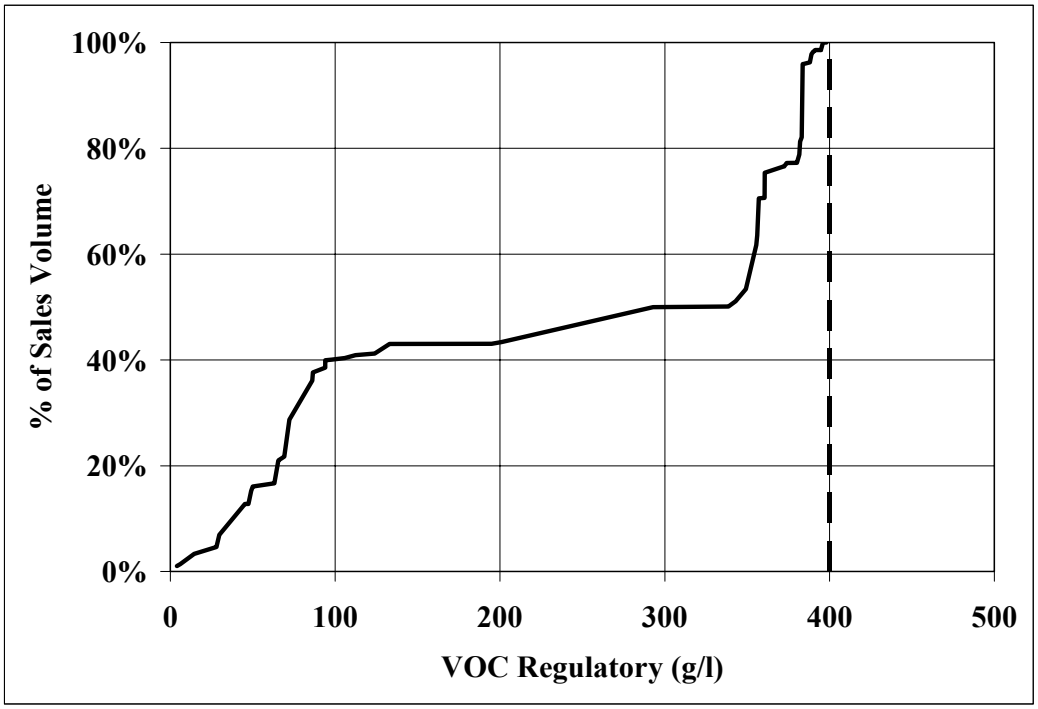


Figure 7-8
Faux Finishing

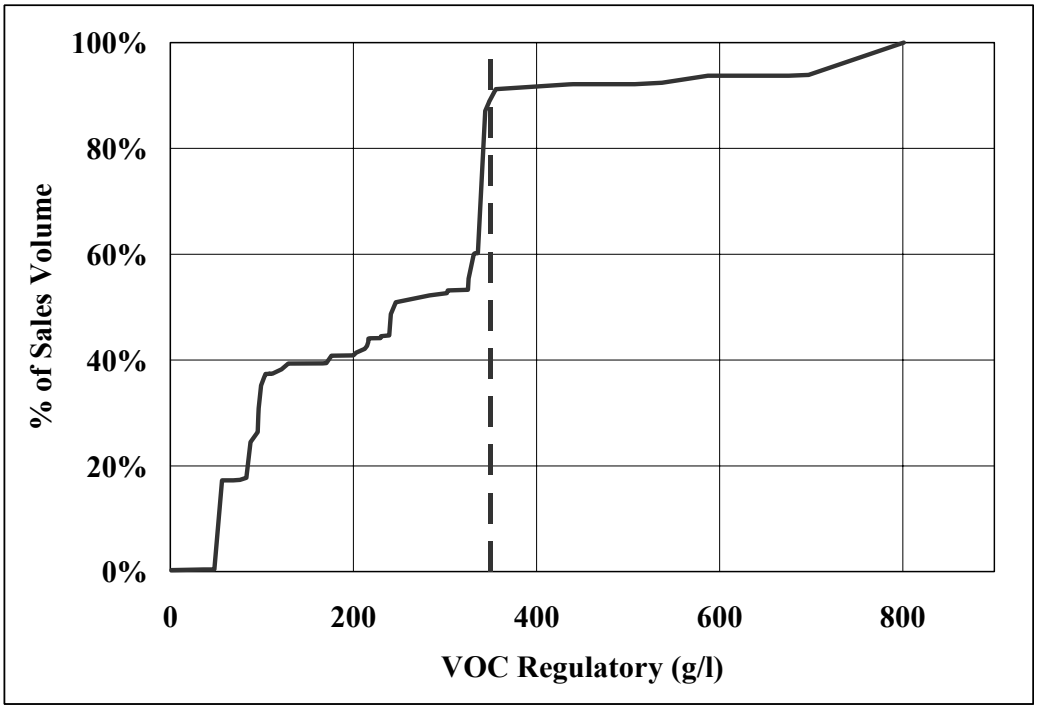


Figure 7-9
Fire Resistive

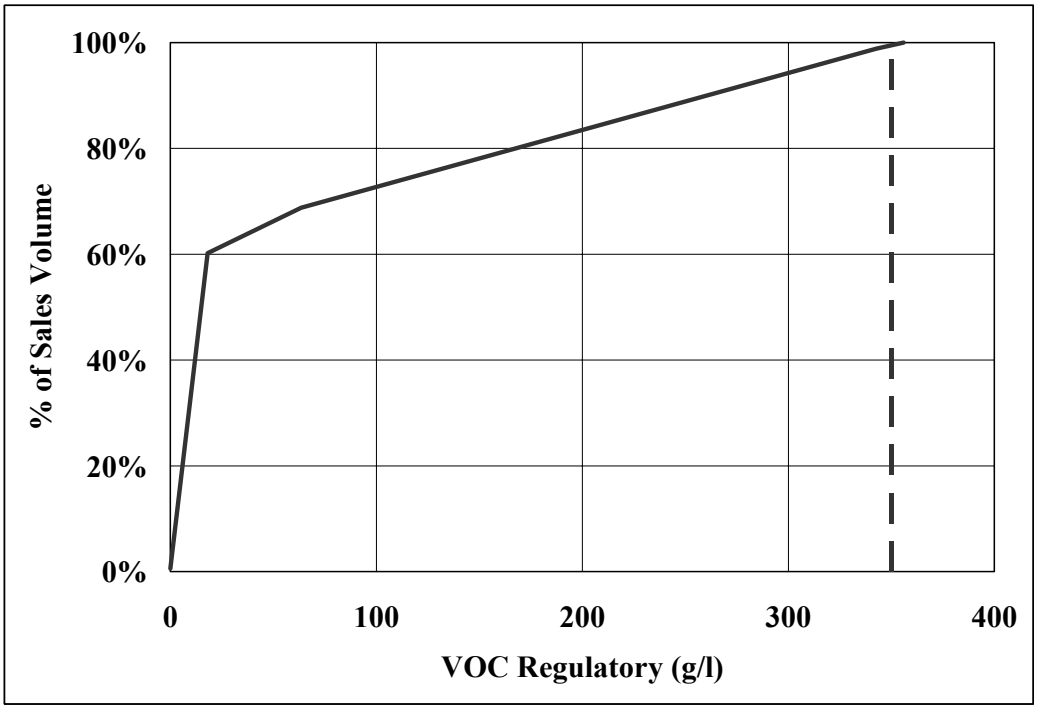


Figure 7-10
Fire Retardant – Clear

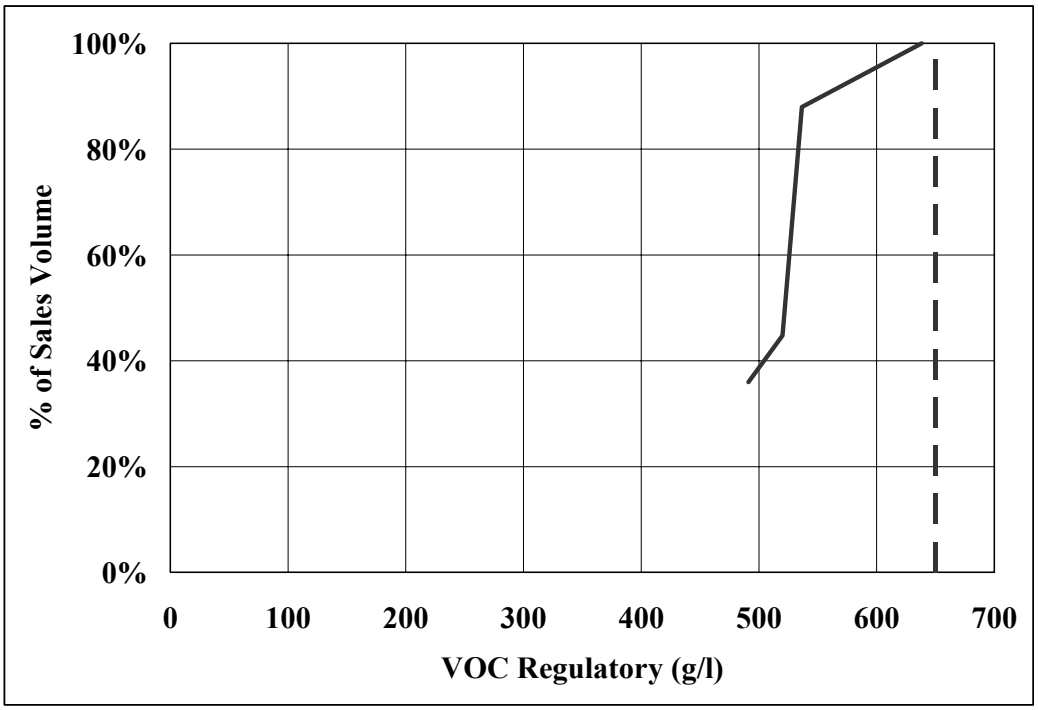


Figure 7-11
Fire Retardant – Opaque

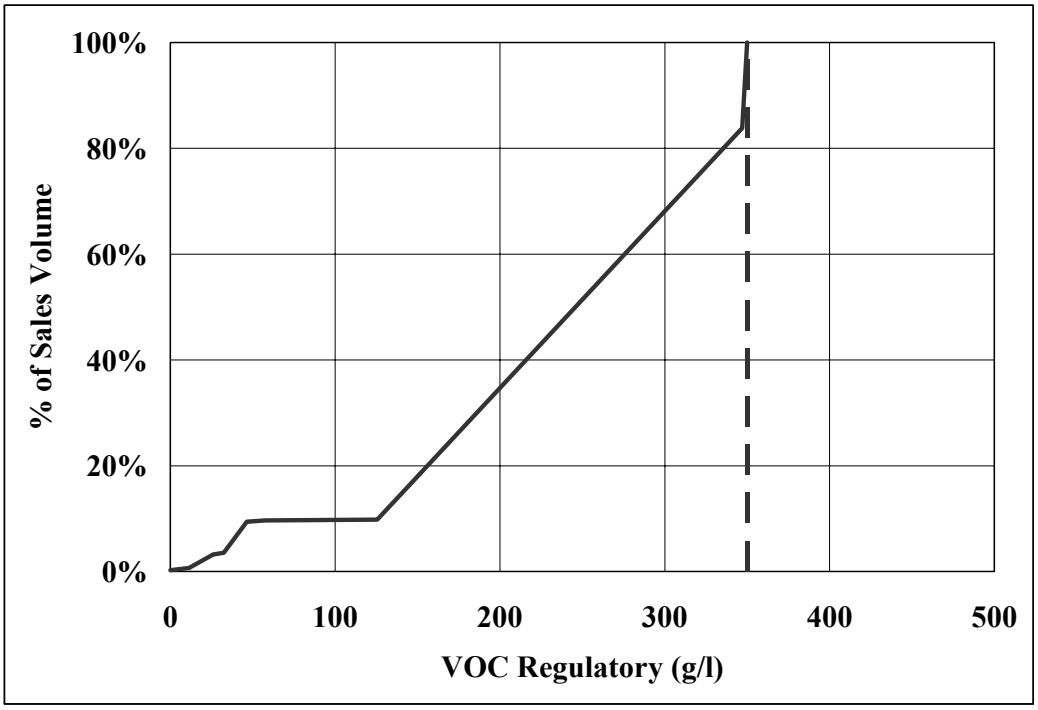


Figure 7-12
Flat

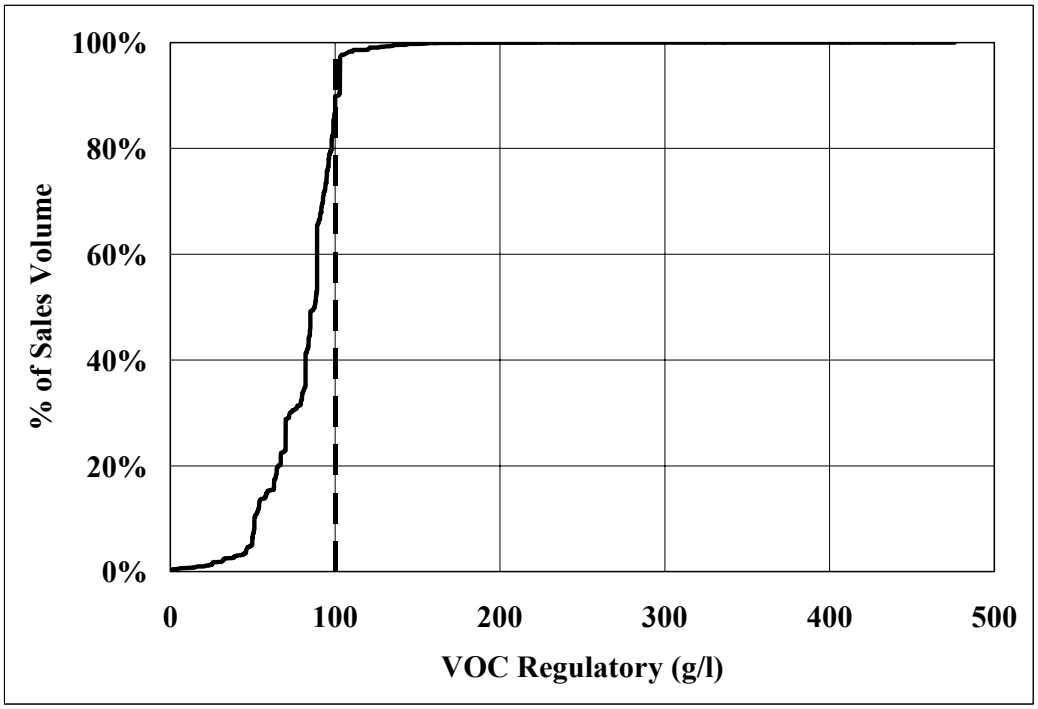


Figure 7-13
Floor

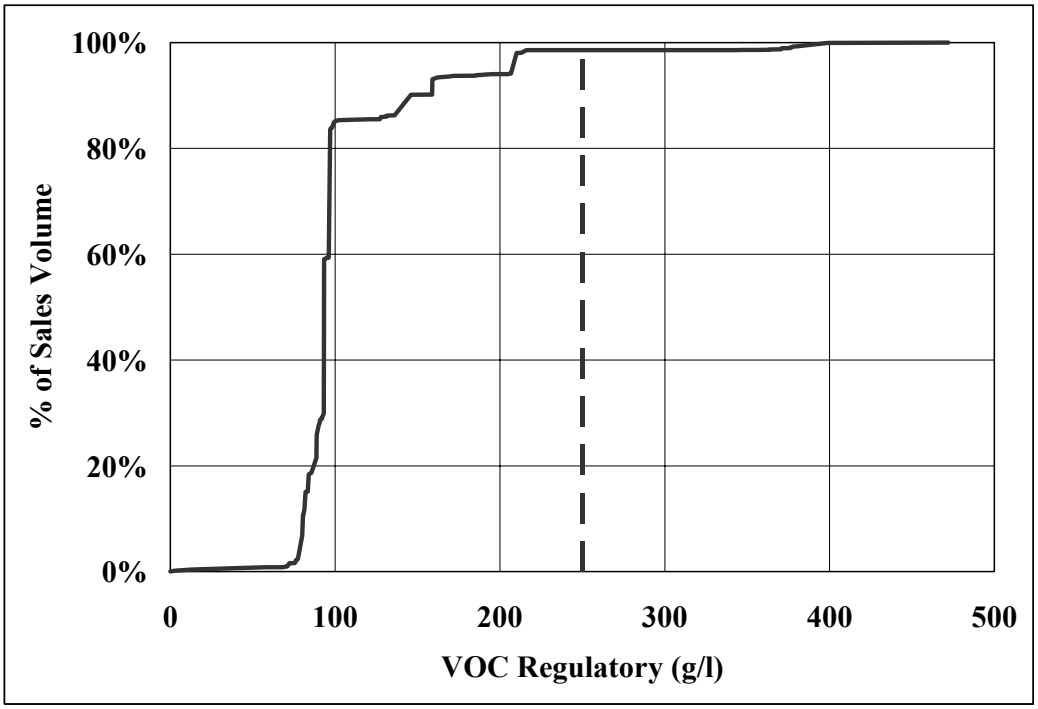


Figure 7-14
Form Release Compounds

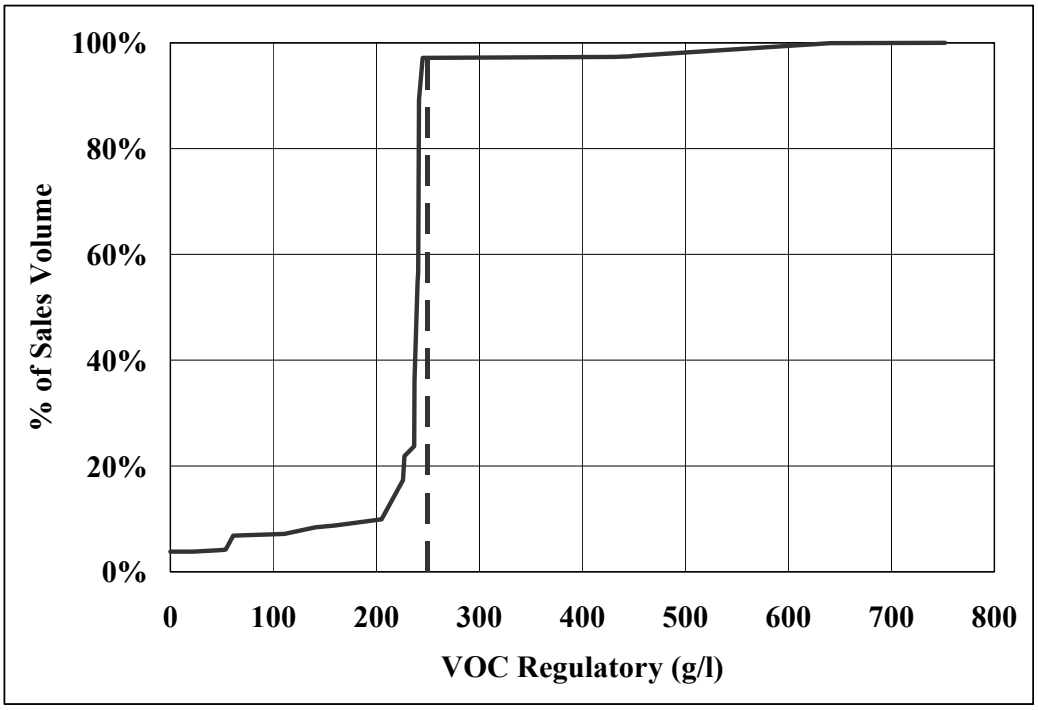


Figure 7-15
Graphic Arts

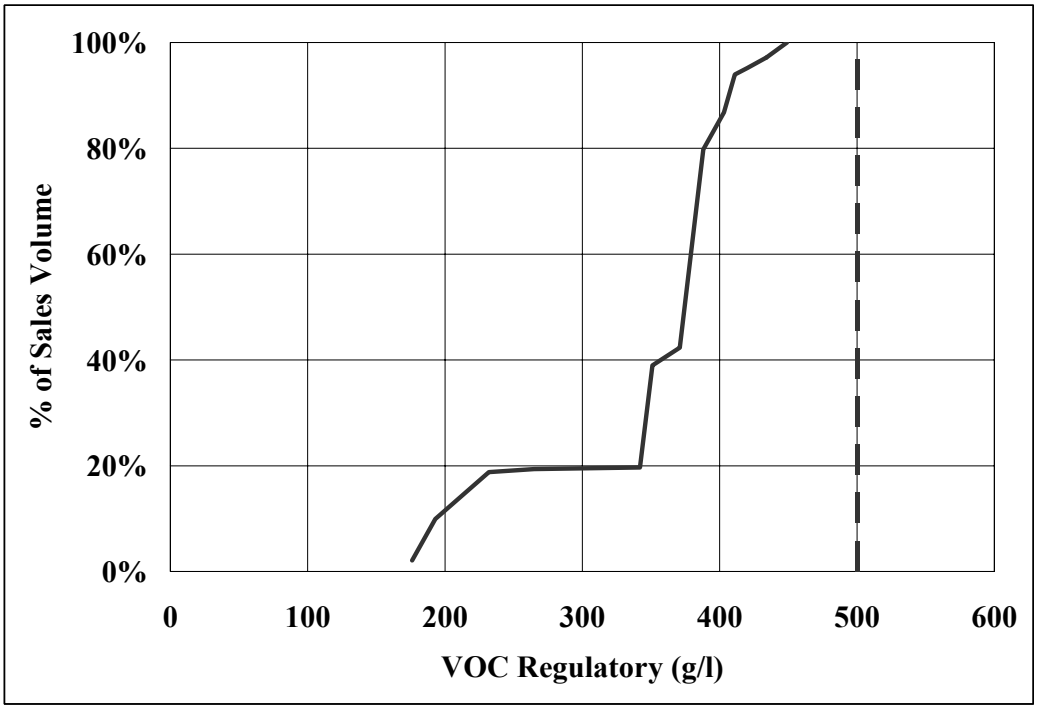


Figure 7-16
High Temperature

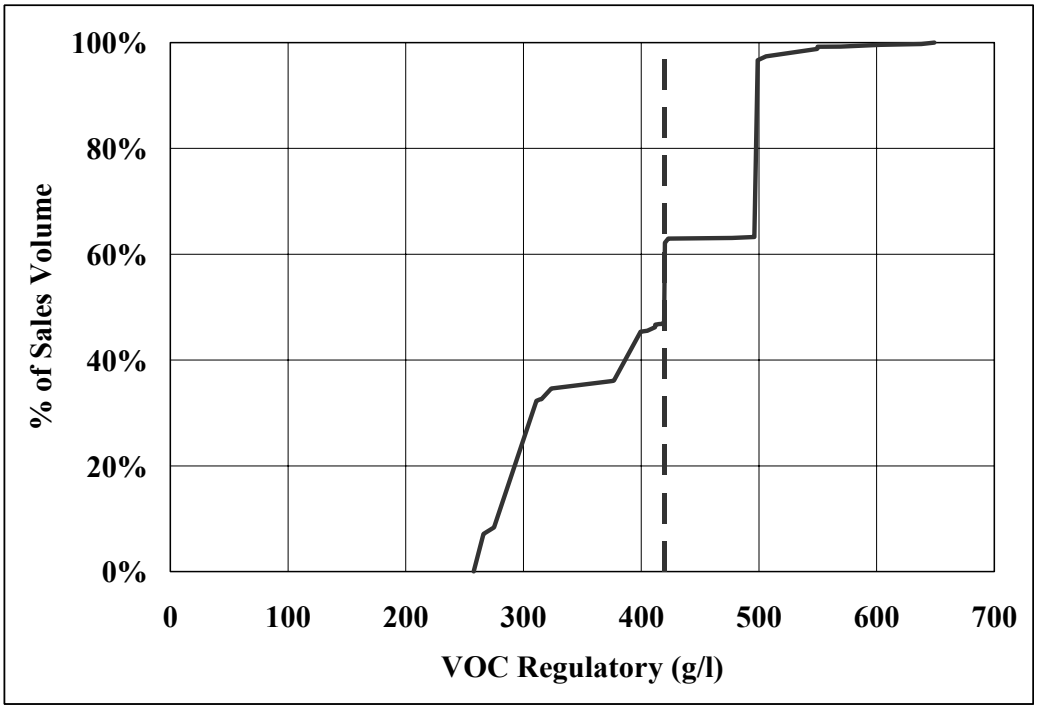


Figure 7-17
Industrial Maintenance

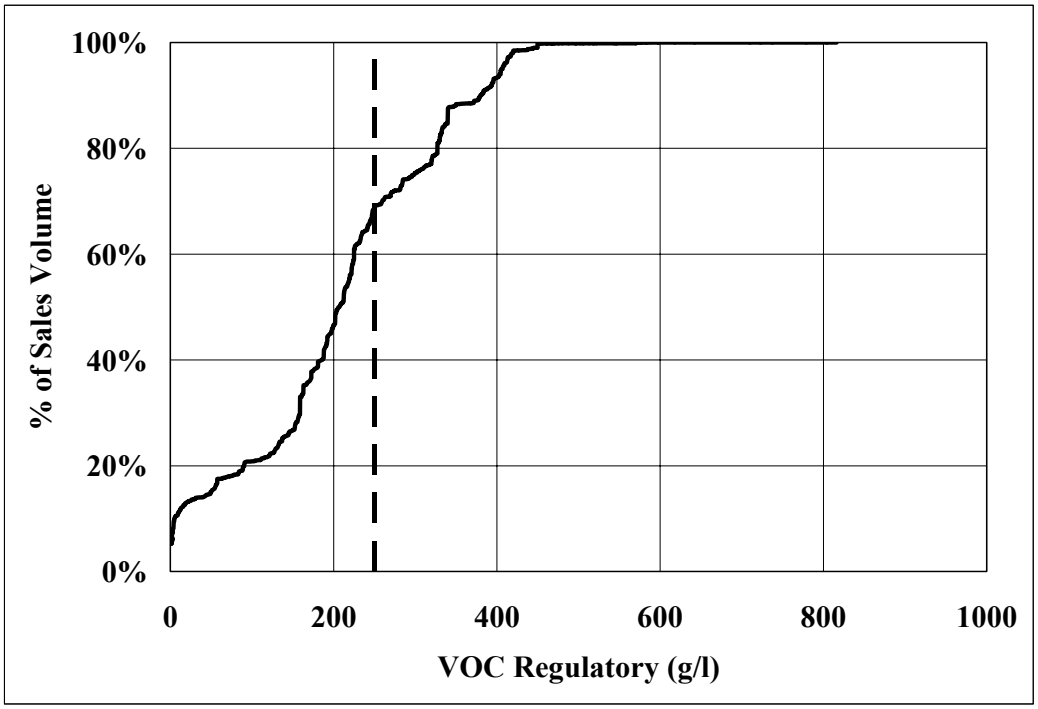


Figure 7-18
Lacquers

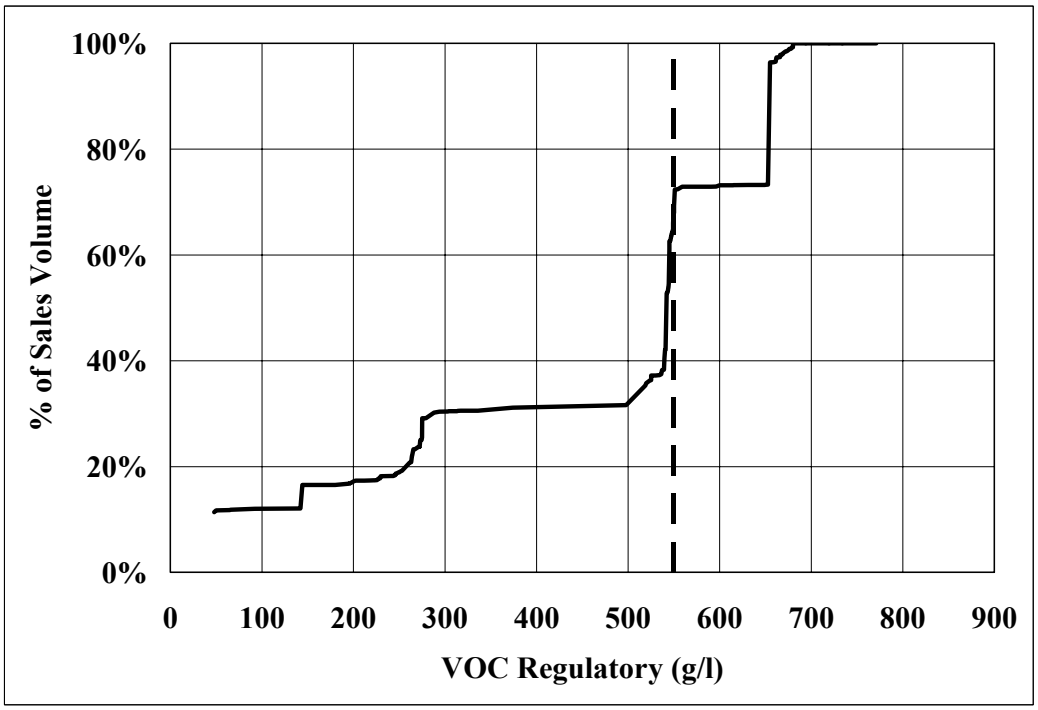
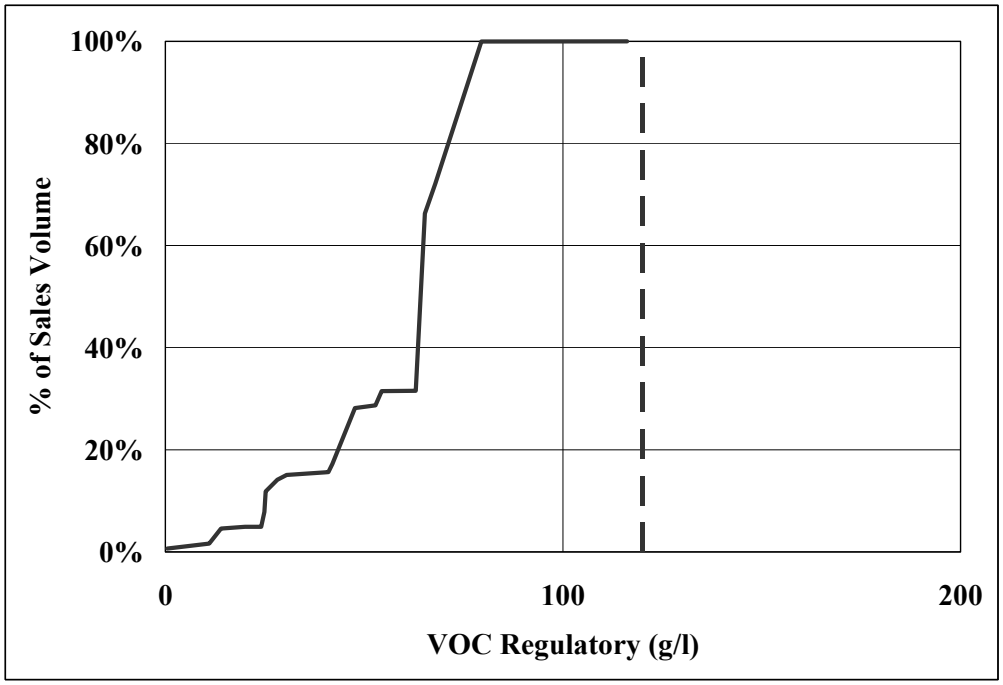


Figure 7-19
Low Solids



Note: For Low Solids coatings, VOC Regulatory equals VOC Actual.

For **Magnesite Cement**, 100% of the products sold complied with the VOC Limit of 450 g/l and no figure is provided, due to the small number of products.

Figure 7-20
Mastic Texture

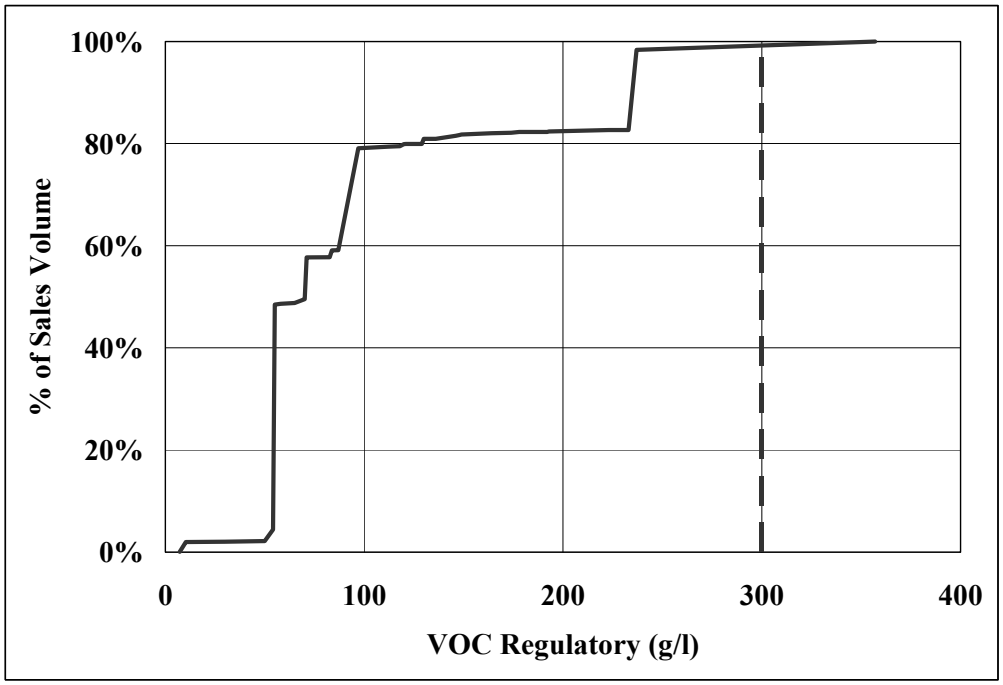


Figure 7-21
Metallic Pigmented

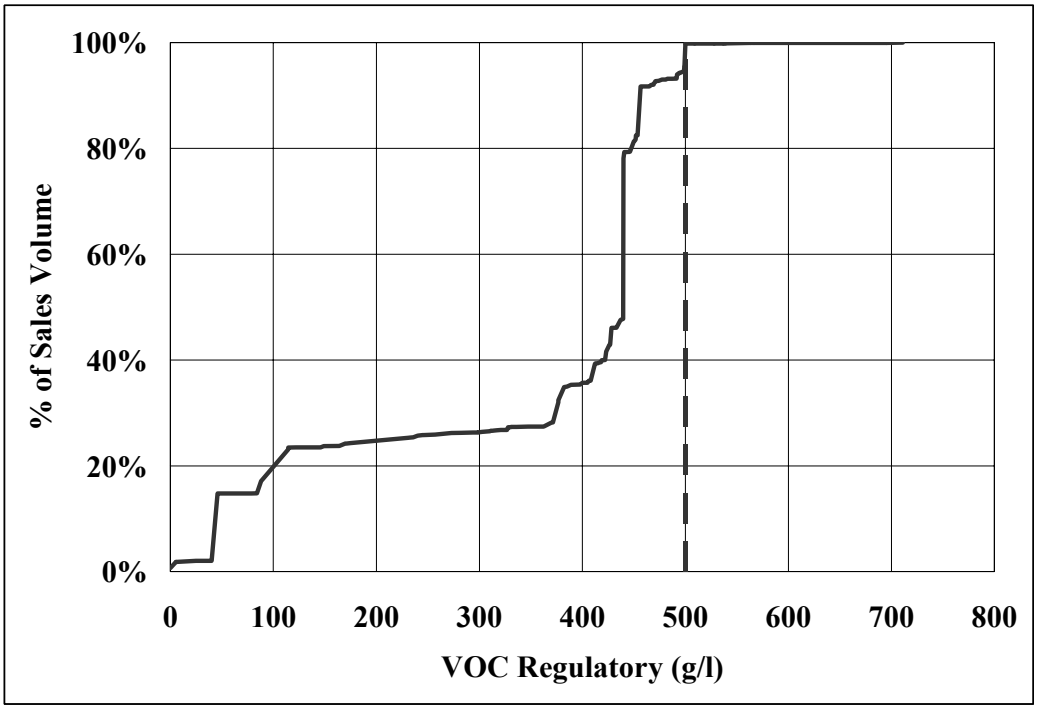


Figure 7-22
Multi-Color

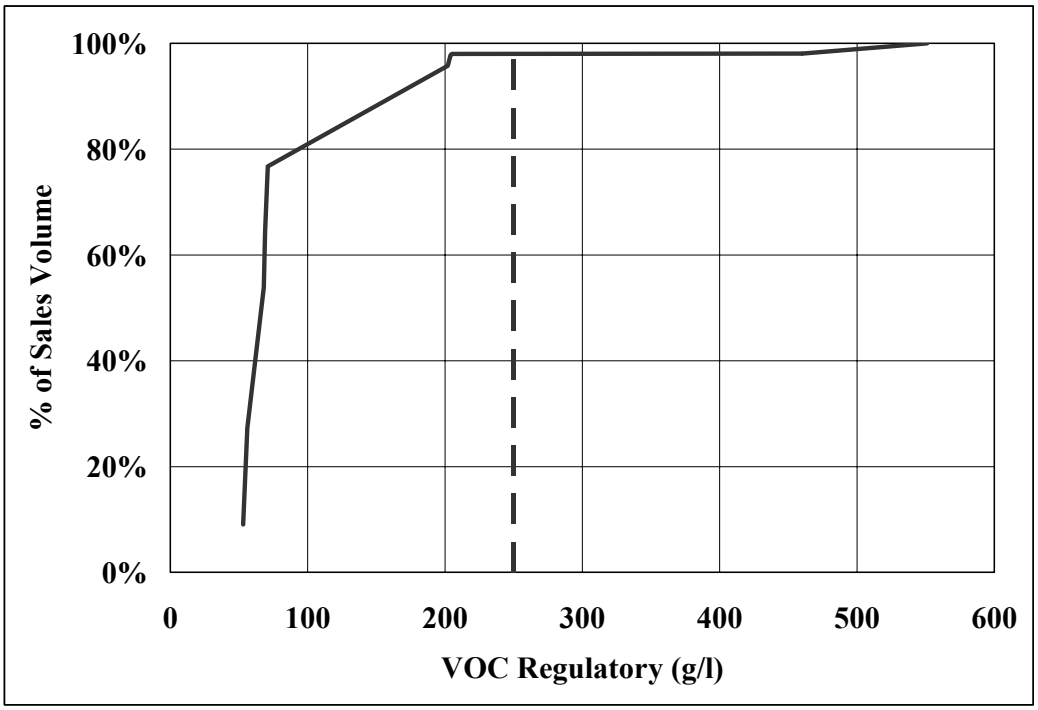


Figure 7-23
Nonflat - High Gloss

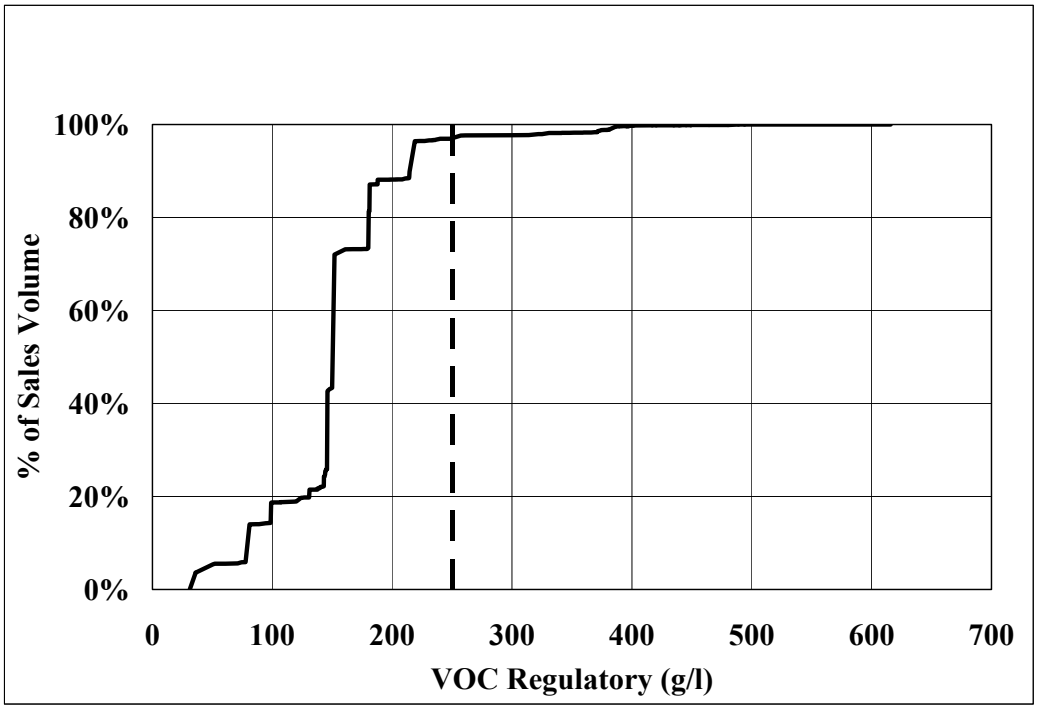


Figure 7-24
Nonflat - Low Gloss

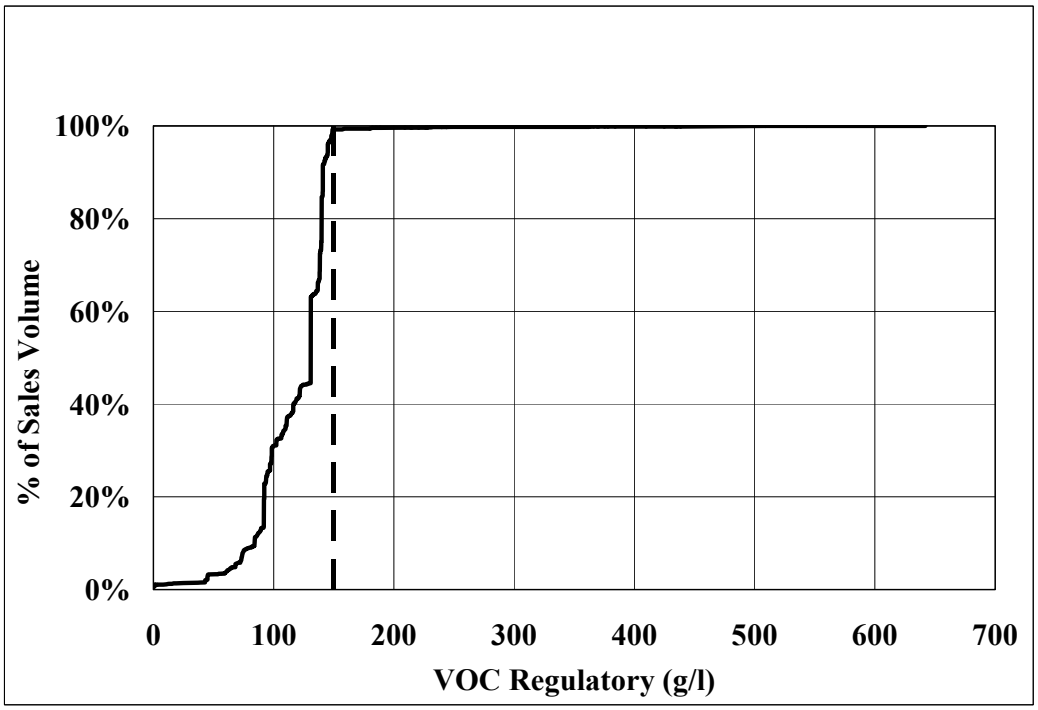


Figure 7-25
Nonflat - Medium Gloss

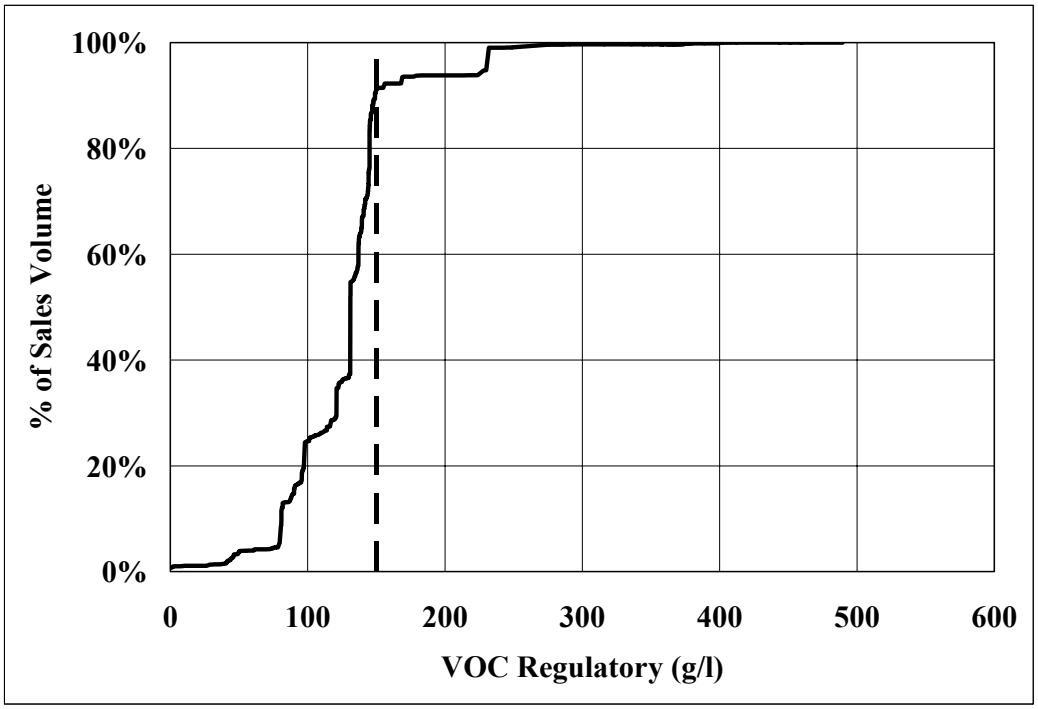


Figure 7-26
Other

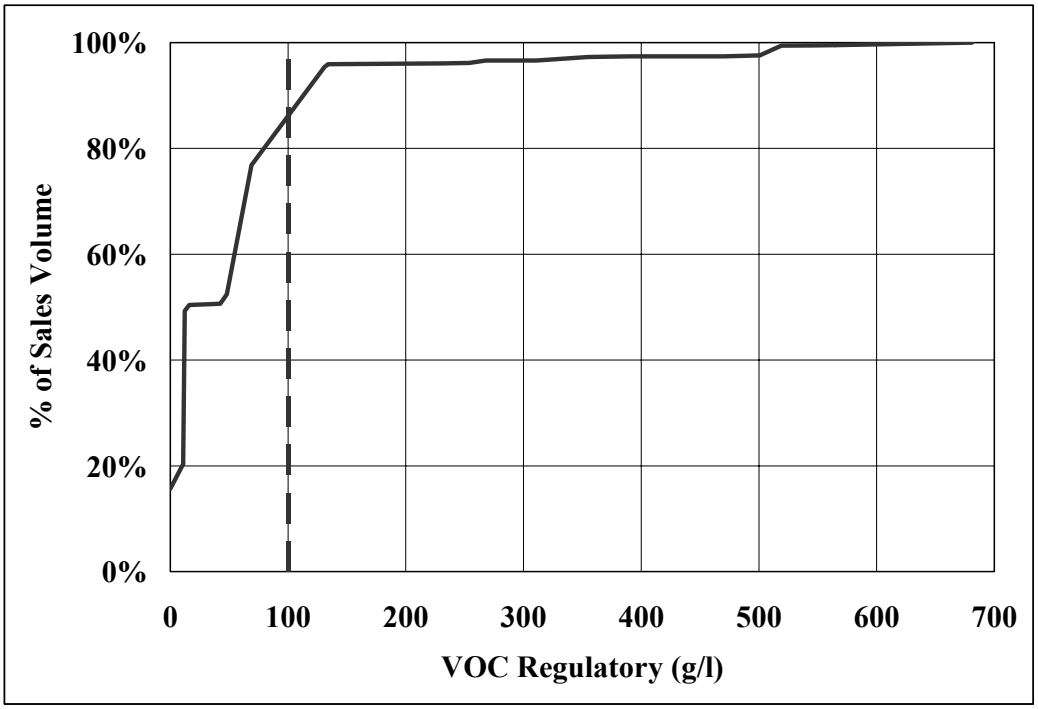


Figure 7-27
Pre-Treatment Wash Primer

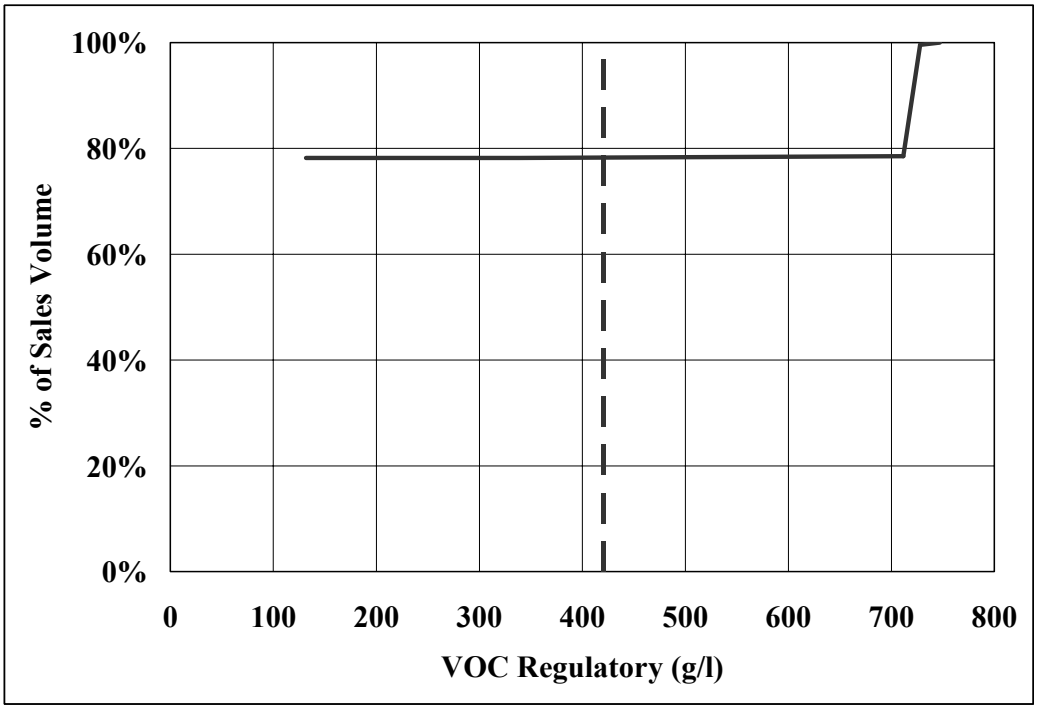


Figure 7-28
Primer, Sealer and Undercoater

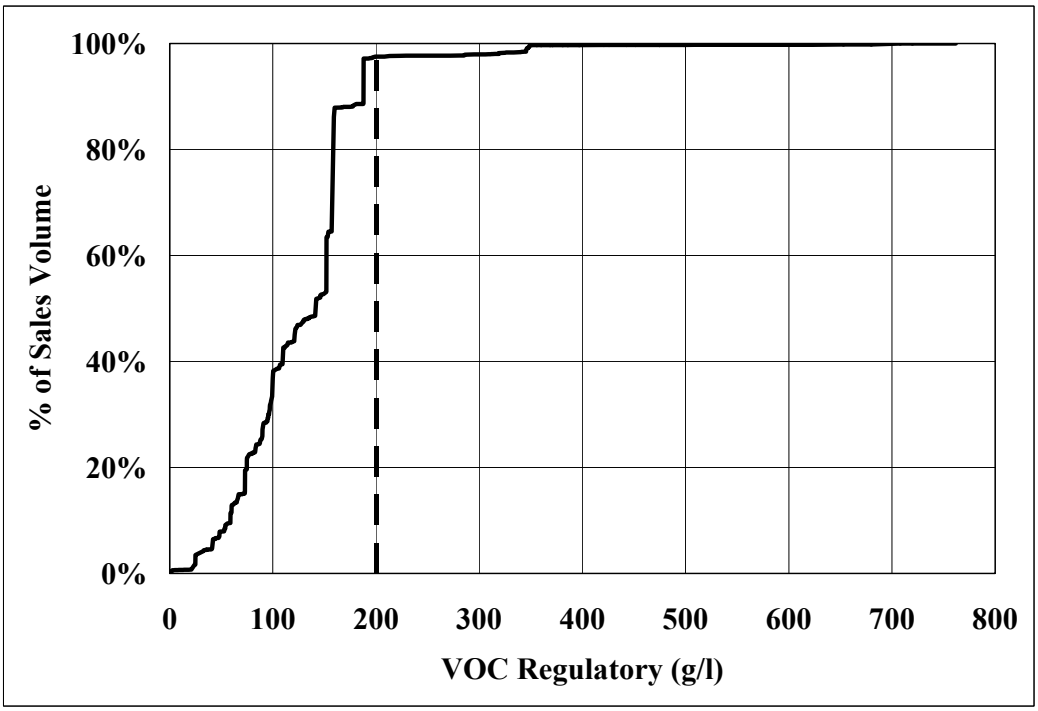


Figure 7-29
Quick Dry Enamel

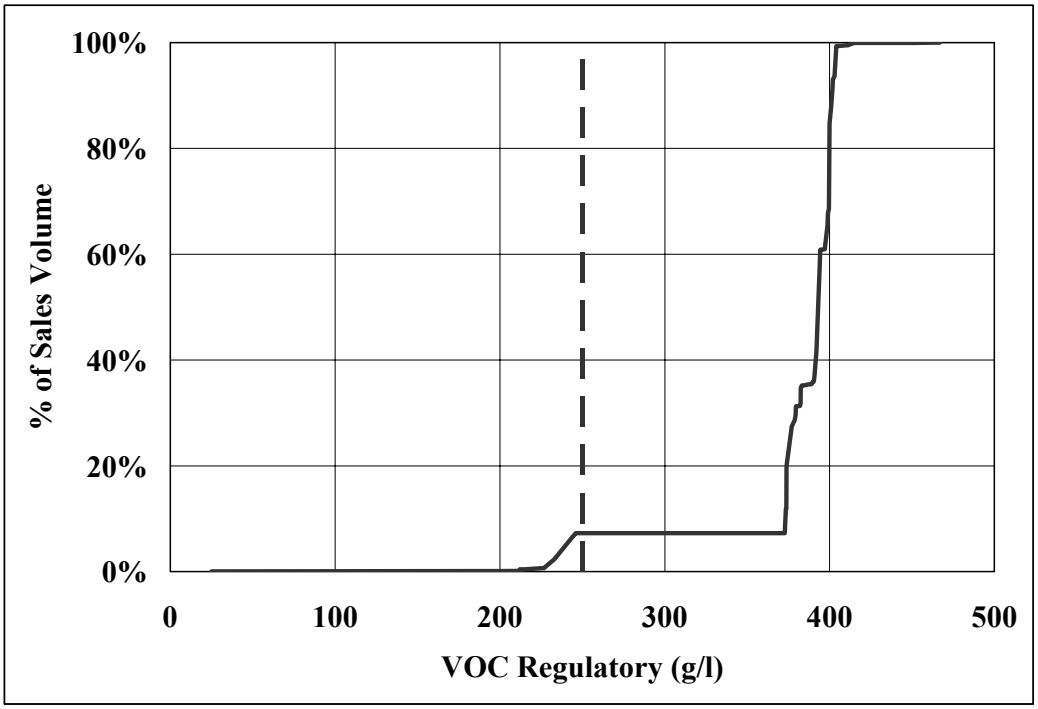


Figure 7-30
Quick Dry Primer, Sealer and Undercoater

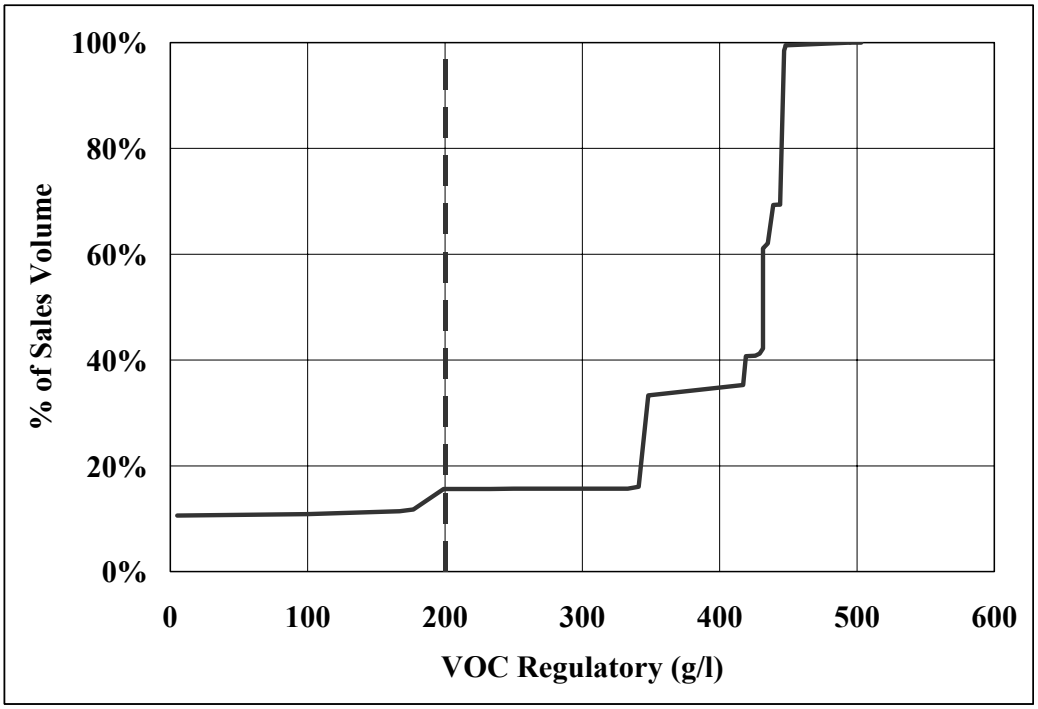


Figure 7-31
Recycled

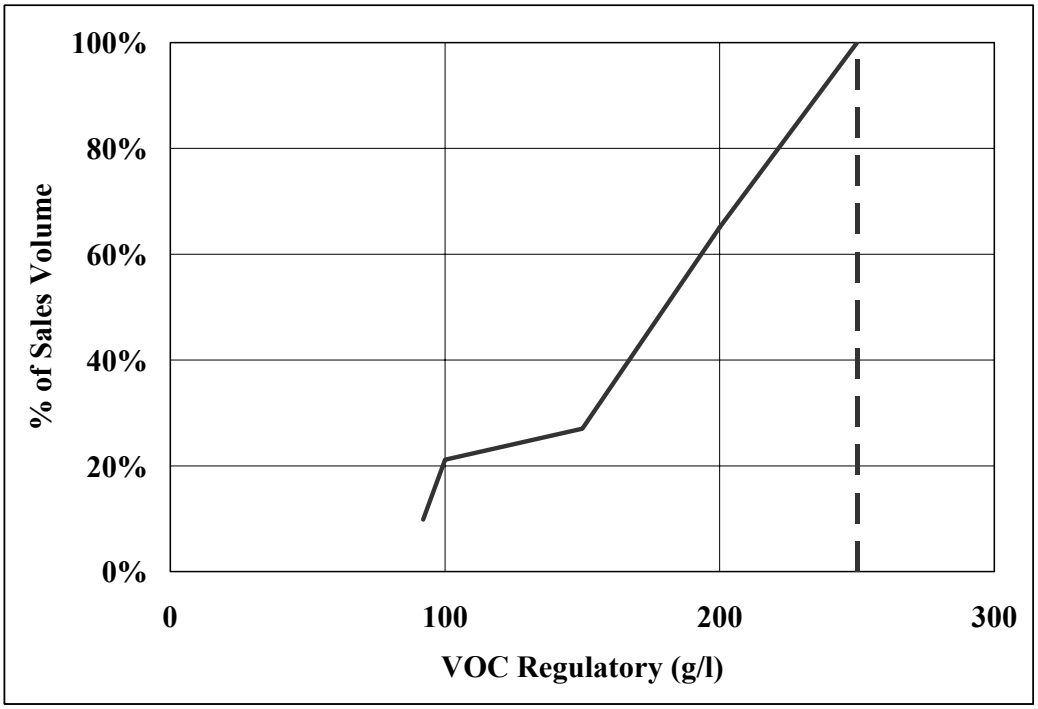


Figure 7-32
Roof

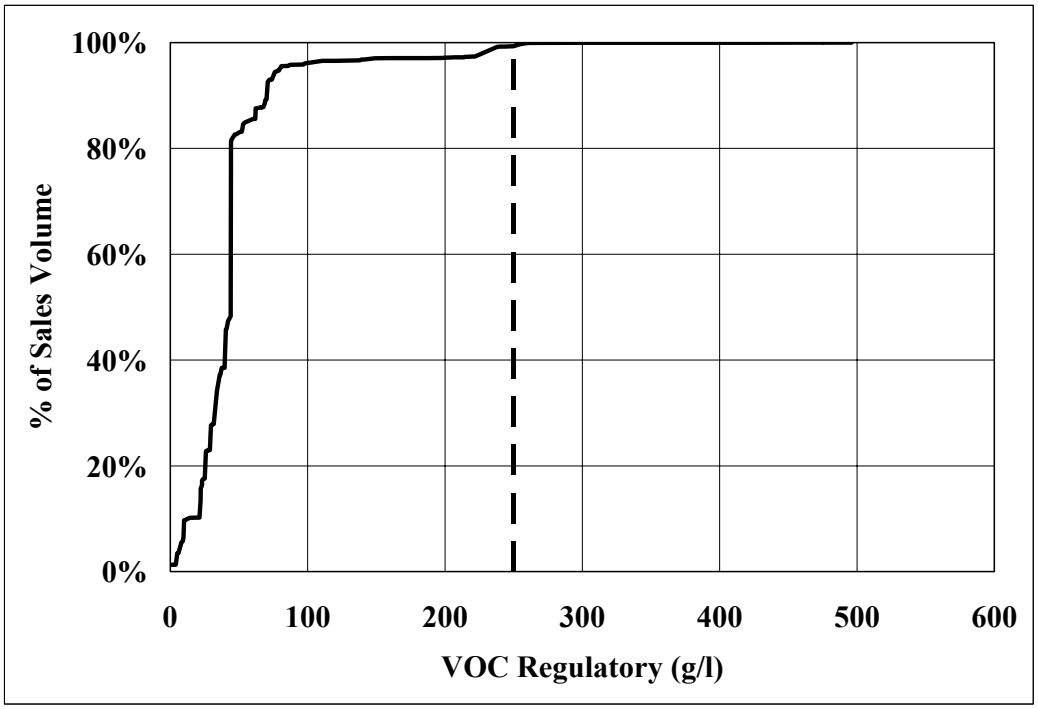


Figure 7-33
Rust Preventative

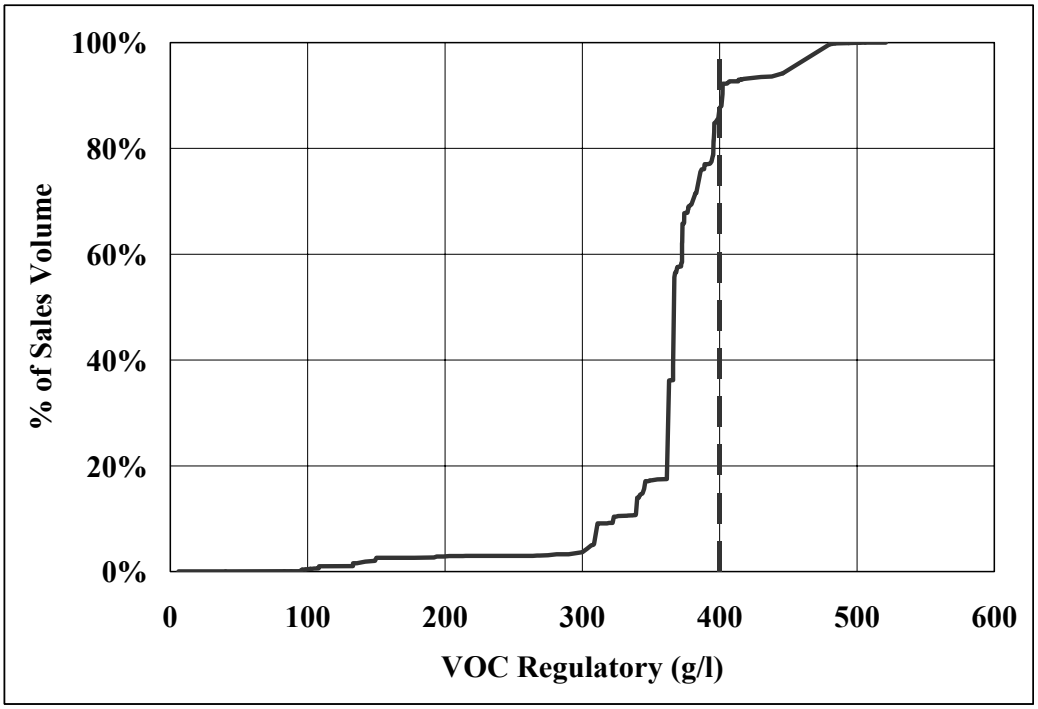


Figure 7-34
Sanding Sealers

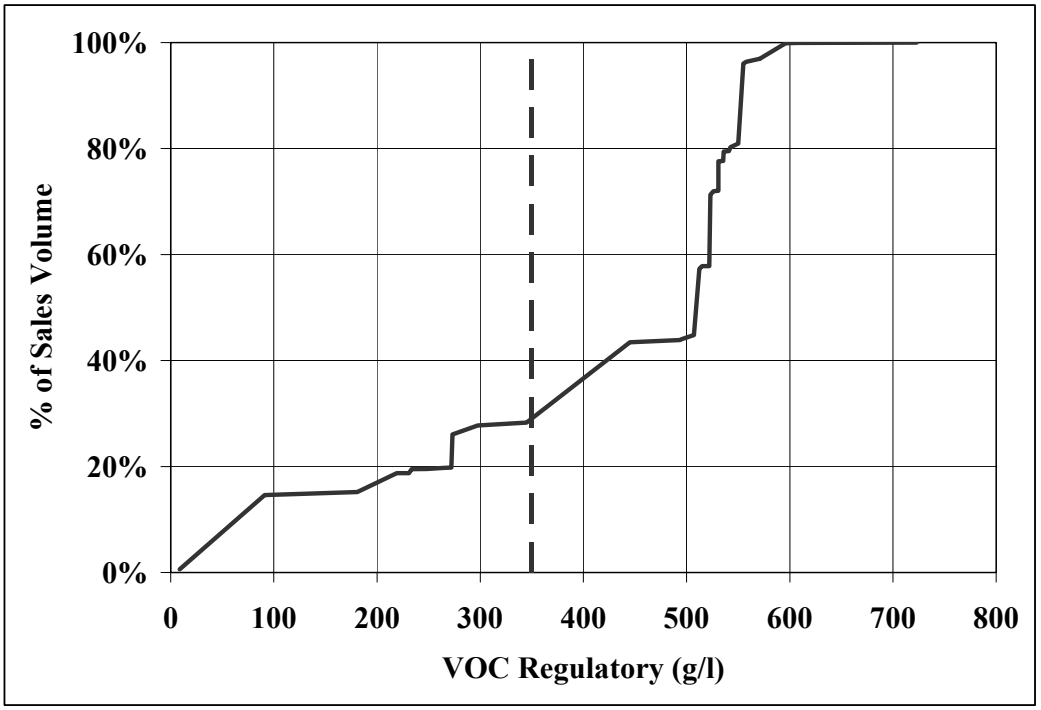
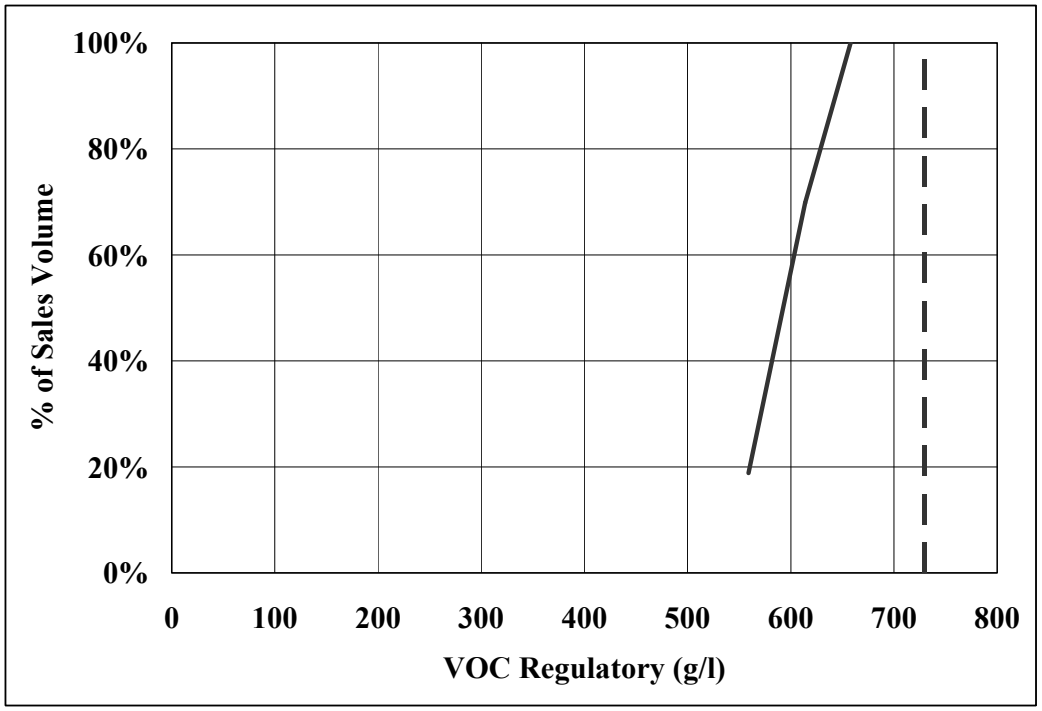


Figure 7-35
Shellacs - Clear



For **Shellacs - Opaque**, 100% of the products sold complied with the VOC Limit of 550 g/l and no figure is provided, due to the small number of products.

Figure 7-36
Specialty Primer, Sealer and Undercoater

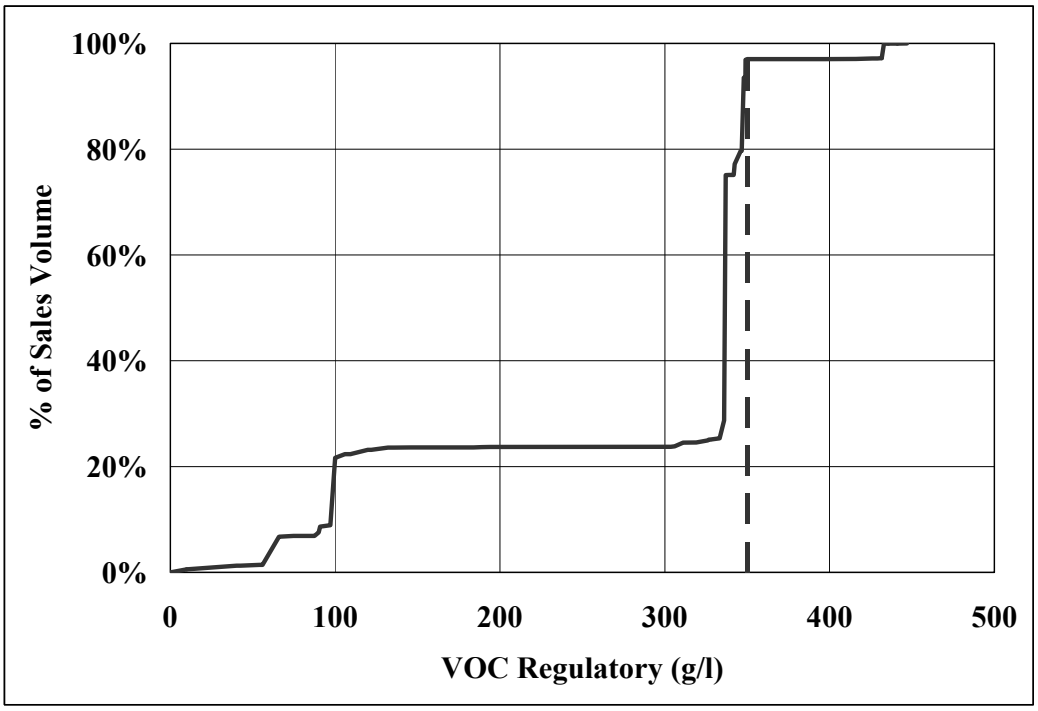


Figure 7-37
Stains – Clear/Semitransparent

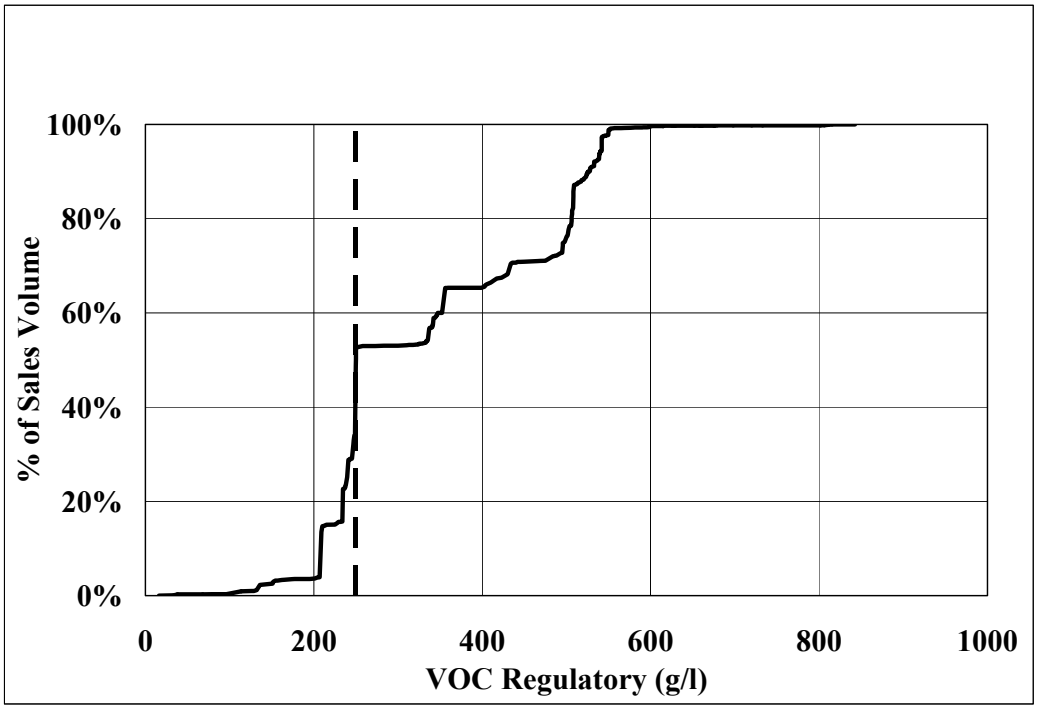


Figure 7-38
Stains - Opaque

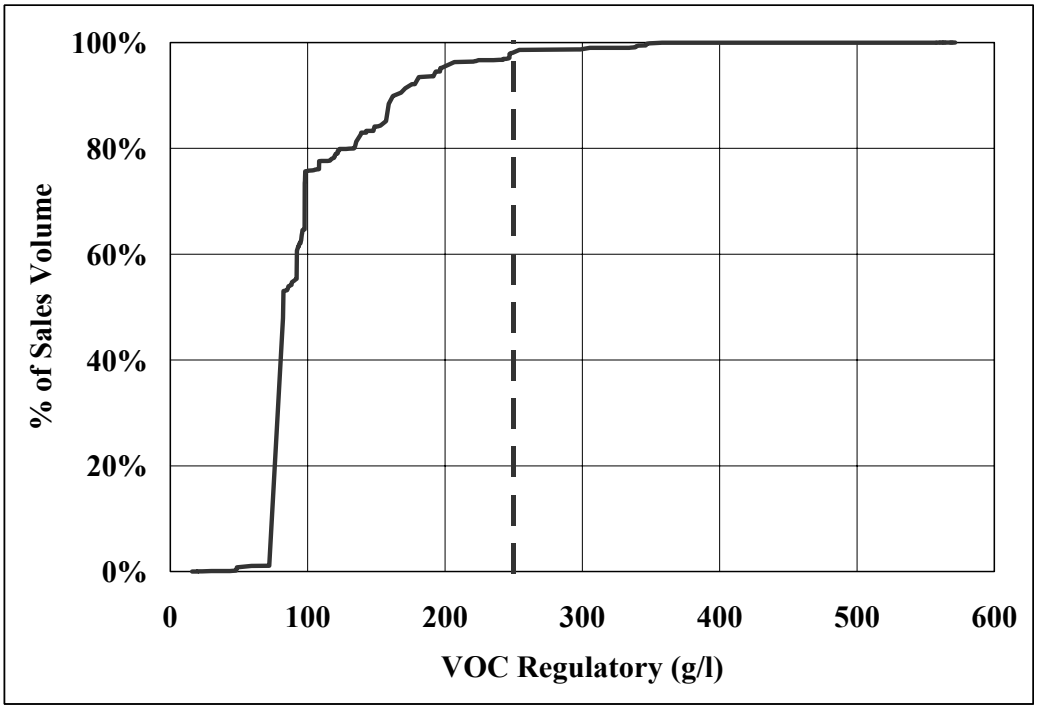


Figure 7-39
Swimming Pool

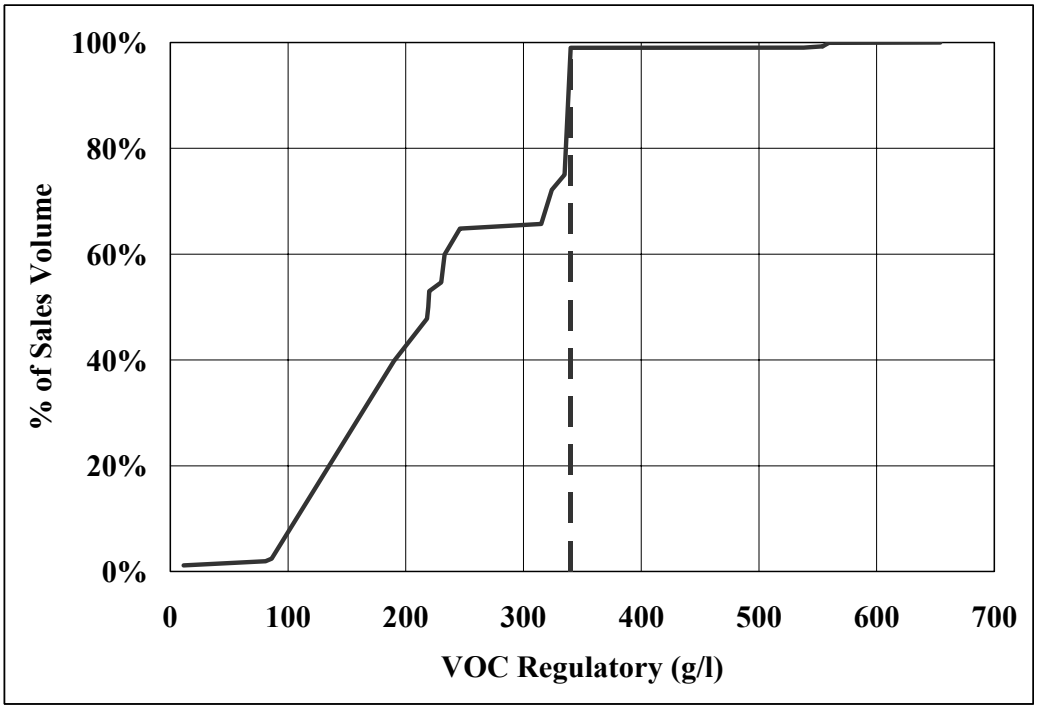


Figure 7-40
Swimming Pool Repair and Maintenance

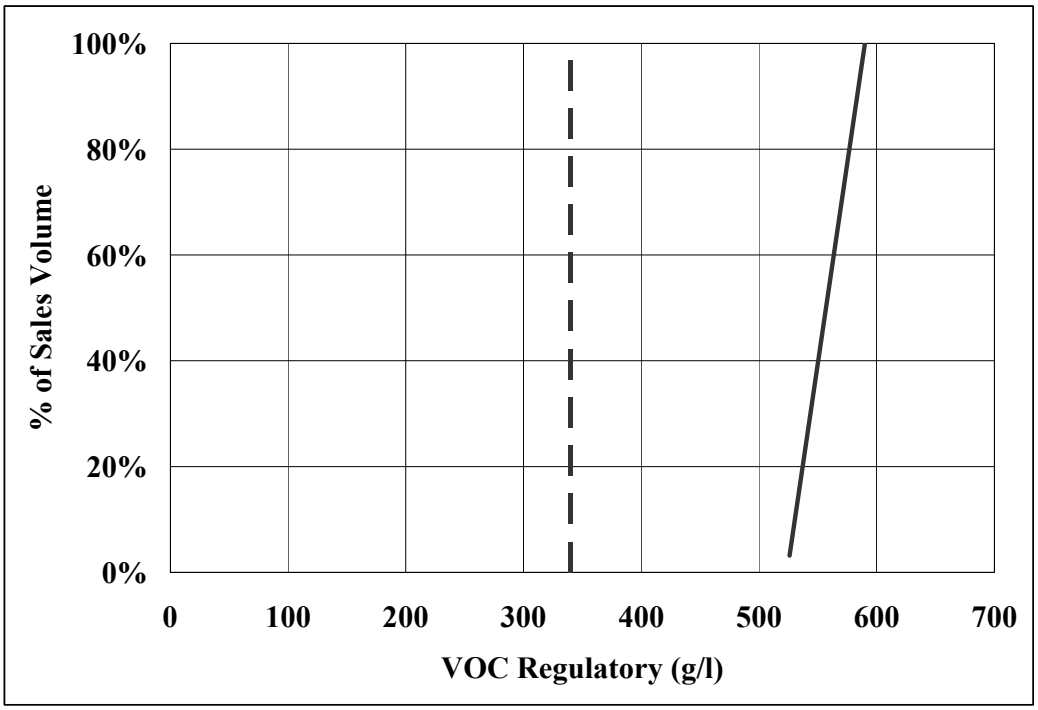


Figure 7-41
Traffic Marking

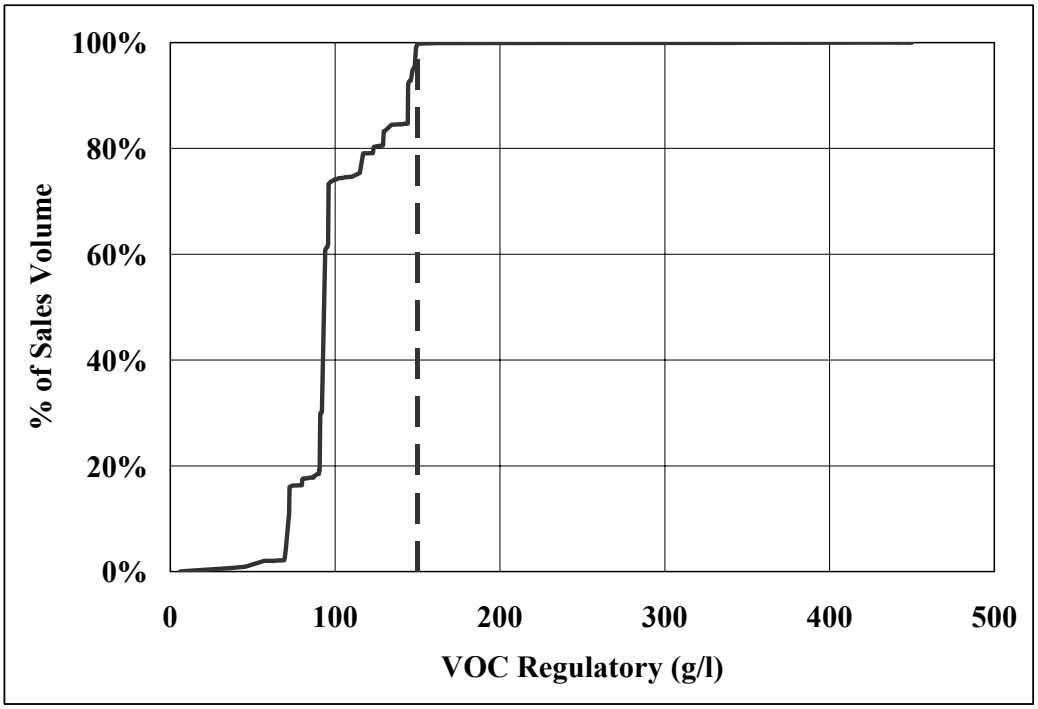


Figure 7-42
Varnishes - Clear

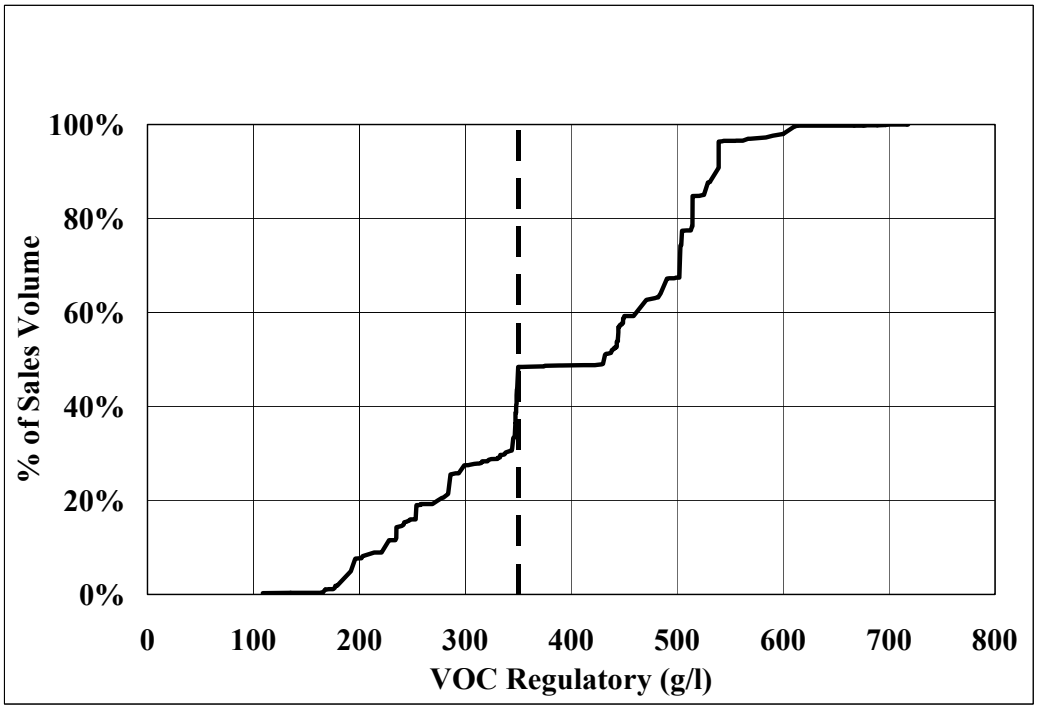


Figure 7-43
Varnishes – Semitransparent

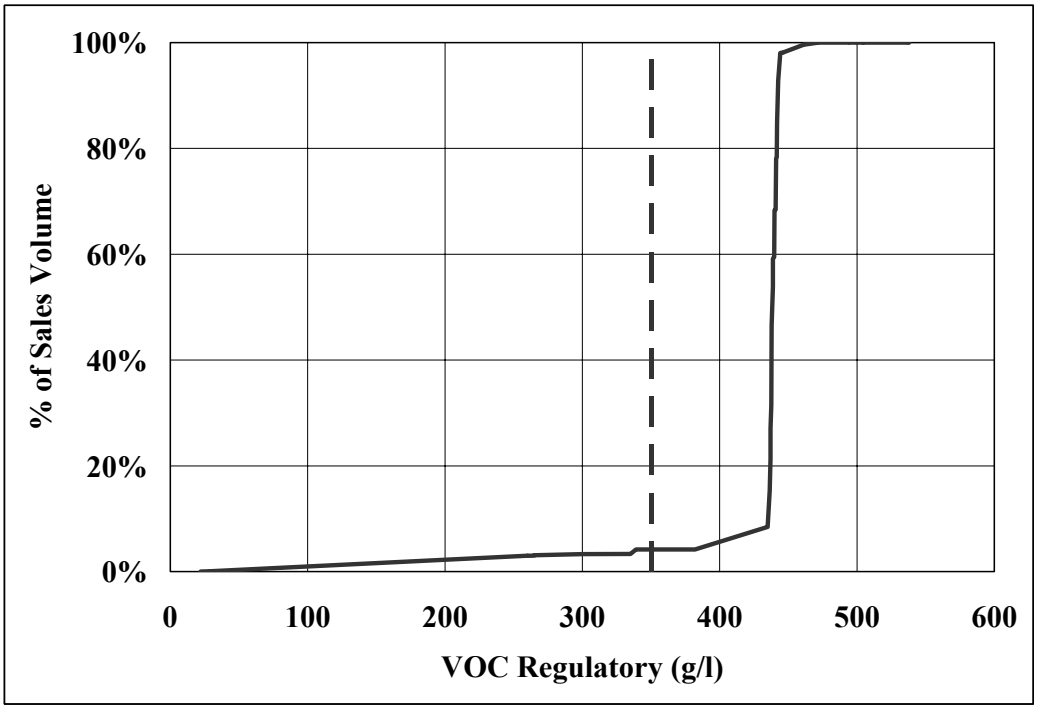


Figure 7-44
Waterproofing Concrete/Masonry Sealers

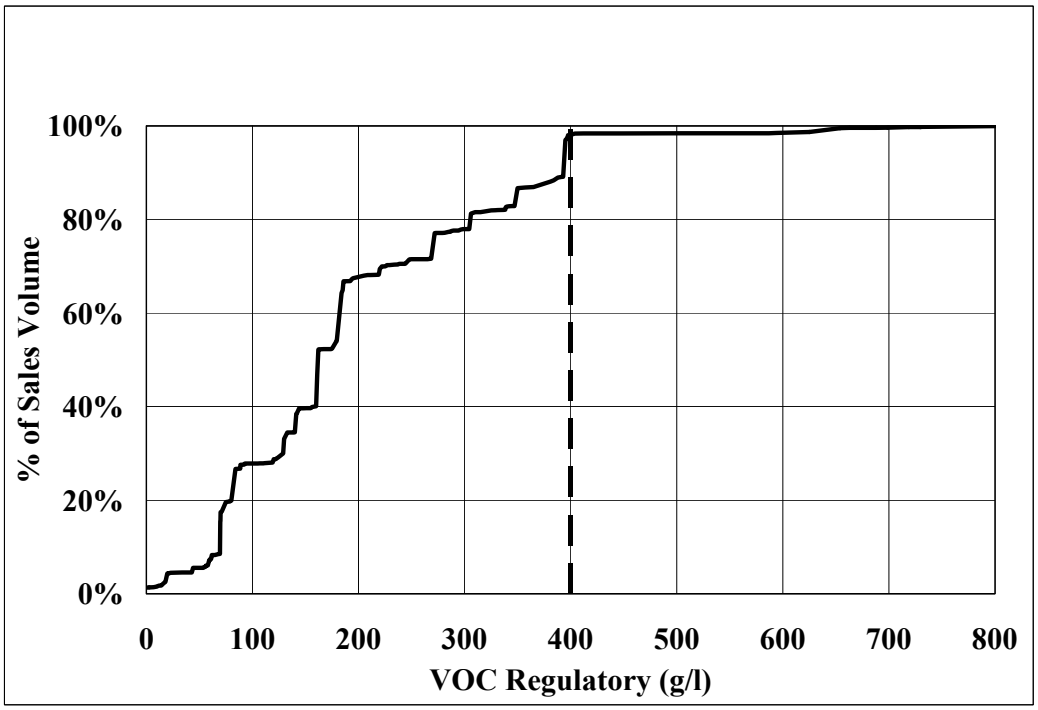


Figure 7-45
Waterproofing Sealers

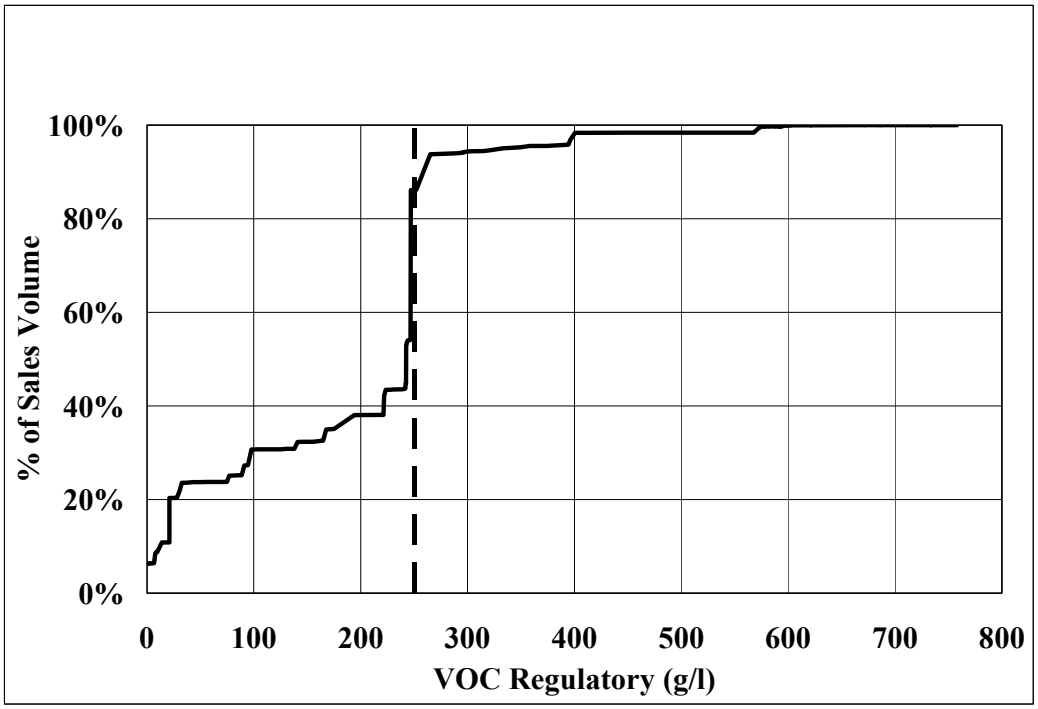
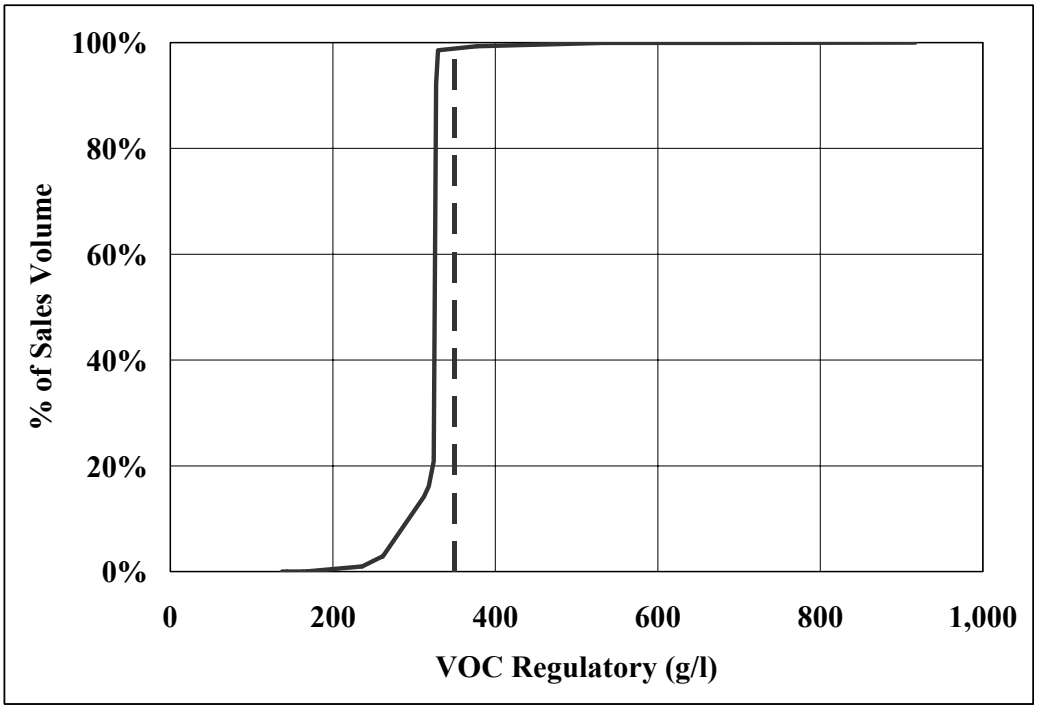


Figure 7-46
Wood Preservatives



Chapter 8 -- Volume Percents, Weight Percents, & Densities

The 2005 survey gathered the following physical parameter data:

- Solids Percent by Weight
- Volatiles Percent by Weight
- Water Percent by Weight
- Exempt Compounds Percent by Weight
- Solids Percent by Volume
- Water Percent by Volume
- Exempt Compounds Percent by Volume
- Coating Density

These data made it possible to verify the reported VOC values that were calculated using the above-listed parameters. Since most survey respondents calculated their VOCs, rather than using Method 24 results, gathering the physical parameter data greatly improved our ability to ensure the quality of the VOC values.

This chapter includes the following data summaries:

Table 8-1: *Sales-Weighted Average Volume Percents (Solids, Water, Exempts)*

Table 8-2: *Sales-Weighted Average Weight Percents (Solids, VOCs, Water, Exempts)*

Table 8-3: *Sales-Weighted Average VOC Regulatory and Weight Percent VOC*

Table 8-4: *Sales-Weighted Average Coating Densities*

Table 8-1 contains the sales-weighted average (SWA) values for volume percentages in each category, broken down by solvent-borne (SB) and water-borne (WB) coatings and both combined. Table 8-2 contains SWA weight percentages, while Table 8-3 includes weight percent VOCs with the corresponding VOC Regulatory values. Table 8-4 provides SWA coating densities. Sales of small containers were included when calculating the SWA values in these tables. A small number of manufacturers reported sales data, but provided no data on certain physical parameters (e.g, volume percentages). The sales associated with these null values were not included when calculating the SWA values for these tables. This was done to ensure that the numbers were not artificially lowered by inclusion of null values.

Table 8-1: ***Sales-Weighted Average Volume Percents (Solids, Water, Exempts)***

Coating Category	SWA Volume % Solids			SWA Volume % Water			SWA Volume % Exempt Cmpds.		
	SB	WB	All	SB	WB	All	SB	WB	All
Bituminous Roof	69	48	50	1	52	47	0	0	0
Bituminous Roof Primer	59	35	56	1	58	8	0	0	0
Bond Breakers	11	18	18	0	75	74	0	0	0
Clear Brushing Lacquer	19	NA	19	0	NA	0	0	NA	0
Concrete Curing Compounds	25	17	17	35	78	76	2	0	0
Driveway Sealer	50	46	46	0	56	56	0	0	0
Dry Fog	46	38	42	12	54	33	0	0	0
Faux Finishing	45	29	29	0	62	61	0	0	0
Fire Resistive	76	46	58	0	54	32	0	0	0
Fire Retardant - Clear	39	NA	39	0	NA	0	0	NA	0
Fire Retardant - Opaque	55	39	54	0	60	6	0	0	0
Flat	61	36	36	0	61	61	1	0	0
Floor	72	37	39	0	47	45	0	0	0
Form Release Compounds	71	15	65	0	81	10	0	0	0
Graphic Arts	50	39	48	0	49	10	0	0	0
High Temperature	43	NA	43	0	NA	0	13	NA	13
Industrial Maintenance	72	39	61	0	52	18	1	0	0
Lacquers	22	33	25	0	60	17	44	0	32
Low Solids	NA	9	9	NA	85	85	NA	0	0
Magnesite Cement	33	NA	33	0	NA	0	32	NA	32
Mastic Texture	53	52	52	23	44	40	0	0	0
Metallic Pigmented	52	36	48	0	63	15	0	0	0
Multi-Color	16	23	23	44	75	74	0	0	0
Nonflat - High Gloss	52	35	35	0	60	58	0	0	0
Nonflat - Low Gloss	48	35	35	0	59	59	0	0	0
Nonflat - Medium Gloss	54	34	34	0	62	62	0	0	0
Other	35	19	19	1	81	79	3	0	0
Pre-Treatment Wash Primer	8	22	19	0	74	58	1	0	0
Primer, Sealer, and Undercoater	51	33	34	0	62	61	3	0	0
Quick Dry Enamel	50	33	49	0	53	4	0	3	0
Quick Dry Primer, Sealer, and Undercoater	43	35	42	0	67	8	2	0	2

Table 8-1: ***Sales-Weighted Average Volume Percents (Solids, Water, Exempts)***

Coating Category	SWA Volume % Solids			SWA Volume % Water			SWA Volume % Exempt Cmpds.		
	SB	WB	All	SB	WB	All	SB	WB	All
Recycled	NA	41	41	NA	56	56	NA	0	0
Roof	71	44	45	0	54	53	1	0	0
Rust Preventative	52	33	51	0	57	2	0	0	0
Sanding Sealers	33	28	32	0	68	19	1	0	1
Shellacs - Clear	21	NA	21	5	NA	5	0	NA	0
Shellacs - Opaque	31	NA	31	6	NA	6	0	NA	0
Specialty Primer, Sealer, and Undercoater	55	41	52	0	54	13	0	0	0
Stains - Clear/Semitransparent	52	19	45	2	73	18	1	0	1
Stains - Opaque	58	35	36	1	61	60	4	0	0
Swimming Pool	64	33	48	0	58	30	0	0	0
Swimming Pool Repair and Maintenance	35	NA	35	0	NA	0	0	NA	0
Traffic Marking	55	57	57	0	34	29	34	0	5
Varnishes - Clear	42	28	38	0	62	18	0	0	0
Varnishes - Semitransparent	43	17	42	0	77	3	0	0	0
Waterproofing Concrete/Masonry Sealers	64	34	49	0	60	30	10	0	5
Waterproofing Sealers	57	24	29	0	70	61	9	0	1
Wood Preservatives	60	11	57	0	86	5	0	0	0

Notes:
1. NA = Not Applicable. No sales were reported for this category.
2. Sales of small containers were included when calculating the SWA values in this table.

Notes on specific coating categories:

Bond Breakers: More than 25% of the sales volume for Bond Breakers could qualify as "Low Solids" (i.e., has one pound or less of solids per gallon coating), but it was reported under Bond Breakers. Therefore, the sales-weighted average Volume % Solids is low.

Concrete Curing Compounds: The sales-weighted average Volume % Water seems high for solvent-borne Concrete Curing Compounds. The highest sales volume of solvent-borne Concrete Curing Compounds is attributable to a product that contains a fairly high weight percentage of water and a smaller weight percentage of organic solvent. In many cases, coatings that have a volatile content that is more than 50% water would be classified as water-borne. However, another criterion is the type of cleanup solvent that is used. For solvent-borne Concrete Curing Compounds, the high-volume product is cleaned up with mineral spirits. Therefore, it can be classified as a solvent-borne coating, regardless of the high water content.

Mastic Texture: The sales-weighted average Volume % Water seems high for solvent-borne Mastic Texture coatings. The highest sales volumes of solvent-borne Mastic Texture coatings are attributable to a family of products that contain a fairly high weight

percentage of water and a smaller weight percentage of organic solvent. In many cases, coatings that have a volatile content that is more than 50% water would be classified as water-borne. However, another criterion is the type of cleanup solvent that is used. For solvent-borne Mastic Texture coatings, most of the products clean up with mineral spirits. Therefore, they can be classified as solvent-borne coatings, regardless of the high water content.

Multi-Color: The sales-weighted average Volume % Water seems high for solvent-borne Multi-Color coatings. The highest sales volume of solvent-borne Multi-Color coatings is attributable to a product that contains a fairly high weight percentage of water and a smaller weight percentage of organic solvent. In many cases, coatings that have a volatile content that is more than 50% water would be classified as water-borne. However, another criterion is the type of cleanup solvent that is used. For solvent-borne Multi-Color coatings, the high-volume product is cleaned up with lacquer thinner. Therefore, it can be classified as a solvent-borne coating, regardless of the high water content.

Pre-Treatment Wash Primer: A significant portion of the Pre-Treatment Wash Primers has less than two pounds of solids per gallon of coating. Therefore, the sales-weighted average Volume % Solids is relatively low.

Stains – Clear/Semitransparent: More than half of the sales volume for solvent-borne Stains – Clear/Semitransparent contains more than 50% volume solids. Therefore, the sales-weighted average Volume % Solids is relatively high.

Wood Preservatives: More than 25% of the sales volume for water-borne Wood Preservatives could qualify as "Low Solids" (i.e., has one pound or less of solids per gallon coating), but it was reported under Wood Preservatives. Therefore, the sales-weighted average Volume % Solids is low.

Table 8-2: ***Sales-Weighted Average Weight Percents (Solids, VOCs, Water, Exempts)***

Coating Category	SWA Weight % Solids			SWA Weight % VOC			SWA Weight % Water			SWA Weight % Exempt Cmpds.		
	SB	WB	All	SB	WB	All	SB	WB	All	SB	WB	All
Bituminous Roof	75	51	54	25	0	2	1	48	44	0	0	0
Bituminous Roof Primer	61	36	58	38	7	34	1	57	8	0	0	0
Bond Breakers	15	16	16	86	8	8	0	76	76	0	0	0
Clear Brushing Lacquer	26	NA	26	74	NA	74	0	NA	0	0	NA	0
Concrete Curing Compounds	40	19	20	23	4	5	34	78	76	2	0	0
Driveway Sealer	50	57	57	50	0	0	0	43	43	0	0	0
Dry Fog	69	56	63	22	4	13	8	40	24	0	0	0
Faux Finishing	65	37	37	35	9	9	0	55	54	0	0	0
Fire Resistive	78	46	59	22	1	9	0	54	32	0	0	0
Fire Retardant - Clear	49	NA	49	51	NA	51	0	NA	0	0	NA	0
Fire Retardant - Opaque	74	53	72	26	1	23	0	46	5	0	0	0

Table 8-2: ***Sales-Weighted Average Weight Percents (Solids, VOCs, Water, Exempts)***

Coating Category	SWA Weight % Solids			SWA Weight % VOC			SWA Weight % Water			SWA Weight % Exempt Cmpds.		
	SB	WB	All	SB	WB	All	SB	WB	All	SB	WB	All
Flat	74	53	53	26	2	2	0	45	45	1	0	0
Floor	78	48	50	22	13	13	0	40	38	0	0	0
Form Release Compounds	72	15	65	27	3	25	0	82	10	0	0	0
Graphic Arts	72	47	67	28	9	25	0	43	8	0	0	0
High Temperature	58	NA	58	30	NA	30	0	NA	0	12	NA	12
Industrial Maintenance	82	48	70	18	7	14	0	45	15	1	0	0
Lacquers	29	45	34	33	6	26	0	50	14	37	0	27
Low Solids	NA	9	9	NA	6	6	NA	85	85	NA	0	0
Magnesite Cement	48	NA	48	29	NA	29	0	NA	0	24	NA	24
Mastic Texture	62	65	64	17	3	5	21	32	30	0	0	0
Metallic Pigmented	59	42	55	41	3	32	0	56	13	0	0	0
Multi-Color	26	30	30	30	2	3	43	68	67	0	0	0
Nonflat - High Gloss	67	46	47	33	5	6	0	49	48	0	0	0
Nonflat - Low Gloss	68	49	49	32	4	4	0	47	47	0	0	0
Nonflat - Medium Gloss	71	45	45	29	4	4	0	51	51	0	0	0
Other	51	27	28	45	1	2	1	72	70	3	0	0
Pre-Treatment Wash Primer	16	32	28	83	3	21	0	65	51	1	0	0
Primer, Sealer, and Undercoater	67	48	48	31	4	4	0	49	48	2	0	0
Quick Dry Enamel	66	47	65	34	9	32	0	43	3	0	1	0
Quick Dry Primer, Sealer, and Undercoater	67	51	65	32	1	28	0	49	6	1	0	1
Recycled	NA	54	54	NA	3	3	NA	44	44	NA	0	0
Roof	80	56	57	19	1	2	0	43	41	1	0	0
Rust Preventative	69	45	68	31	8	30	0	48	2	0	0	0
Sanding Sealers	40	30	37	58	5	43	0	65	18	2	0	1
Shellacs - Clear	28	NA	28	66	NA	66	7	NA	7	0	NA	0
Shellacs - Opaque	52	NA	52	43	NA	43	5	NA	5	0	NA	0
Specialty Primer, Sealer, and Undercoater	76	54	71	24	3	19	0	43	10	0	0	0
Stains - Clear/Semitransparent	57	22	49	40	7	33	1	71	16	2	0	2
Stains - Opaque	74	47	47	22	3	4	1	50	49	4	0	0
Swimming Pool	78	51	64	22	6	14	0	43	22	0	0	0
Swimming Pool Repair and Maintenance	53	NA	53	47	NA	47	0	NA	0	0	NA	0
Traffic Marking	76	73	74	6	4	4	0	23	19	18	0	3
Varnishes - Clear	48	30	43	52	9	39	0	61	17	0	0	0
Varnishes - Semitransparent	52	20	51	48	6	47	0	75	3	0	0	0

Table 8-2: ***Sales-Weighted Average Weight Percents (Solids, VOCs, Water, Exempts)***

Coating Category	SWA Weight % Solids			SWA Weight % VOC			SWA Weight % Water			SWA Weight % Exempt Cmpds.		
	SB	WB	All	SB	WB	All	SB	WB	All	SB	WB	All
Waterproofing Concrete/Masonry Sealers	69	44	56	20	4	12	0	52	26	11	0	6
Waterproofing Sealers	60	27	31	31	5	9	0	68	59	9	0	1
Wood Preservatives	62	10	60	38	4	36	0	85	5	0	0	0

Notes:
1. NA = Not Applicable. No sales were reported for this category.
2. Sales of small containers were included when calculating the SWA values in this table.

Table 8-3: ***Sales-Weighted Average VOC Regulatory and Weight Percent VOC***

Coating Category	SWA VOC Regulatory (g/l)			SWA Weight % VOC		
	SB	WB	All	SB	WB	All
Bituminous Roof	252	3	26	25	0	2
Bituminous Roof Primer	346	167	324	38	7	34
Bond Breakers	717	300	302	86	8	8
Clear Brushing Lacquer	666	NA	666	74	NA	74
Concrete Curing Compounds	344	155	166	23	4	5
Driveway Sealer	439	2	3	50	0	0
Dry Fog	361	107	233	22	4	13
Faux Finishing	392	255	257	35	9	9
Fire Resistive	279	18	123	22	1	9
Fire Retardant - Clear	531	NA	531	51	NA	51
Fire Retardant - Opaque	348	39	317	26	1	23
Flat	331	82	82	26	2	2
Floor	239	98	106	22	13	13
Form Release Compounds	243	158	233	27	3	25
Graphic Arts	385	211	352	28	9	25
High Temperature	407	NA	407	30	NA	30
Industrial Maintenance	224	168	205	18	7	14
Lacquers	570	151	455	33	6	26
Low Solids	NA	60	60	NA	6	6
Magnesite Cement	446	NA	446	29	NA	29
Mastic Texture	248	70	101	17	3	5
Metallic Pigmented	425	77	344	41	3	32
Multi-Color	551	94	103	30	2	3
Nonflat - High Gloss	373	146	151	33	5	6
Nonflat - Low Gloss	402	118	118	32	4	4
Nonflat - Medium Gloss	372	128	129	29	4	4
Other	520	53	66	45	1	2
Pre-Treatment Wash Primer	747	132	266	83	3	21
Primer, Sealer, and Undercoater	371	122	128	31	4	4
Quick Dry Enamel	390	237	380	34	9	32

Table 8-3: ***Sales-Weighted Average VOC Regulatory and Weight Percent VOC***

Coating Category	SWA VOC Regulatory (g/l)			SWA Weight % VOC		
	SB	WB	All	SB	WB	All
Quick Dry Primer, Sealer, and Undercoater	410	20	364	32	1	28
Recycled	NA	193	193	NA	3	3
Roof	232	40	46	19	1	2
Rust Preventative	376	198	368	31	8	30
Sanding Sealers	516	170	418	58	5	43
Shellacs - Clear	617	NA	617	66	NA	66
Shellacs - Opaque	521	NA	521	43	NA	43
Specialty Primer, Sealer, and Undercoater	343	89	283	24	3	19
Stains - Clear/Semitransparent	367	240	339	40	7	33
Stains - Opaque	300	103	107	22	3	4
Swimming Pool	304	199	250	22	6	14
Swimming Pool Repair and Maintenance	588	NA	588	47	NA	47
Traffic Marking	147	93	101	6	4	4
Varnishes - Clear	458	243	397	52	9	39
Varnishes - Semitransparent	439	260	433	48	6	47
Waterproofing Concrete/Masonry Sealers	248	140	194	20	4	12
Waterproofing Sealers	297	170	186	31	5	9
Wood Preservatives	327	292	325	38	4	36

Notes:
1. NA = Not Applicable. No sales were reported for this category.
2. Sales of small containers were included when calculating the SWA values in this table.

Table 8-4*: Sales-Weighted Average Coating Densities*

Coating Category	SWA Density (lb/gal)		
	SB	WB	All
Bituminous Roof	8.6	8.8	8.8
Bituminous Roof Primer	7.6	8.5	7.7
Bond Breakers	7.0	8.2	8.2
Clear Brushing Lacquer	7.5	NA	7.5
Concrete Curing Compounds	8.3	8.5	8.5
Driveway Sealer	7.3	10.9	10.9
Dry Fog	12.0	11.6	11.8
Faux Finishing	9.3	9.6	9.6
Fire Resistive	10.9	8.8	9.6
Fire Retardant - Clear	8.6	NA	8.6
Fire Retardant - Opaque	11.4	11.0	11.4
Flat	10.7	11.4	11.4
Floor	9.2	10.1	10.1
Form Release Compounds	7.4	8.2	7.5
Graphic Arts	11.6	9.4	11.1
High Temperature	10.5	NA	10.5

Table 8-4*: Sales-Weighted Average Coating Densities*

Coating Category	SWA Density (lb/gal)		
	SB	**WB**	**All**
Industrial Maintenance	10.8	9.9	10.5
Lacquers	7.8	10.4	8.5
Low Solids	NA	8.3	8.3
Magnesite Cement	8.9	NA	8.9
Mastic Texture	9.4	11.5	11.1
Metallic Pigmented	9.2	9.9	9.4
Multi-Color	8.5	9.2	9.2
Nonflat - High Gloss	9.4	10.2	10.2
Nonflat - Low Gloss	10.7	10.6	10.6
Nonflat - Medium Gloss	10.9	10.1	10.1
Other	9.5	10.0	10.0
Pre-Treatment Wash Primer	7.5	9.4	9.0
Primer, Sealer, and Undercoater	11.0	10.7	10.7
Quick Dry Enamel	9.7	10.3	9.8
Quick Dry Primer, Sealer, and Undercoater	10.8	11.5	10.9
Recycled	NA	11.4	11.4
Roof	10.1	11.0	11.0
Rust Preventative	10.2	9.8	10.2
Sanding Sealers	7.3	8.6	7.7
Shellacs - Clear	7.4	NA	7.4
Shellacs - Opaque	9.8	NA	9.8
Specialty Primer, Sealer, and Undercoater	11.8	10.7	11.6
Stains - Clear/Semitransparent	7.6	8.5	7.8
Stains - Opaque	11.1	10.2	10.2
Swimming Pool	11.7	11.5	11.6
Swimming Pool Repair and Maintenance	10.4	NA	10.4
Traffic Marking	12.7	13.5	13.4
Varnishes - Clear	7.5	8.6	7.8
Varnishes - Semitransparent	7.6	8.6	7.7
Waterproofing Concrete/Masonry Sealers	9.5	10.4	10.0
Waterproofing Sealers	7.6	8.7	8.5
Wood Preservatives	7.3	8.4	7.3
Overall:	**9.6**	**10.8**	**10.6**

Notes:
1. NA = Not Applicable. No sales were reported for this category.
2. Sales of small containers were included when calculating the SWA values in this table.

Chapter 9 -- Substrate and Resin Information

The 2005 survey gathered data on the types of substrates that were recommended for a particular product. In addition to substrate information, the survey collected data on resin types and number of components (i.e., single-component or multi-component) for all of the coating categories.

This chapter includes the following data summaries:

Table 9-1: *Volume Percent for Each Substrate Type*

Table 9-2: *Volume Percent for Each Resin Type*

Table 9-3: *Single-Component/Multi-Component Breakdown*

Table 9-1 illustrates the types of substrates that were reported for various coating categories, based on the VOC Regulatory value. For example, in a given 50 gram/liter VOC range, most of the reported coatings in a category may be suitable for all substrates. However, in another 50 gram/liter VOC range for that same category, the recommended substrates may be limited to a few main areas. Differences in formulation between lower-VOC and higher-VOC coatings may result in differences for the recommended substrates.

Table 9-1 lists the volume percent of coating that is appropriate for a given substrate, based on VOC ranges in each category. In some cases, survey respondents reported multiple substrate codes for a single product. In those cases, the sales volume was equally divided between the reported substrates. For example, if a product had two substrates (e.g., Drywall and Wood) and the product sales quantity was 100 gallons, we attributed 50 gallons to the Drywall and 50 gallons to the Wood, for the purpose of calculating a substrate volume percentage. If a survey respondent reported a Substrate Code of "0" or left the Substrate Code field blank, it was assumed that the substrate was not specified. The reason for unspecified substrates is either because the product was suitable for all substrates or the manufacturer did not provide a complete data submittal.

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Bituminous Roof																			
000-050 g/l	0%	0%	92%	4%					0%		2%	0%	0%	2%				0%	0%
051-100 g/l	10%		90%																
101-150 g/l				100%															
201-250 g/l	1%		50%	17%							15%			2%				14%	1%
251-300 g/l			93%	0%					6%		1%			0%					0%
301-350 g/l			50%	50%															
351-400 g/l			25%	25%							25%								25%
451-500 g/l			100%																
Bituminous Roof Primer																			
000-050 g/l											100%								
151-200 g/l			50%	0%							50%								
201-250 g/l				50%							50%								
301-350 g/l			36%	17%					31%		17%								0%
351-400 g/l				33%							33%			33%					
401-450 g/l			21%	26%							40%							14%	
451-500 g/l	99%																	1%	
Bond Breakers																			
051-100 g/l									100%										
151-200 g/l									100%										
251-300 g/l									100%										
351-400 g/l									100%										
651-700 g/l									100%										
700 g/l +									100%										
Clear Brushing Lacquer																			
601-650 g/l											50%						50%		
651-700 g/l														100%					
Concrete Curing Compounds																			
000-050 g/l				38%					62%										
051-100 g/l				7%					93%										
101-150 g/l				100%															

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
151-200 g/l				54%	1%	1%	1%	1%	41%										
201-250 g/l				13%					87%										
251-300 g/l				79%					21%										
301-350 g/l				24%					76%										
401-450 g/l									100%										
501-550 g/l									100%										
551-600 g/l				100%															
601-650 g/l				100%															
651-700 g/l				100%															
Driveway Sealer																			
000-050 g/l			100%																
351-400 g/l			100%																
401-450 g/l			100%																
451-500 g/l			100%																
Dry Fog																			
000-050 g/l	20%	15%		25%						7%	7%			25%					20%
051-100 g/l		1%		23%					2%	24%	24%			26%					
101-150 g/l				33%						5%	33%			28%					
151-200 g/l				25%						25%	25%			25%					
201-250 g/l		50%							50%										
251-300 g/l	100%																		100%
301-350 g/l				26%						26%	24%			24%					
351-400 g/l	6%			19%					0%	34%	20%			20%			0%	0%	6%
Faux Finishing																			
000-050 g/l				9%						79%	3%			7%			2%		
051-100 g/l	0%			26%						47%				2%			26%		
101-150 g/l				17%						83%							0%		
151-200 g/l	100%																		
201-250 g/l	5%			3%						72%	1%			15%			3%		
251-300 g/l	100%																		
301-350 g/l	74%			8%						13%				0%			4%	0%	
351-400 g/l				20%						20%	20%						20%	20%	

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
401-450 g/l				19%						21%	19%						21%	19%	
501-550 g/l	94%														6%				
551-600 g/l	100%																		
651-700 g/l										10%				10%					81%
700 g/l +										100%									
Fire Resistive																			
000-050 g/l	99%										0%	0%		0%					
051-100 g/l												100%							
301-350 g/l												100%							
351-400 g/l												100%							
Fire Retardant - Clear																			
451-500 g/l															100%				
501-550 g/l														83%	17%				
601-650 g/l															100%				
Fire Retardant - Opaque																			
000-050 g/l	27%	68%		1%							1%			4%			1%		
051-100 g/l	100%																		
101-150 g/l		100%																	
301-350 g/l	100%																		
Flat																			
000-050 g/l	16%	2%	2%	32%		0%		0%	1%	20%	5%		1%	12%			6%		3%
051-100 g/l	21%	6%	0%	20%	1%	0%	0%	0%	1%	19%	6%	0%	0%	21%	0%	0%	4%	0%	1%
101-150 g/l	80%	2%	1%	6%	0%	0%		0%	0%	4%	2%		0%	3%	0%	0%	1%	0%	0%
151-200 g/l	44%	0%		16%	1%	1%		1%		17%	0%			14%	1%		3%		0%
201-250 g/l				33%						34%			0%	33%					
301-350 g/l	6%		31%						31%		32%			1%					
401-450 g/l				1%						1%	1%			91%	0%				7%
451-500 g/l										1%	49%	1%		49%	1%				1%

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Floor																			
000-050 g/l				29%					24%										47%
051-100 g/l	29%		2%	52%					6%	0%	1%	0%		7%	2%		0%		
101-150 g/l	6%	0%	27%	32%					0%	0%	2%	0%		33%					
151-200 g/l	73%		1%	11%					3%		4%			8%					
201-250 g/l	0%		0%	2%					6%					1%	6%				85%
251-300 g/l	100%																		
301-350 g/l				25%							25%			49%					
351-400 g/l			17%	25%					10%		8%		4%	24%	5%		8%		
451-500 g/l															50%		50%		
Form Release Compounds																			
000-050 g/l											5%			95%					0%
051-100 g/l											45%			47%				8%	
101-150 g/l											4%	46%		4%				46%	
151-200 g/l														100%					
201-250 g/l											5%			74%	21%				
401-450 g/l									52%		17%			31%					
601-650 g/l														100%					
700 g/l +					20%	20%	20%	20%	20%										
Graphic Arts																			
151-200 g/l				33%							33%			33%					
201-250 g/l				33%							33%			33%					
251-300 g/l				33%							33%			33%					
301-350 g/l				33%							33%			33%					
351-400 g/l				25%						24%	25%			25%					
401-450 g/l				29%						12%	29%			29%					
High Temperature																			
251-300 g/l									42%		16%	42%							
301-350 g/l									4%		91%	5%							
351-400 g/l											99%	1%							
401-450 g/l											96%	4%							
451-500 g/l				0%							100%								0%

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
501-550 g/l											28%	72%							
551-600 g/l												100%							
601-650 g/l											82%	18%							
Industrial Maintenance																			
000-050 g/l	10%	0%	0%	30%		1%			16%	1%	13%	11%	3%	2%	0%		0%	3%	11%
051-100 g/l	12%	1%	4%	29%	0%	4%			6%	0%	14%	4%	1%	6%	1%	0%	0%	1%	15%
101-150 g/l	10%			25%	0%	1%	0%	0%	4%	5%	38%	10%	0%	5%			0%		2%
151-200 g/l	9%			24%	0%	0%	0%	0%	8%	5%	32%	4%	0%	14%			0%	1%	1%
201-250 g/l	0%			18%		0%			12%	8%	40%	12%	0%	10%			0%	1%	
251-300 g/l	3%		0%	21%		0%			2%	4%	48%	17%	0%	4%					0%
301-350 g/l	2%	0%		14%	0%	0%	0%	0%	1%	2%	58%	19%	0%	4%			0%	0%	0%
351-400 g/l	9%		0%	21%	0%				1%	10%	35%	8%	1%	9%	0%		8%		
401-450 g/l	22%		0%	9%					0%	2%	37%	18%		9%			0%	0%	3%
451-500 g/l		1%		9%					0%	2%	78%	0%		6%					5%
501-550 g/l				7%							19%	74%		0%					
551-600 g/l			0%								7%		91%						2%
601-650 g/l											0%								100%
700 g/l +				5%							55%		40%						
Lacquers																			
000-050 g/l														100%					
051-100 g/l														100%					
101-150 g/l				49%							2%			49%					
151-200 g/l														100%					
201-250 g/l	1%			9%							9%			80%	1%		0%		
251-300 g/l	4%													61%	18%	16%	1%	1%	
301-350 g/l															54%		17%	29%	
351-400 g/l																	100%		
451-500 g/l															50%		50%		
501-550 g/l														80%	18%		2%		
551-600 g/l														31%	69%				
601-650 g/l	2%			6%						6%			6%	73%	7%				
651-700 g/l														98%	1%	0%	1%		

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
700 g/l +															73%		27%		
Low Solids																			
000-050 g/l				9%	10%	4%	4%	5%	10%					10%	24%	24%	1%		0%
051-100 g/l				16%											42%	42%			
101-150 g/l	100%																		
Magnesite Cement																			
401-450 g/l																			100%
Mastic Texture																			
000-050 g/l	6%			93%										1%					
051-100 g/l	1%		1%	86%	1%	1%	1%	2%	1%	0%					1%	1%	2%	2%	
101-150 g/l				14%	14%	14%	14%	14%	14%	14%							0%	0%	
151-200 g/l				14%	14%	14%	14%	14%	14%	14%									
201-250 g/l				14%	14%	14%	14%	14%	14%	14%									
351-400 g/l								100%											
Metallic Pigmented																			
000-050 g/l			94%								4%	2%							
051-100 g/l		0%		0%						0%	99%							0%	
101-150 g/l			96%	1%						1%	1%	0%		1%					
151-200 g/l	17%	15%		21%						15%	15%			0%				15%	
201-250 g/l				9%						2%	7%	73%		2%				7%	
251-300 g/l									5%		17%	22%	28%	28%					
301-350 g/l	2%					0%					58%	40%							
351-400 g/l			85%								15%	0%							
401-450 g/l	0%		94%	4%						0%	1%	0%		0%			0%		0%
451-500 g/l	3%		77%	2%						0%	5%	11%		1%					1%
501-550 g/l			6%	0%							3%	32%		0%					59%
551-600 g/l		1%								1%	95%	2%		1%					
651-700 g/l	100%																		
700 g/l +											100%								

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Multi-Color																			
051-100 g/l				25%					25%		25%							25%	
201-250 g/l	100%																		
451-500 g/l	100%																		
551-600 g/l				25%					25%		25%							25%	
Nonflat - High Gloss																			
000-050 g/l				25%						25%	25%			25%			1%		
051-100 g/l	27%	18%		6%						24%	1%			23%			1%		1%
101-150 g/l	8%			6%				3%		40%	2%		0%	39%			2%		0%
151-200 g/l	67%			9%						8%	9%	0%		8%			0%		0%
201-250 g/l	76%			6%						7%	4%			4%	1%		3%		0%
251-300 g/l				22%					4%	22%	22%		1%	24%	4%				
301-350 g/l	2%			13%	8%	7%	6%	7%		12%	19%	0%		13%			13%		
351-400 g/l	0%			9%	7%	7%	7%	7%		5%	19%	1%	1%	14%			12%	10%	1%
401-450 g/l				26%						24%	24%			24%			1%		
451-500 g/l				9%						4%	9%			9%					70%
601-650 g/l											100%								
Nonflat - Low Gloss																			
000-050 g/l	2%	2%		20%		0%				25%	13%	0%		35%			3%		
051-100 g/l	1%	0%		27%	1%	0%			1%	20%	13%	0%	0%	27%			8%	0%	2%
101-150 g/l	43%	4%	0%	10%	0%	0%		0%	0%	23%	4%	0%	1%	10%	0%	0%	5%	0%	1%
151-200 g/l		8%	0%	14%						33%	3%	8%		25%			8%		2%
201-250 g/l	4%			20%	1%	1%		1%		0%	24%	0%		5%	20%		22%		
251-300 g/l				1%						1%	98%			1%					
301-350 g/l				12%						12%				64%			12%		
351-400 g/l				30%						13%	27%			5%			25%		
401-450 g/l				32%						32%	4%			32%					
501-550 g/l	100%											0%					0%		
601-650 g/l												50%					50%		

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Nonflat - Medium Gloss																			
000-050 g/l	1%	0%		20%				0%		24%	9%			38%			3%		4%
051-100 g/l	26%	0%		24%	0%	0%	0%	0%	0%	21%	3%	0%		7%			17%		0%
101-150 g/l	44%	2%	0%	11%		0%		1%	0%	20%	1%	0%	0%	11%	0%	0%	7%	0%	0%
151-200 g/l	11%	0%		26%	0%	0%		0%	0%	27%	12%		0%	23%		0%	0%		0%
201-250 g/l	100%	0%		0%						0%	0%		0%	0%	0%	0%	0%		
251-300 g/l				24%	1%	1%		1%		26%	24%						24%		
301-350 g/l	25%			19%						8%	17%			19%					11%
351-400 g/l	20%			23%						11%	16%	0%	0%	16%	1%		7%	5%	
401-450 g/l	7%			25%						5%	24%	5%	5%	25%			5%		
451-500 g/l				32%						32%	3%			32%					
Other																			
000-050 g/l	3%	61%	0%	30%	6%														
051-100 g/l			1%																99%
101-150 g/l		97%																	3%
201-250 g/l				100%															
251-300 g/l															11%	11%			78%
301-350 g/l																			100%
351-400 g/l																			100%
401-450 g/l											100%								
451-500 g/l																			100%
501-550 g/l																			100%
551-600 g/l																			100%
651-700 g/l																			100%
Pre-Treatment Wash Primer																			
101-150 g/l											100%								
700 g/l +											0%		98%	1%					

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Primer, Sealer, and Undercoater																			
000-050 g/l	22%	7%	0%	11%		0%		0%	0%	42%	0%	0%	4%	13%			0%	0%	1%
051-100 g/l	1%	0%		21%	0%	2%	0%	2%	4%	50%	2%		3%	13%	1%		2%	0%	0%
101-150 g/l	53%	0%		16%	0%	0%	0%	0%	1%	22%	1%		0%	5%	1%	0%	0%	0%	0%
151-200 g/l	71%	1%	0%	2%	0%	0%	0%	0%	0%	15%	0%	0%	0%	12%	0%	0%		0%	
201-250 g/l				24%	10%	10%		10%		0%	0%		0%	24%	10%	10%		0%	0%
251-300 g/l	1%			11%					5%	63%	6%		4%	10%					
301-350 g/l	0%	1%		15%	4%	4%	4%	4%	0%	3%	8%	0%	0%	53%	3%	0%		0%	0%
351-400 g/l		0%		2%	2%	2%	2%	2%	2%	15%	47%			24%	1%		1%	1%	
401-450 g/l		2%		2%					24%	36%				36%					
451-500 g/l				29%					27%	7%	2%			7%			27%		
501-550 g/l									43%					43%	14%				
551-600 g/l	4%			96%															
601-650 g/l				25%						25%	25%			25%	0%				
651-700 g/l														6%	94%				
700 g/l +				0%								0%			100%		0%		
Quick Dry Enamel																			
000-050 g/l		100%																	
151-200 g/l				25%						25%	25%			25%					
201-250 g/l	85%			6%						1%	1%			6%					
301-350 g/l														100%					
351-400 g/l	12%			23%						11%	14%			18%	8%		14%		
401-450 g/l				25%						8%	36%			32%					
451-500 g/l				25%						25%	25%			25%					
Quick Dry Primer, Sealer, and Undercoater																			
000-050 g/l										50%				50%					
101-150 g/l				25%						25%			25%	25%					
151-200 g/l				31%						24%	20%			24%					
201-250 g/l	70%													30%					
301-350 g/l	3%									49%				49%					
401-450 g/l	10%			0%						28%		3%		58%	0%		0%		0%
451-500 g/l				25%						25%	25%			25%					

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
501-550 g/l									100%										
Recycled																			
051-100 g/l	53%			12%						12%	12%			12%					
101-150 g/l	100%																		
151-200 g/l	100%																		
201-250 g/l	100%																		
Roof																			
000-050 g/l	6%		49%	4%					0%		1%	0%	15%	0%	1%			0%	23%
051-100 g/l	16%		37%	4%		0%			3%		0%	1%	7%	0%	0%	0%	0%	1%	31%
101-150 g/l	59%		24%	1%							1%			1%					14%
151-200 g/l			31%	31%							7%		12%						18%
201-250 g/l				4%		0%			27%		21%			21%					29%
251-300 g/l			18%	14%							5%								63%
301-350 g/l			4%	4%					23%		23%							23%	23%
351-400 g/l																			100%
401-450 g/l				50%										50%					
451-500 g/l			62%										38%						
Rust Preventative																			
000-050 g/l												100%							
051-100 g/l										7%	88%	5%							
101-150 g/l	42%			0%						0%	49%	4%	4%	0%					
151-200 g/l	1%		2%								78%		19%						
201-250 g/l											100%								
251-300 g/l											20%	80%							
301-350 g/l											76%	24%	0%						
351-400 g/l											91%	8%	1%						
401-450 g/l											74%	25%	1%						0%
451-500 g/l											1%	99%							
501-550 g/l											100%								

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Sanding Sealers																			
000-050 g/l														100%					
051-100 g/l															50%		50%		
151-200 g/l															50%		50%		
201-250 g/l														99%	1%				
251-300 g/l														3%	59%	38%			
301-350 g/l															33%	33%	33%		
401-450 g/l															100%				
451-500 g/l														75%	25%				
501-550 g/l														8%	90%	0%	2%		
551-600 g/l														18%	82%				
601-650 g/l														100%					
700 g/l +														100%					
Shellacs - Clear																			
551-600 g/l														100%					
601-650 g/l														100%					
651-700 g/l															50%	50%			
Shellacs - Opaque																			
501-550 g/l										50%					50%				
Specialty Primer, Sealer, and Undercoater																			
000-050 g/l	44%			27%						28%				1%					
051-100 g/l	26%	1%		19%		0%				18%	3%		16%	19%	0%				
101-150 g/l	39%	4%		17%						4%	4%		13%	19%					
151-200 g/l	2%			27%						27%				27%	2%	2%			11%
301-350 g/l	26%	0%		2%	0%	0%	0%	0%	0%	35%	0%		0%	37%	0%	0%	0%	0%	
351-400 g/l										31%				69%					
401-450 g/l				1%						49%	1%			49%	0%		0%		
Stains - Clear/Semitransparent																			
000-050 g/l														71%	29%				
051-100 g/l														100%					
101-150 g/l				28%										72%					
151-200 g/l				10%										2%	45%	42%			

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
201-250 g/l	20%			3%						0%	0%			23%	22%	21%	11%		
251-300 g/l														23%	30%	30%	17%		
301-350 g/l														57%	36%	5%	2%	0%	
351-400 g/l														0%	50%	50%			
401-450 g/l				2%										21%	50%	14%	14%		
451-500 g/l														18%	82%				
501-550 g/l														29%	69%	1%	0%	0%	
551-600 g/l														12%	87%	1%			
601-650 g/l															22%	78%			
651-700 g/l														74%	26%				
700 g/l +														21%	79%				
Stains - Opaque																			
000-050 g/l				91%									3%	6%					
051-100 g/l	62%			11%							10%		0%	17%					
101-150 g/l				2%							0%			95%	1%	1%	1%	1%	
151-200 g/l				6%										57%	13%	20%	3%		
201-250 g/l				8%					12%					71%	6%	4%			
251-300 g/l				45%					1%					45%	5%	5%			
301-350 g/l														83%	6%	6%	2%	3%	
351-400 g/l															50%	50%			
501-550 g/l				100%															
551-600 g/l				100%															
Swimming Pool																			
000-050 g/l									100%										
051-100 g/l				100%															
151-200 g/l				100%															
201-250 g/l				100%															
301-350 g/l				100%															
501-550 g/l				100%															
551-600 g/l				27%	73%														
651-700 g/l				100%															

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Swimming Pool Repair and Maintenance																			
501-550 g/l				100%															
551-600 g/l				100%															
Traffic Marking																			
000-050 g/l			76%	5%	3%				8%	8%									
051-100 g/l	0%		19%	17%	63%	0%			2%										0%
101-150 g/l			26%	22%	48%				4%										
151-200 g/l					100%														
251-300 g/l			50%						50%										
301-350 g/l			50%	19%					31%										
351-400 g/l			50%	40%					10%										
401-450 g/l			100%	0%															
Varnishes - Clear																			
101-150 g/l				5%						5%	5%			5%	40%		40%		
151-200 g/l	4%									0%				59%	18%	0%	17%		
201-250 g/l														39%	40%	5%	16%		0%
251-300 g/l	7%													63%	16%	3%	10%		1%
301-350 g/l											0%			34%	65%	1%	1%		0%
351-400 g/l											2%			2%	20%		55%	21%	
401-450 g/l														38%	56%	5%	0%	0%	
451-500 g/l														12%	67%	10%	10%		
501-550 g/l														4%	84%	0%	12%		
551-600 g/l														27%	58%	12%	1%	1%	
601-650 g/l														9%				91%	
651-700 g/l														100%					
700 g/l +														100%					
Varnishes - Semitransparent																			
000-050 g/l															50%	50%			
251-300 g/l														90%	10%				
301-350 g/l															100%				
351-400 g/l															70%	30%			
401-450 g/l														0%	100%				

Table 9-1: *Volume Percent for Each Substrate Type*

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
451-500 g/l														100%	0%				
501-550 g/l														72%	28%				
Waterproofing Concrete/Masonry Sealers																			
000-050 g/l			9%	58%	0%				12%		2%			0%				18%	1%
051-100 g/l		0%	0%	69%		0%		0%	6%	7%		0%		1%			7%	9%	
101-150 g/l				98%	0%	0%	0%	0%	1%										
151-200 g/l			0%	81%	0%	0%	0%	0%	0%						18%			0%	
201-250 g/l				52%	0%	0%	0%	0%	4%		3%			25%				11%	6%
251-300 g/l				52%	0%	0%	0%		5%									43%	
301-350 g/l				53%	15%	1%	1%	1%	1%	1%	14%			14%					
351-400 g/l				84%	3%	3%	3%	3%	3%	0%				1%					
401-450 g/l				26%	13%	12%	13%	12%	13%	12%									
501-550 g/l				100%															
551-600 g/l				100%															
601-650 g/l				100%															
651-700 g/l				100%															
700 g/l +				100%	0%		0%		0%										
Waterproofing Sealers																			
000-050 g/l	1%			74%	0%	9%			11%					3%	1%	1%			
051-100 g/l	0%			98%	0%	0%	0%	0%		0%	0%			1%	0%	0%	0%	0%	
101-150 g/l				6%					23%	2%				1%	24%		22%	22%	
151-200 g/l				57%	2%				2%					40%					
201-250 g/l				3%	0%	0%	0%	0%	3%					68%	13%	13%		1%	0%
251-300 g/l				3%											48%	48%			
301-350 g/l				64%	10%	10%	6%		10%										
351-400 g/l				84%											8%	8%			
401-450 g/l				100%					0%										
451-500 g/l															25%	25%	25%	25%	
551-600 g/l				28%										6%	33%	33%			
601-650 g/l				35%											33%	33%			
651-700 g/l				55%					45%										
700 g/l +				100%															

Table 9-1: ***Volume Percent for Each Substrate Type***

				Concrete, Stone, Masonry, etc.							Metal			Wood					
	Substrate Not Specified	*Acoustic Materials*	*Asphalt*	*All Concrete*	*Brick*	*Cinder Block*	*Stone*	*Stucco*	*Tilt Up/ Poured In Place*	*Drywall*	*All Metal*	*Ferrous*	*Non-Ferrous*	*All Wood*	*No Paint, Smooth*	*No Paint, Rough*	*Painted*	*Plywood*	*Other*
Wood Preservatives																			
101-150 g/l															50%	50%			
151-200 g/l															50%	50%			
201-250 g/l															50%	50%			
251-300 g/l														100%					
301-350 g/l														14%	37%	49%			
351-400 g/l															50%	50%			
501-550 g/l														100%					
700 g/l +															33%	33%		33%	

Notes:

1. Substrate Not Specified: In some cases, the substrate field was left blank. In other cases, a zero was reported, which was generally the result of automatic spreadsheet formatting for electronic submittals.
2. The "Other" substrate category includes items such as: vinyl siding, foam, thermal insulation, glass, plastic, roofing membranes, and tile. For example, the substrate was reported simply as "roof" for some products in Bituminous Roof, Bituminous Roof Primer, Roof, and Metallic Pigmented (which includes aluminum roof coatings).
3. The data in this table include sales from small containers (1 quart or less).

Table 9-2 lists the volume percent of coating associated with a given resin type, for each applicable VOC range.

Table 9-2: ***Volume Percent for Each Resin Type***

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
Bituminous Roof																						
000-050 g/l		2%																		98%		
051-100 g/l																				100%		
101-150 g/l																50%				50%		
201-250 g/l																				100%		
251-300 g/l	0%																			100%		
301-350 g/l																				100%		
351-400 g/l																				100%		
451-500 g/l																				100%		
Bituminous Roof Primer																						
000-050 g/l																				100%		
151-200 g/l															50%					50%		
201-250 g/l																				100%		
301-350 g/l																				100%		
351-400 g/l																				100%		
401-450 g/l																				100%		
451-500 g/l																				100%		
Bond Breakers																						
051-100 g/l																						100%
151-200 g/l																						100%
251-300 g/l									37%													63%
351-400 g/l																						100%
651-700 g/l																						100%
700 g/l +																						100%
Clear Brushing Lacquer																						
601-650 g/l						100%																
651-700 g/l				33%		33%																33%
Concrete Curing Compounds																						
000-050 g/l		1%	2%									8%		9%								79%
051-100 g/l															0%							100%
101-150 g/l			70%																			30%

Table 9-2: ***Volume Percent for Each Resin Type***

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
151-200 g/l		6%	2%	40%																		52%
201-250 g/l			63%	36%					0%													1%
251-300 g/l		1%	21%																			78%
301-350 g/l		0%	9%						0%						73%						3%	15%
401-450 g/l				100%																		
501-550 g/l										100%												
551-600 g/l																		100%				
601-650 g/l		6%	85%																			9%
651-700 g/l																						100%
Driveway Sealer																						
000-050 g/l												0%			0%					100%		
351-400 g/l																				100%		
401-450 g/l																				100%		
451-500 g/l																				100%		
Dry Fog																						
000-050 g/l		15%	14%									15%			6%				50%			
051-100 g/l		34%	38%																27%			
101-150 g/l		19%	36%																45%			
151-200 g/l																			100%			
201-250 g/l								100%														
251-300 g/l				100%																		
301-350 g/l				86%																		14%
351-400 g/l				65%				5%										24%				6%
Faux Finishing																						
000-050 g/l												28%							6%			66%
051-100 g/l		0%																	87%			12%
101-150 g/l		17%																	38%			46%
151-200 g/l		100%																				
201-250 g/l		51%	3%																45%			
251-300 g/l		100%																				
301-350 g/l		74%	4%	7%								1%							12%		1%	
351-400 g/l																			100%			
401-450 g/l				100%																		

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
501-550 g/l		94%		6%																		
551-600 g/l		100%																				
651-700 g/l		81%																19%				
700 g/l +		100%																				
Fire Resistive																						
000-050 g/l							99%	1%														
051-100 g/l								100%														
301-350 g/l		33%																33%	33%			
351-400 g/l																		100%				
Fire Retardant - Clear																						
451-500 g/l							100%															
501-550 g/l				100%																		
601-650 g/l							100%															
Fire Retardant - Opaque																						
000-050 g/l		4%	13%									13%							69%			
051-100 g/l																			100%			
101-150 g/l																			100%			
301-350 g/l				100%																		
Flat																						
000-050 g/l		20%	10%									26%			0%		2%		40%		1%	1%
051-100 g/l	0%	33%	10%	0%	0%							11%				0%	0%		44%		0%	1%
101-150 g/l		77%	1%									0%							18%		3%	
151-200 g/l		44%	5%									5%							46%			
201-250 g/l		98%		1%								1%										
301-350 g/l		5%														95%						
401-450 g/l				10%								90%										
451-500 g/l				100%																		
Floor																						
000-050 g/l								6%								94%						
051-100 g/l		53%	19%					27%	0%													0%
101-150 g/l		92%	8%													0%						
151-200 g/l		25%	73%													1%						0%
201-250 g/l		3%	12%													85%						0%

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
251-300 g/l		100%																				
301-350 g/l				58%												42%						
351-400 g/l				94%												4%					3%	
451-500 g/l																100%						
Form Release Compounds																						
000-050 g/l									8%												30%	62%
051-100 g/l									90%												10%	
101-150 g/l									92%												8%	
151-200 g/l																						100%
201-250 g/l									1%												99%	0%
401-450 g/l																					85%	15%
601-650 g/l																					100%	
700 g/l +	100%																					
Graphic Arts																						
151-200 g/l		100%																				
201-250 g/l		100%																				
251-300 g/l		100%																				
301-350 g/l				100%																		
351-400 g/l				100%																		
401-450 g/l				100%																		
High Temperature																						
251-300 g/l								85%						15%								
301-350 g/l					8%			0%						92%								
351-400 g/l														100%								
401-450 g/l				85%										13%						2%		
451-500 g/l				0%										100%								0%
501-550 g/l		7%		28%										65%								
551-600 g/l		50%												50%								
601-650 g/l				9%										91%								
Industrial Maintenance																						
000-050 g/l	0%	5%	1%		7%			49%		0%	0%		0%	3%	0%	21%			1%	3%		10%
051-100 g/l		25%	3%	1%	7%			20%				15%		0%		17%			1%	7%	0%	4%
101-150 g/l		47%	7%	0%	3%			34%				1%				6%			1%			0%

Table 9-2: ***Volume Percent for Each Resin Type***

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
151-200 g/l		37%	4%	1%	1%			28%			0%					29%						1%
201-250 g/l		24%	9%	9%	0%			32%	0%	0%	0%			0%	0%	24%				1%		1%
251-300 g/l		4%	4%	10%	0%		0%	52%	1%	0%	0%			0%		27%						0%
301-350 g/l	1%	4%	0%	65%	0%			18%	0%	0%	0%			0%		10%				0%	0%	1%
351-400 g/l	0%	1%	0%	67%	2%			8%	0%	2%	1%			0%		11%		0%		8%		0%
401-450 g/l	0%	1%	0%	69%	1%		0%	10%		0%	0%			1%	3%	9%		2%		0%	3%	0%
451-500 g/l				76%	0%			10%		2%					7%	2%				1%		2%
501-550 g/l				74%	0%		1%	5%		1%						20%						
551-600 g/l				2%			2%	91%						3%						0%		2%
601-650 g/l					0%		100%															
700 g/l +					25%		1%	25%							40%	8%						1%
Lacquers																						
000-050 g/l		100%																				
051-100 g/l		81%																	19%			
101-150 g/l		51%	49%																			
151-200 g/l		75%				25%																
201-250 g/l		71%	28%													1%						
251-300 g/l		43%	2%	32%		0%										23%						
301-350 g/l		14%	36%			4%										47%						
351-400 g/l			50%													50%						
451-500 g/l																100%						
501-550 g/l		4%		5%		77%					2%						3%					9%
551-600 g/l						100%																
601-650 g/l		2%		16%		83%																
651-700 g/l				44%		55%					0%											0%
700 g/l +		18%		18%		34%						30%										
Low Solids																						
000-050 g/l	0%	3%	7%	57%										16%								16%
051-100 g/l	56%	0%		5%												39%						
101-150 g/l		50%																	50%			
Magnesite Cement																						
401-450 g/l		100%																				

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
Mastic Texture																						
000-050 g/l		92%																	8%			
051-100 g/l		6%	83%					11%											0%			
101-150 g/l		23%	77%																			
151-200 g/l		86%	14%																			
201-250 g/l			0%	100%																		
351-400 g/l				100%																		
Metallic Pigmented																						
000-050 g/l	0%													0%						94%	0%	6%
051-100 g/l			1%					99%														
101-150 g/l			0%					0%							2%	2%				96%		0%
151-200 g/l		17%	38%					6%							0%	0%						38%
201-250 g/l			4%	67%				5%						0%		21%						3%
251-300 g/l			1%					16%						1%		26%						56%
301-350 g/l		2%						49%						4%		14%						31%
351-400 g/l		0%	1%		0%			1%								0%				85%		12%
401-450 g/l			0%	0%				0%	1%					0%		0%				99%	0%	0%
451-500 g/l	0%	0%		12%				1%	0%	0%				0%						82%	0%	4%
501-550 g/l				32%			2%		1%											65%		
551-600 g/l				4%	1%									95%								
651-700 g/l			100%																			
700 g/l +		100%																				
Multi-Color																						
051-100 g/l		100%																				
201-250 g/l			99%													1%						
451-500 g/l			100%																			
551-600 g/l				100%																		
Nonflat - High Gloss																						
000-050 g/l		49%		2%															49%			
051-100 g/l		37%	14%	2%								27%							20%			
101-150 g/l		58%	1%	0%															42%			0%
151-200 g/l		97%	3%	0%				0%														
201-250 g/l		14%	85%	1%																		

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
251-300 g/l		89%		11%																		
301-350 g/l			9%	91%																	0%	
351-400 g/l				91%	0%			0%								0%					8%	0%
401-450 g/l				100%																		
451-500 g/l				30%												70%						
601-650 g/l		50%		50%																		
Nonflat - Low Gloss																						
000-050 g/l		45%	6%	4%								2%				1%			36%			6%
051-100 g/l		40%	4%	1%								11%				0%			43%			
101-150 g/l		57%	4%									6%			0%	0%	0%		29%			3%
151-200 g/l		78%																	22%			
201-250 g/l		2%	70%	28%																		
251-300 g/l		3%		97%																		
301-350 g/l				36%																		64%
351-400 g/l				94%												6%					0%	
401-450 g/l				100%																		
501-550 g/l		0%						50%											50%			
601-650 g/l		100%																				
Nonflat - Medium Gloss																						
000-050 g/l		47%	7%	1%								2%							35%			8%
051-100 g/l		6%	16%	1%		0%		0%				1%				0%	0%		77%			
101-150 g/l		60%	3%	0%							0%	3%			0%	0%			28%			5%
151-200 g/l		80%	3%									1%			0%	0%			17%			
201-250 g/l		1%	99%	1%												0%						
251-300 g/l		32%	35%									2%							32%			
301-350 g/l				90%																		10%
351-400 g/l		0%		100%												0%					0%	
401-450 g/l				100%																		
451-500 g/l				100%																		
Other																						
000-050 g/l			3%																66%	0%		30%
051-100 g/l												99%							1%			
101-150 g/l			3%												97%							

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
201-250 g/l								100%														
251-300 g/l			78%																	22%		
301-350 g/l								100%														
351-400 g/l			100%																			
401-450 g/l																						100%
451-500 g/l																100%						
501-550 g/l		99%		1%																		
551-600 g/l																100%						
651-700 g/l		100%																				
Pre-Treatment Wash Primer																						
101-150 g/l		100%																				
700 g/l +																						100%
Primer, Sealer, and Undercoater																						
000-050 g/l		30%	22%					1%				11%		0%		0%			32%		0%	3%
051-100 g/l	0%	18%	34%	1%				2%				3%			0%	0%			38%		0%	3%
101-150 g/l		41%	23%	1%				0%				15%			0%	0%			18%			1%
151-200 g/l		93%	1%	0%				0%			0%	2%				0%			4%		0%	
201-250 g/l		21%	55%	0%								0%				24%						0%
251-300 g/l		12%	5%	8%				4%								12%			57%		1%	
301-350 g/l		3%	1%	76%				12%		7%						0%			0%		0%	0%
351-400 g/l				85%				14%			1%											
401-450 g/l			68%															8%		24%		
451-500 g/l				18%												82%						
501-550 g/l		43%		57%																		
551-600 g/l			90%	10%																		
601-650 g/l		0%		50%						50%												
651-700 g/l										94%										2%	2%	2%
700 g/l +				0%												0%					100%	
Quick Dry Enamel																						
000-050 g/l												100%										
151-200 g/l		100%																				
201-250 g/l		65%	25%	10%																		
301-350 g/l				100%																		

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
351-400 g/l				100%																		
401-450 g/l				100%																		
451-500 g/l				100%																		
Quick Dry Primer, Sealer, and Undercoater																						
000-050 g/l		100%																				
101-150 g/l			100%																			
151-200 g/l		18%		41%						41%												
201-250 g/l			100%																			
301-350 g/l		0%		100%																		
401-450 g/l	1%		0%	61%						0%					0%			2%				36%
451-500 g/l				50%						50%												
501-550 g/l								100%														
Recycled																						
051-100 g/l		18%	18%																18%			47%
101-150 g/l	100%																					
151-200 g/l	100%																					
201-250 g/l	100%																					
Roof																						
000-050 g/l		77%	22%		0%									1%		0%						0%
051-100 g/l		56%	16%					0%				1%		4%					16%			6%
101-150 g/l		12%	75%													14%						
151-200 g/l		24%	7%		31%			31%								6%						
201-250 g/l														89%		11%						
251-300 g/l														59%	14%	27%						
301-350 g/l																100%						
351-400 g/l																				100%		
401-450 g/l																100%						
451-500 g/l			77%																			23%
Rust Preventative																						
000-050 g/l																			98%		2%	
051-100 g/l		16%	84%																			
101-150 g/l		81%	19%																			
151-200 g/l		0%	4%	76%																		19%

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
201-250 g/l		76%	24%																			
251-300 g/l		2%	1%	98%																		
301-350 g/l		0%		89%				9%		0%						0%						2%
351-400 g/l		3%		90%	5%					0%						0%					2%	
401-450 g/l		1%		65%		33%				0%								0%			0%	
451-500 g/l				100%																		
501-550 g/l				100%																		0%
Sanding Sealers																						
000-050 g/l												50%							50%			
051-100 g/l		100%																				
151-200 g/l			100%																			
201-250 g/l		99%														1%						
251-300 g/l		24%	76%																			
301-350 g/l		100%																				
401-450 g/l																100%						
451-500 g/l				25%														75%				
501-550 g/l	0%	5%		3%												71%		4%				16%
551-600 g/l				19%												80%		0%				1%
601-650 g/l																						100%
700 g/l +																						100%
Shellacs - Clear																						
551-600 g/l													100%									
601-650 g/l													100%									
651-700 g/l													100%									
Shellacs - Opaque																						
501-550 g/l													50%									50%
Specialty Primer, Sealer, and Undercoater																						
000-050 g/l		2%	44%									1%							54%			
051-100 g/l		37%	63%												0%						0%	
101-150 g/l		61%	39%																			
151-200 g/l		84%	5%	2%											5%						2%	
301-350 g/l			0%	78%						0%								19%			1%	2%
351-400 g/l				37%											63%							

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
401-450 g/l			2%	94%														4%				1%
Stains - Clear/Semitransparent																						
000-050 g/l				71%					29%			0%										
051-100 g/l			85%	1%								15%										
101-150 g/l		44%		56%																		
151-200 g/l		87%	7%	7%																		
201-250 g/l		24%	0%	34%					0%										0%		39%	2%
251-300 g/l			4%	17%															4%		68%	7%
301-350 g/l		9%	9%	58%																	22%	2%
351-400 g/l		0%	0%	99%						0%								0%			0%	
401-450 g/l		38%		42%																	20%	
451-500 g/l				18%						2%											80%	
501-550 g/l		0%	4%	30%						2%						2%					59%	2%
551-600 g/l				74%					0%	7%	3%										17%	
601-650 g/l				100%																		
651-700 g/l				26%												7%					66%	
700 g/l +				35%		33%										0%					25%	8%
Stains - Opaque																						
000-050 g/l		93%																			5%	3%
051-100 g/l		84%	0%	0%															14%		1%	
101-150 g/l		91%	2%	2%								1%							4%		1%	
151-200 g/l		53%	14%	10%															21%		2%	
201-250 g/l		28%		18%															39%		16%	
251-300 g/l			23%	32%															23%		23%	
301-350 g/l				61%																	39%	
351-400 g/l				100%																		
501-550 g/l		100%																				
551-600 g/l		100%																				
Swimming Pool																						
000-050 g/l																100%						
051-100 g/l			38%					62%														
151-200 g/l			100%																			
201-250 g/l		20%						80%														

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
301-350 g/l					39%			61%														
501-550 g/l							100%															
551-600 g/l							100%															
651-700 g/l							100%															
Swimming Pool Repair and Maintenance																						
501-550 g/l															100%							
551-600 g/l							100%															
Traffic Marking																						
000-050 g/l		84%																6%				10%
051-100 g/l		90%	2%	0%		7%						0%						1%				
101-150 g/l		38%	17%	25%								5%						16%				
151-200 g/l			33%	33%														33%				
251-300 g/l				100%																		
301-350 g/l				69%			30%												1%			
351-400 g/l		1%		83%			16%															
401-450 g/l				99%																		1%
Varnishes - Clear																						
101-150 g/l		10%														90%						
151-200 g/l		9%		7%												80%			4%			
201-250 g/l		16%	10%	0%					0%							74%					0%	
251-300 g/l		1%	4%	4%				36%								52%					3%	
301-350 g/l		3%	0%	4%						28%				0%		60%					0%	5%
351-400 g/l		8%								2%	19%					69%					2%	
401-450 g/l				20%						10%						68%					0%	1%
451-500 g/l				2%					0%							98%		0%			0%	
501-550 g/l				1%	0%											97%		0%			0%	0%
551-600 g/l				3%												45%		26%			27%	
601-650 g/l																91%					9%	
651-700 g/l																						100%
700 g/l +																						100%
Varnishes - Semitransparent																						
000-050 g/l																					100%	
251-300 g/l			97%																			3%

Table 9-2: ***Volume Percent for Each Resin Type***

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
301-350 g/l			4%	96%																		
351-400 g/l																59%						41%
401-450 g/l																100%						0%
451-500 g/l				100%												0%						
501-550 g/l				72%												28%						
Waterproofing Concrete/Masonry Sealers																						
000-050 g/l		36%	2%		0%			16%						1%		11%				18%		16%
051-100 g/l		84%	1%		0%			1%						0%	8%	4%						1%
101-150 g/l		8%	19%					0%							0%	72%			1%			
151-200 g/l		33%	25%													42%						0%
201-250 g/l		18%	2%											1%		80%			0%			
251-300 g/l		4%	5%	5%										0%		43%				43%		
301-350 g/l		3%	42%					4%						7%		44%						
351-400 g/l		90%	8%											1%		1%		0%				
401-450 g/l			85%											1%		13%						1%
501-550 g/l														100%								
551-600 g/l		55%												45%								
601-650 g/l		100%																				
651-700 g/l		90%	9%																			1%
700 g/l +		60%	11%											4%		25%						
Waterproofing Sealers																						
000-050 g/l		49%	6%		0%			4%					9%	15%		1%				12%		4%
051-100 g/l		79%	9%											1%					11%			
101-150 g/l		99%	0%											1%	0%							
151-200 g/l		4%	27%	42%	0%			0%								27%						
201-250 g/l	8%	87%						0%						2%		2%			0%	0%		1%
251-300 g/l	91%	3%		3%																0%		3%
301-350 g/l		15%	14%											70%								
351-400 g/l				16%										19%						65%		
401-450 g/l		100%														0%						
451-500 g/l																					100%	
551-600 g/l	87%			1%						0%				11%		0%					1%	
601-650 g/l			2%						98%													

Table 9-2: *Volume Percent for Each Resin Type*

Range	Resin Not Specified	Acrylic	Acrylic Copolymer	Alkyd	Amines Amides	Cellulosic	Chlorinated Rubber	Epoxy	Oleoresin	Phenolic	Polyester	Polyvinyl Acetate	Shellac	Silicone Silane Siloxane	Styrene Butadiene	Urethane Polyurethane	Polyvinyl Chloride	Vinyl Toluene	Vinyl Acrylic Copolymer	Asphalt Bituminous	Oil (e.g., linseed, tung)	Other
651-700 g/l		96%												4%								
700 g/l +														100%								
Wood Preservatives																						
101-150 g/l				100%																		
151-200 g/l				100%																		
201-250 g/l																						100%
251-300 g/l		1%																				99%
301-350 g/l				11%																	87%	2%
351-400 g/l																						100%
501-550 g/l																					100%	
700 g/l +																						100%

Notes:

1. The "Other" resin category includes, but is not limited to, the following resin descriptions: hydrocarbon resin; sodium silicate; wax; aldehyde resin; ethylene vinyl acetate; inorganic zinc; and polyurea.
2. The data in this table include sales from small containers (1 quart or less).

Table 9-3 lists the volume percent of coating for single-component and multi-component formulations. Single-component coatings are those that are "ready-to-use" from the can, while multi-component coatings require that two or more materials be mixed to catalyze or activate the coating prior to use.

Table 9-3: *Single-Component/Multi-Component Breakdown*

Coating Category	Total		Solvent-Borne		Water-Borne	
	% Single	% Multi	% Single	% Multi	% Single	% Multi
Bituminous Roof	100%	0%	100%	0%	100%	0%
Bituminous Roof Primer	100%	0%	100%	0%	100%	0%
Bond Breakers	100%	0%	100%	0%	100%	0%
Clear Brushing Lacquer	100%	0%	100%	0%	0%	0%
Concrete Curing Compounds	100%	0%	100%	0%	100%	0%
Driveway Sealer	100%	0%	100%	0%	100%	0%
Dry Fog	97%	3%	95%	5%	100%	0%
Faux Finishing	100%	0%	100%	0%	100%	0%
Fire Resistive	91%	9%	77%	23%	100%	0%
Fire Retardant - Clear	100%	0%	100%	0%	0%	0%
Fire Retardant - Opaque	100%	0%	100%	0%	100%	0%
Flat	100%	0%	94%	6%	100%	0%
Floor	93%	7%	92%	8%	93%	7%
Form Release Compounds	100%	0%	100%	0%	100%	0%
Graphic Arts	100%	0%	100%	0%	100%	0%
High Temperature	91%	9%	91%	9%	0%	0%
Industrial Maintenance	55%	45%	42%	58%	80%	20%
Lacquers	100%	0%	100%	0%	100%	0%
Low Solids	100%	0%	0%	0%	100%	0%
Magnesite Cement	100%	0%	100%	0%	0%	0%
Mastic Texture	100%	0%	100%	0%	100%	0%
Metallic Pigmented	93%	7%	93%	7%	93%	7%
Multi-Color	100%	0%	100%	0%	100%	0%
Nonflat - High Gloss	100%	0%	100%	0%	100%	0%
Nonflat - Low Gloss	100%	0%	100%	0%	100%	0%
Nonflat - Medium Gloss	100%	0%	100%	0%	100%	0%
Other	96%	4%	11%	89%	99%	1%
Pre-Treatment Wash Primer	78%	22%	0%	100%	100%	0%
Primer, Sealer, and Undercoater	100%	0%	98%	2%	100%	0%
Quick Dry Enamel	100%	0%	100%	0%	100%	0%
Quick Dry Primer, Sealer, and Undercoater	100%	0%	100%	0%	100%	0%
Recycled	100%	0%	0%	0%	100%	0%
Roof	100%	0%	95%	5%	100%	0%
Rust Preventative	100%	0%	100%	0%	100%	0%

Table 9-3: *Single-Component/Multi-Component Breakdown*

Coating Category	Total		Solvent-Borne		Water-Borne	
	% Single	% Multi	% Single	% Multi	% Single	% Multi
Sanding Sealers	96%	4%	94%	6%	100%	0%
Shellacs - Clear	100%	0%	100%	0%	0%	0%
Shellacs - Opaque	100%	0%	100%	0%	0%	0%
Specialty Primer, Sealer, and Undercoater	100%	0%	100%	0%	100%	0%
Stains - Clear/Semitransparent	100%	0%	100%	0%	100%	0%
Stains - Opaque	100%	0%	100%	0%	100%	0%
Swimming Pool	44%	56%	2%	98%	83%	17%
Swimming Pool Repair and Maintenance	100%	0%	100%	0%	0%	0%
Traffic Marking	100%	0%	99%	1%	100%	0%
Varnishes - Clear	90%	10%	99%	1%	67%	33%
Varnishes - Semitransparent	98%	2%	98%	2%	100%	0%
Waterproofing Concrete/Masonry Sealers	87%	13%	76%	24%	98%	2%
Waterproofing Sealers	99%	1%	92%	8%	100%	0%
Wood Preservatives	100%	0%	100%	0%	100%	0%
Totals:	**99%**	**1%**	**91%**	**9%**	**100%**	**0%**

Notes:
1. This table contains percentages based on sales volume.
2. The data in this table include sales of small containers (1 quart or less).

Subtotals:	Solvent-Borne Single-Component Sales (gals):	11,904,054
	Solvent-Borne Multi-Component Sales (gals):	1,148,981
	Water-Borne Single-Component Sales (gals):	96,987,337
	Water-Borne Multi-Component Sales (gals):	367,350
	Grand Total (gals):	**110,407,721**

Chapter 10 -- Ingredients

The 2005 survey gathered speciation data for all volatile ingredients (VOCs, exempt compounds, and water). Data were collected for all volatile ingredients that amounted to at least 0.1% (by weight) of each coating. These will be used to update ARB's speciation profiles for architectural coatings. It will also be used when ARB staff evaluates the feasibility of a reactivity-based regulation. The quantity of VOC ingredients summarized in this chapter is very close to the quantity of VOC emissions calculated in Chapter 5. This indicates that there is good correlation between the speciated ingredient data and the reported VOC Actual values.

To evaluate the reactivity of architectural coatings, we will use the Maximum Incremental Reactivity (MIR) scale, developed by Dr. William Carter[1] and adopted in ARB's Aerosol Coatings Regulation[2]. The MIR values quantify the potential for a chemical to form ozone. For each coating category, we will develop a profile of the volatile ingredients that are present, including exempt compounds. In one approach, which was used in the ARB's Aerosol Coatings Regulation, we would then use the MIR values for specific volatile ingredients to develop a product-weighted MIR for a coating category, as shown in the example below:

Ingredient	**CAS #**	**Weight Fraction**	**MIR Value (g O_3/g product)**	**Weighted Reactivity**
1,2-Propanediol	57-55-6	4%	2.74	0.110
2,2,4-Trimethyl-1,3-Pentanediol Monoisobutyrate	25265-77-4	2%	0.88	0.018
2-(2-Butoxyethoxy)-Ethanol	112-34-5	4%	2.87	0.115
2-(2-Methoxyethoxy)-Ethanol	111-77-3	3%	2.88	0.086
Water	7732-18-5	54%	0	0
Solids		33%	0	0
		100%		0.329
Product-Weighted MIR = 0.329 grams ozone/gram product				

Some members of the architectural coatings industry have indicated that they do not believe this approach, although appropriate for aerosol coatings, is suitable for architectural coatings. We will be working with the industry and local air districts as we consider methods to evaluate a reactivity-based control measure for architectural coatings.

Hydrocarbon solvents comprise a significant quantity of the VOCs in architectural coatings. Since hydrocarbon solvents are complex mixtures of individual organic

[1] William P.L. Carter, Ph.D.; Research Chemist; Air Pollution Research Center and College of Engineering, Center for Environmental Research and Technology; University of California, Riverside, CA See also: http://pah.cert.ucr.edu/~carter

[2] California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.6. Maximum Incremental Reactivity.

compounds, it is necessary to use a different approach when assigning MIR values to these mixtures. For ARB's Aerosol Coatings Regulation, hydrocarbon solvents were assigned to various "bins", based on the boiling point range, aromatic content, and type of hydrocarbon (e.g., normal, cyclic, or isoparaffinic). All hydrocarbon solvents that were grouped in a given "bin" were assigned a MIR value. The 2005 architectural coating survey requested available data on bin numbers and survey respondents provided bin information for more than 90% of the reported hydrocarbon solvent mass.

This chapter includes the following data summaries:

Table 10-1: *VOC Ingredients (sorted by Weight) – All Coatings*

Table 10-2: *VOC Ingredients (sorted by Weight) - Solvent-borne Coatings*

Table 10-3: *VOC Ingredients (sorted by Weight) – Water-borne Coatings*

Table 10-4: *VOC Ingredients (sorted by Weight) – All Coatings*

Table 10-5: *VOC Ingredients (sorted by CAS #) – Solvent-borne Coatings*

Table 10-6: *VOC Ingredients (sorted by CAS #) – Water-borne Coatings*

Table 10-7: *Exempt Compounds (sorted by Weight) – All Coatings*

Table 10-8: *Exempt Compounds (sorted by Weight) - Solvent-borne Coatings*

Table 10-9: *Exempt Compounds (sorted by Weight) – Water-borne Coatings*

Table 10-10: *Hydrocarbon Solvents Only (sorted by Bin and CAS#) - All Coatings*

Table 10-11: *Hydrocarbon Solvents Only (sorted by Weight) - Solvent-borne Coatings*

Table 10-12: *Hydrocarbon Solvents Only (sorted by Weight) - Water-borne Coatings*

Table 10-13: *Ingredient Listing by Category (VOCs & Exempts) – All Coatings*

Tables 10-1 through 10-6 list the quantities of reported ingredients that are classified as VOCs, including solvent-borne and water-borne breakouts. These tables are sorted by weight, in descending order, and by CAS number. Tables 10-7 through 10-9 display ingredients that are classified as exempt compounds. Tables 10-10 through 10-12 display the hydrocarbon solvents reported, and corresponding Bin numbers. Table 10-13 contains an ingredient listing for each coating category. A small number of survey respondents reported the solid components in their coatings, but these data are not included in this report. In some tables, ingredients that were reported in small quantities are grouped together under the name "Other Ingredients".

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
0	Bin 11 Hydrocarbon Solvent	16,005,880
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	11,065,895
107211	Ethylene Glycol	9,679,387
57556	Propylene Glycol	4,844,997
0	Bin 15 Hydrocarbon Solvent	3,645,733
0	Bin 6 Hydrocarbon Solvent	1,900,944
0	Bin 10 Hydrocarbon Solvent	1,831,467
112345	2-(2-Butoxyethoxy) Ethanol	1,567,208
0	Bin 22 Hydrocarbon Solvent	1,490,650
1330207	Xylene	1,350,251
0	Bin 12 Hydrocarbon Solvent	1,037,669
9981	Aggregated VOCs < 0.1%	952,715
124685	2-Amino-2-Methyl-1-Propanol	942,256
111762	2-Butoxy Ethanol	914,049
64175	Ethanol	861,224
123864	Butyl Acetate, 1-	811,801
0	Bin 9 Hydrocarbon Solvent	521,645
67561	Methanol	516,647
110430	Methyl-n-Amyl Ketone	458,986
67630	Isopropanol	426,553
8052413	Stoddard Solvent	408,577
0	Bin 14 Hydrocarbon Solvent	375,894
64741442	Straight-Run Middle Distillate	367,597
34590948	Dipropylene Glycol Methyl Ether	311,443
64742887	Medium Aliphatic Solvent Naphtha	310,229
29911282	Dipropylene Glycol Monobutyl Ether	291,925
0	Bin 2 Hydrocarbon Solvent	281,473
95636	1,2,4-Trimethylbenzene	256,413
8008206	Kerosene	253,481
0	Bin 5 Hydrocarbon Solvent	237,108
0	Bin 23 Hydrocarbon Solvent	235,248
108883	Toluene	229,810
111773	2-(2-Methoxyethoxy) Ethanol	208,653
111466	Diethylene Glycol	192,457
78831	1-Propanol, 2-Methyl-	183,545
29911271	Dipropylene Glycol Monopropyl Ether	178,630
64742536	Hydrotreated Light Naphthenic Distillate	177,452

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
108327	Propylene carbonate	164,924
100414	Ethyl Benzene	159,802
68476302	Fuel oil no. 2	134,535
96297	Ethyl Methyl Ketone Oxime	133,695
5444757	2-Ethylhexyl Benzoate	128,168
108656	Propylene Glycol Monomethyl Ether Acetate	121,734
64742489	Hydrotreated Heavy Naphtha	117,035
71363	n-Butanol	106,183
97858	Isobutyl Isobutyrate	105,429
108101	Methyl Isobutyl Ketone	98,625
78933	Methyl Ethyl Ketone	95,508
872504	1-Methyl-2-Pyrrolidinone	94,717
2807309	Ethylene Glycol Monopropyl Ether	92,752
107982	Propylene Glycol Monomethyl Ether	87,373
64742898	VM&P Naphtha	86,511
5131668	Propylene Glycol Monobutyl Ether	72,747
108678	Mesitylene	54,289
64742525	Hydrotreated Heavy Naphthenic Distillate	51,297
112276	Triethylene Glycol	49,033
8012951	Mineral Oil	47,669
124174	Diethylene Glycol Butyl Ether Acetate	45,116
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897
51200874	4,4-Dimethyloxazolidine	41,124
100516	Benzyl Alcohol	35,626
78922	Butyl Alcohol, Sec-	33,695
0	Bin 7 Hydrocarbon Solvent	31,719
25265718	Dipropylene Glycol	30,556
25551137	Trimethyl Benzene (mixed isomers)	28,286
64741895	Paraffinic Distillate	26,502
763699	Ethyl 3-ethoxypropionate	24,643
21564170	Thiocyanic acid (2-benzoathiazolythio)methyl ester	24,354
2171962	Methoxysilane	23,449
64742478	Distillate (Petroleum), Hydrotreated Light	23,340
67685	Dimethylsulfoxide	22,408
110190	Isobutyl Acetate	21,764
107879	2-Pentanone	21,743
138863	Limonene	20,450
126738	Tributyl Phosphate	19,834
108032	1-Nitropropane	19,345
25498491	Tripropylene Glycol Methyl Ether	18,975
770354	Propylene Glycol Phenyl Ether	17,878
110123	Methyl Isoamyl Ketone	16,413
141786	Ethyl Acetate	16,212
0	Bin 16 Hydrocarbon Solvent	15,193
121448	Triethylamine	15,029
122996	Ethylene Glycol Monophenyl Ether	14,523
9985	Other VOC	14,517
2943751	Triethoxyoctylsilane	14,486
1569013	Propylene Glycol Monopropyl Ether	13,916
0	Bin 21 Hydrocarbon Solvent	12,772

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
5989275	D-limonene	12,513
4719044	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	11,622
108383	Meta-Xylene	11,034
0	Bin 24 Hydrocarbon Solvent	10,791
75070	Acetaldehyde	10,352
111900	Diethylene Glycol Monoethyl Ether	10,089
143226	Triethylene Glycol Monobutyl Ether	9,625
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	9,174
88230357	Oxohexyl Acetate	9,122
590012	Butyl Propionate	8,772
0	Residual Monomer(s)	8,496
8032324	Petroleum Ether	8,364
112072	Butoxyethyl Acetate, 2-	7,878
1.11E+08	Dipropylene Glycol Dimethyl Ether	7,844
64742956	Aromatic 100	7,187
628637	Amyl Acetate	6,996
96480	gamma-Butyrolactone	6,971
64741419	Heavy Straight-Run Naphtha	6,918
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917
25550145	Ethylmethylbenzene	6,914
108838	2,6-Dimethyl-4-Heptanone	6,566
108010	n,n-Dimethylethanolamine	6,511
34375285	Troysan 174	6,393
98828	Cumene	6,163
123422	Diacetone Alcohol	5,628
68154643	Fatty Acids	5,605
4253343	Methyltriacetoxysilane	5,419
540885	tert-Butyl acetate	5,208
1.08E+08	Oxo-Tridecyl Acetate	5,007
108930	Cyclohexanol	4,801
64741657	Petroleum Naphtha, Heavy Alkylate	4,502
106423	Para-Xylene	4,485
4420740	(3-Mercaptopropyl)trimethoxysilane	4,346
0	Preservative	4,342
27646806	2(Methylamino)-2-methyl-1-propanol	4,287
88917220	Dipropylene Glycol Methyl Ether Acetate	4,175
0	Fuel Oil	4,135
95476	Ortho-Xylene	3,992
64197	Acetic Acid	3,924
122510	Ethyl orthoformate	3,621
68476346	Fuel oil no. 2	3,377
91203	Naphthalene	3,216
15821837	2-Butoxy-1-Propanol	3,185
1119400	Dimethyl Glutarate	3,132
79243	Nitroethane	3,102
68410979	Hydrotreated Light Distillate	3,101
64742945	Heavy aromatic naphtha solvent	3,053
100425	Styrene	2,793
108941	Cyclohexanone	2,688
19549805	4,6-Dimethyl-2-heptanone	2,652

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
149735	Trimethoxymethane	2,547
110985	1,1-Oxydi-2-propanol	2,450
78104	Tetraethyl Orthosilicate	2,406
104767	2-Ethyl-1-Hexanol	2,252
119642	1,2,3,4-Tetrahydronaphthalene	2,177
109604	n-Propyl Acetate	2,152
0	Alcohols	2,116
9003138	Poly[oxy(methyl-1,2-ethanediyl)], alpha-butyl-omega-hydroxy-	1,950
123546	2,4-Pentanedione	1,879
141435	Ethanolamine	1,778
25013154	Vinyl Toluene	1,745
64742821	Hydrodesulfurized Heavy Naphtha	1,670
22984549	Methyltris(ethylmethylketoxime)silane	1,662
110918	Morpholine	1,622
919302	1-Propanamine, 3-(triethoxysilyl)	1,567
0	Glycol Ethers	1,541
115968	Tris(2-Chloroethyl)Phosphate	1,469
142825	Heptane	1,394
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360
78513	Tri(butyl cellosolve) phosphate	1,352
50000	Formaldehyde	1,315
1559360	Diethylene Glycol Mono-2-Ethyl Hexyl Ether	1,304
112594	Diethylene Glycol Monohexyl Ether	1,290
104687	Diethylene Glycol Phenyl Ether	1,139
526738	Trimethyl Benzene, 1,2,3-	1,124
627930	Dimethyl Adipate	1,117
149575	2-Ethylhexanoic Acid	1,064
25340174	Diethyl Benzene	1,036
84852153	4-Nonylphenol (branched)	1,021
64742467	Petroleum Distillates, Hydrotreated Middle	1,000
1.27E+08	Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	991
41593388	Phenoxypropanol	984
64771728	Isoparaffinic hydrocarbons	931
0	Bin 1 Hydrocarbon Solvent	924
6846500	Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester	880
75912	Tert-Butyl Hydroperoxide	879
2320061	1-phenyl-1-(4-isopropyl-phenyl)-ethane	835
51730940	Dipropylene glycol phenyl ether	810
57018527	Propylene Glycol t-Butyl Ether	767
111400	Diethylene Triamine	741
614459	Peroxybenzoic Acid, tert-Butyl Ester	725
0	Biocide	683
142927	n-Hexyl Acetate	678
98000	Furfuryl mercaptan	646
8042475	Petroleum Distillate	642
123922	Isopentyl Acetate	610
2530872	(3-Chloropropyl)trimethoxysilane	541
111273	Hexanol, N-	519

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
107415	2-Methyl-2,4-Pentanediol	510
0	Aliphatic Solvent	505
71195647	Pentanedioic acid, bis(2-methylpropyl) ester	501
61791535	Amines, N-tallow alkyltrimethylenedi-, oleates	495
52299204	2((Hydroxymethyl)amino)-iso-butanol	488
102716	Triethanolamine	463
0	Petroleum Hydrocarbon	449
83817725	Di (ethylmethylketoxime) methoxy methyl silane	416
1760243	n-[3-(Trimethoxysilyl)propyl]-1,2-ethananediamine	407
694837	1,2-Cyclohexanediamine	398
2466673	1-Butanol, 3-methyl-, dihydrogen phosphate	392
68648873	Benzene, C10-16-alkyl derivs.	386
107222	Glyoxal	348
13822565	1-Propanamine, 3-(trimethoxysilyl)-	342
111159	Ethoxyethyl Acetate	330
107153	Ethylenediamine	305
8002093	Pine Oil	276
71238	n-Propyl Alcohol	269
1477550	m-Xylene-a,a-diamine	250
682111	Trimethylolpropane Monoallyl Ether	208
7397628	Butyl glycolate	204
0	Mergal 395	196
103093	2-Ethylhexyl Acetate	177
110543	Hexane	173
56709138	Bicyclic Oxazolidine	164
925064	Butanedioic Acid, bis(2-methylpropyl) Ester	163
141048	Hexanedioic Acid, bis(2-methylpropyl) Ester	163
88164	Chlorobenzotrifluoride	133
79107	Acrylic Acid	119
56235	Carbon Tetrachloride	110
0	Petroleum Distillate	105
110805	Ethoxyethanol, 2-	104
109897	Diethylamine	103
8030306	Naphtha	102
1185553	Trimethoxymethylsilane	85
108952	Phenol	84
0	Odorant	83
103651	n-Propylbenzene	82
80159	Cumene Hydroperoxide	79
6440580	Troysan 395	75
71432	Benzene	75
100378	Diethylaminoethanol	72
142905	2-Methyl-2-Propenoic Acid, Dodecyl Ester	71
103833	Benzyldimethylamine	71
90438792	Oxo-Heptyl Acetate	70
64742650	Distillates, petroleum, solvent-dewaxed heavy paraffinic	64
68609972	Oxirane, mono ((C12 - 14 - alkyloxy) methyl) derivatives	64
1589475	Propylene Glycol Monomethyl Ether	60
64742547	Hydrotreated Heavy Paraffinic Distillate	55
0	Fatty Acids	53

Table 10-1: ***VOC Ingredients (sorted by Weight) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
112243	Triethylenetetramine	52
106650	Dimethyl Succinate	52
110634	1,4-Butanediol	50
328847	3,4-Dichlorobenzotrifluoride	45
27138314	Propanol, oxybis-, dibenzoate	44
60864337	Benzyl ether of 1,1,3,3-tetramethylbutylphenoxypolyethoxy ethanol	39
2855132	Isophorone diamine	33
68956569	Terpenes	28
25707704	1,2-Ethanediamine, N,N'-bis (1,3-dimethylbutylidene)-	28
111422	Diethanolamine	22
121437	Trimethyl Borate	21
78966	1-Amino-2-Propanol	21
0	Dibasic Esters	20
107880	Butanediol, 1,3-	20
9043305	Polyethylene glycol monoisotridecyl ether	18
112572	Tetraethylenepentamine	17
70657704	Propylene Glycol Monomethyl Ether Acetate	17
26447143	Cresyl Glycidyl Ether (mixed isomers)	14
80466	t-Amyl Phenol	13
52125538	Propylene Glycol Monoethyl Ether	13
110850	Piperazine	12
0	Nopco NXZ Defoamer	12
0	Bin 13 Hydrocarbon Solvent	11
69009901	1,1'-Biphenyl, bis(1-methylethyl)-	11
3586558	(Ethylenedioxy)dimethanol	11
109591	2-Isopropoxyethanol	8
78591	Isophorone	8
0	Saturated Hydrocarbon Distillates	7
1.08E+08	Oxo-Octyl Acetate	7
26183528	Polyethylene glycol monodecyl ether	6
2426086	Butyl Glycidal Ether, N-	6
90722	Tris(dimethylaminomethyl)phenol	5
29225910	1,1'-Biphenyl, tris(1-methylethyl)-	5
100743	Ethylmorpholine, n-	5
109999	Tetrahydrofuran	5
68439463	Alcohols, C9-11, ethoxylated	4
98862	Acetophenone	4
24800440	Tripropylene glycol	4
2031676	Methyl Triethoxysilane	3
100447	Benzyl Chloride	3
108112	Methylisobutyl Carbinol	3
110827	Cyclohexane	2
1241947	Phosphoric acid, 2-ethylhexyl diphenyl ester	1
3302101	3,5,5-Trimethylhexanoic Acid	1
108872	Methylcyclohexane	1
68439509	Fatty Alcohols	1
105533	Diethyl Malonate	1
77941	Tributyl Citrate	1

Table 10-1: *VOC Ingredients (sorted by Weight) – All Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
	All Coatings VOCs Total (lbs) =	**68,415,571**
	All Coatings VOCs Total (tons/yr) =	**34,208**
	All Coatings VOCs Total (tons/day) =	**93.7**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-2: *VOC Ingredients (sorted by Weight) – Solvent-borne Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
0	Bin 11 Hydrocarbon Solvent	15,652,663
0	Bin 15 Hydrocarbon Solvent	3,500,977
0	Bin 6 Hydrocarbon Solvent	1,881,536
0	Bin 10 Hydrocarbon Solvent	1,803,228
0	Bin 22 Hydrocarbon Solvent	1,437,304
1330207	Xylene	1,332,737
0	Bin 12 Hydrocarbon Solvent	1,016,166
64175	Ethanol	815,249
123864	Butyl Acetate, 1-	810,724
0	Bin 9 Hydrocarbon Solvent	502,591
110430	Methyl-n-Amyl Ketone	458,986
8052413	Stoddard Solvent	406,911
67630	Isopropanol	392,517
0	Bin 14 Hydrocarbon Solvent	374,897
64741442	Straight-Run Middle Distillate	357,686
64742887	Medium Aliphatic Solvent Naphtha	310,226
111762	2-Butoxy Ethanol	292,202
0	Bin 2 Hydrocarbon Solvent	280,644
8008206	Kerosene	253,481
0	Bin 5 Hydrocarbon Solvent	236,978
95636	1,2,4-Trimethylbenzene	233,201
108883	Toluene	217,375
0	Bin 23 Hydrocarbon Solvent	211,292
78831	1-Propanol, 2-Methyl-	183,439
64742536	Hydrotreated Light Naphthenic Distillate	166,749
108327	Propylene carbonate	164,924
100414	Ethyl Benzene	159,096
68476302	Fuel oil no. 2	132,090
96297	Ethyl Methyl Ketone Oxime	121,463
108656	Propylene Glycol Monomethyl Ether Acetate	118,744
64742489	Hydrotreated Heavy Naphtha	117,035
97858	Isobutyl Isobutyrate	105,429
71363	n-Butanol	104,402
9981	Aggregated VOCs < 0.1%	101,329
108101	Methyl Isobutyl Ketone	98,625
78933	Methyl Ethyl Ketone	95,470
64742898	VM&P Naphtha	86,511

Table 10-2: ***VOC Ingredients (sorted by Weight) – Solvent-borne Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
64742525	Hydrotreated Heavy Naphthenic Distillate	51,157
108678	Mesitylene	47,699
8012951	Mineral Oil	47,669
107982	Propylene Glycol Monomethyl Ether	45,963
100516	Benzyl Alcohol	32,076
0	Bin 7 Hydrocarbon Solvent	31,714
25551137	Trimethyl Benzene (mixed isomers)	28,258
2807309	Ethylene Glycol Monopropyl Ether	28,190
67561	Methanol	27,624
763699	Ethyl 3-ethoxypropionate	24,581
21564170	Thiocyanic acid (2-benzoathiazolythio)methyl ester	24,354
64742478	Distillate (Petroleum), Hydrotreated Light	22,566
110190	Isobutyl Acetate	21,764
107879	2-Pentanone	21,743
138863	Limonene	20,450
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	18,437
124174	Diethylene Glycol Butyl Ether Acetate	17,085
25498491	Tripropylene Glycol Methyl Ether	16,748
110123	Methyl Isoamyl Ketone	16,413
0	Bin 16 Hydrocarbon Solvent	14,948
5989275	D-limonene	12,511
108383	Meta-Xylene	11,034
108032	1-Nitropropane	10,985
111773	2-(2-Methoxyethoxy) Ethanol	10,801
0	Bin 24 Hydrocarbon Solvent	10,672
107211	Ethylene Glycol	10,623
0	Bin 21 Hydrocarbon Solvent	9,838
112345	2-(2-Butoxyethoxy) Ethanol	9,191
88230357	Oxohexyl Acetate	9,094
590012	Butyl Propionate	8,772
8032324	Petroleum Ether	8,364
9985	Other VOC	7,397
112072	Butoxyethyl Acetate, 2-	7,210
628637	Amyl Acetate	6,996
64741419	Heavy Straight-Run Naphtha	6,918
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917
25550145	Ethylmethylbenzene	6,909
108838	2,6-Dimethyl-4-Heptanone	6,566
98828	Cumene	6,127
124685	2-Amino-2-Methyl-1-Propanol	5,829
64742956	Aromatic 100	5,626
68154643	Fatty Acids	5,605
4253343	Methyltriacetoxysilane	5,419
540885	tert-Butyl acetate	5,208
34590948	Dipropylene Glycol Methyl Ether	4,933
108930	Cyclohexanol	4,801
106423	Para-Xylene	4,485
4420740	(3-Mercaptopropyl)trimethoxysilane	4,346
0	Fuel Oil	4,135
88917220	Dipropylene Glycol Methyl Ether Acetate	4,119

Table 10-2: ***VOC Ingredients (sorted by Weight) – Solvent-borne Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
5131668	Propylene Glycol Monobutyl Ether	4,079
95476	Ortho-Xylene	3,992
122510	Ethyl orthoformate	3,621
123422	Diacetone Alcohol	3,504
68476346	Fuel oil no. 2	3,377
91203	Naphthalene	3,192
141786	Ethyl Acetate	3,154
1119400	Dimethyl Glutarate	3,132
68410979	Hydrotreated Light Distillate	3,101
79243	Nitroethane	3,089
64742945	Heavy aromatic naphtha solvent	2,995
19549805	4,6-Dimethyl-2-heptanone	2,652
100425	Styrene	2,600
149735	Trimethoxymethane	2,547
78104	Tetraethyl Orthosilicate	2,406
64741657	Petroleum Naphtha, Heavy Alkylate	2,237
119642	1,2,3,4-Tetrahydronaphthalene	2,177
109604	n-Propyl Acetate	2,152
0	Other Ingredients (<100 Lbs each)	1,904
123546	2,4-Pentanedione	1,879
25013154	Vinyl Toluene	1,745
64742821	Hydrodesulfurized Heavy Naphtha	1,670
22984549	Methyltris(ethylmethylketoxime)silane	1,662
108941	Cyclohexanone	1,610
142825	Heptane	1,394
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360
57556	Propylene Glycol	1,239
25265718	Dipropylene Glycol	1,156
2943751	Triethoxyoctylsilane	1,131
526738	Trimethyl Benzene, 1,2,3-	1,122
627930	Dimethyl Adipate	1,117
84852153	4-Nonylphenol (branched)	1,021
64742467	Petroleum Distillates, Hydrotreated Middle	1,000
25340174	Diethyl Benzene	949
64771728	Isoparaffinic hydrocarbons	931
0	Bin 1 Hydrocarbon Solvent	921
149575	2-Ethylhexanoic Acid	886
6846500	Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester	880
2320061	1-phenyl-1-(4-isopropyl-phenyl)-ethane	835
0	Glycol Ethers	824
57018527	Propylene Glycol t-Butyl Ether	767
614459	Peroxybenzoic Acid, tert-Butyl Ester	725
111400	Diethylene Triamine	716
872504	1-Methyl-2-Pyrrolidinone	679
104767	2-Ethyl-1-Hexanol	678
1569013	Propylene Glycol Monopropyl Ether	672
142927	n-Hexyl Acetate	664
98000	Furfuryl mercaptan	646
123922	Isopentyl Acetate	610

Table 10-2: *VOC Ingredients (sorted by Weight) – Solvent-borne Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
2530872	(3-Chloropropyl)trimethoxysilane	541
61791535	Amines, N-tallow alkyltrimethylenedi-, oleates	495
107415	2-Methyl-2,4-Pentanediol	486
50000	Formaldehyde	419
83817725	Di (ethylmethylketoxime) methoxy methyl silane	416
694837	1,2-Cyclohexanediamine	398
2466673	1-Butanol, 3-methyl-, dihydrogen phosphate	392
110918	Morpholine	391
68648873	Benzene, C10-16-alkyl derivs.	386
13822565	1-Propanamine, 3-(trimethoxysilyl)-	342
111159	Ethoxyethyl Acetate	330
107153	Ethylenediamine	305
8002093	Pine Oil	273
71238	n-Propyl Alcohol	269
1477550	m-Xylene-a,a-diamine	250
64741895	Paraffinic Distillate	223
7397628	Butyl glycolate	204
121448	Triethylamine	199
0	Mergal 395	196
103093	2-Ethylhexyl Acetate	177
110543	Hexane	173
88164	Chlorobenzotrifluoride	133
122996	Ethylene Glycol Monophenyl Ether	114
56235	Carbon Tetrachloride	110
8030306	Naphtha	102
	Solvent-borne VOCs Subtotal (lbs) =	**35,410,466**
	Solvent-borne VOCs Subtotal (tons/yr) =	**17,705**
	Solvent-borne VOCs Subtotal (tons/day) =	**48.5**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-3: *VOC Ingredients (sorted by Weight) – Water-borne Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	11,047,459
107211	Ethylene Glycol	9,668,764
57556	Propylene Glycol	4,843,757
112345	2-(2-Butoxyethoxy) Ethanol	1,558,017
124685	2-Amino-2-Methyl-1-Propanol	936,427
9981	Aggregated VOCs < 0.1%	851,385
111762	2-Butoxy Ethanol	621,847
67561	Methanol	489,024
0	Bin 11 Hydrocarbon Solvent	353,173
34590948	Dipropylene Glycol Methyl Ether	306,510
29911282	Dipropylene Glycol Monobutyl Ether	291,920
111773	2-(2-Methoxyethoxy) Ethanol	197,852

Table 10-3: ***VOC Ingredients (sorted by Weight) – Water-borne Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
111466	Diethylene Glycol	192,411
29911271	Dipropylene Glycol Monopropyl Ether	178,630
0	Bin 15 Hydrocarbon Solvent	144,648
5444757	2-Ethylhexyl Benzoate	128,168
872504	1-Methyl-2-Pyrrolidinone	94,038
5131668	Propylene Glycol Monobutyl Ether	68,667
2807309	Ethylene Glycol Monopropyl Ether	64,562
0	Bin 22 Hydrocarbon Solvent	53,344
112276	Triethylene Glycol	49,033
64175	Ethanol	45,975
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897
107982	Propylene Glycol Monomethyl Ether	41,410
51200874	4,4-Dimethyloxazolidine	41,124
67630	Isopropanol	34,035
78922	Butyl Alcohol, Sec-	33,687
25265718	Dipropylene Glycol	29,400
0	Bin 10 Hydrocarbon Solvent	28,214
124174	Diethylene Glycol Butyl Ether Acetate	28,031
64741895	Paraffinic Distillate	26,280
0	Bin 23 Hydrocarbon Solvent	23,851
2171962	Methoxysilane	23,449
95636	1,2,4-Trimethylbenzene	23,212
67685	Dimethylsulfoxide	22,318
0	Bin 12 Hydrocarbon Solvent	21,437
126738	Tributyl Phosphate	19,834
0	Bin 6 Hydrocarbon Solvent	19,346
0	Bin 9 Hydrocarbon Solvent	19,037
770354	Propylene Glycol Phenyl Ether	17,878
1330207	Xylene	17,514
121448	Triethylamine	14,831
122996	Ethylene Glycol Monophenyl Ether	14,409
2943751	Triethoxyoctylsilane	13,354
1569013	Propylene Glycol Monopropyl Ether	13,244
141786	Ethyl Acetate	13,058
108883	Toluene	12,435
96297	Ethyl Methyl Ketone Oxime	12,232
4719044	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	11,622
64742536	Hydrotreated Light Naphthenic Distillate	10,703
75070	Acetaldehyde	10,352
111900	Diethylene Glycol Monoethyl Ether	10,089
64741442	Straight-Run Middle Distillate	9,911
143226	Triethylene Glycol Monobutyl Ether	9,625
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	9,174
0	Residual Monomer(s)	8,496
108032	1-Nitropropane	8,360
111109774	Dipropylene Glycol Dimethyl Ether	7,844
9985	Other VOC	7,119
96480	gamma-Butyrolactone	6,971
108678	Mesitylene	6,590
108010	n,n-Dimethylethanolamine	6,510

Table 10-3: ***VOC Ingredients (sorted by Weight) – Water-borne Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
34375285	Troysan 174	6,393
108419358	Oxo-Tridecyl Acetate	5,007
0	Preservative	4,337
27646806	2(Methylamino)-2-methyl-1-propanol	4,287
64197	Acetic Acid	3,869
100516	Benzyl Alcohol	3,550
15821837	2-Butoxy-1-Propanol	3,185
108656	Propylene Glycol Monomethyl Ether Acetate	2,990
0	Bin 21 Hydrocarbon Solvent	2,934
110985	1,1-Oxydi-2-propanol	2,450
68476302	Fuel oil no. 2	2,445
64741657	Petroleum Naphtha, Heavy Alkylate	2,265
25498491	Tripropylene Glycol Methyl Ether	2,227
123422	Diacetone Alcohol	2,124
0	Alcohols	2,116
9003138	Poly[oxy(methyl-1,2-ethanediyl)], alpha-butyl-omega-hydroxy-	1,950
71363	n-Butanol	1,781
141435	Ethanolamine	1,778
8052413	Stoddard Solvent	1,666
104767	2-Ethyl-1-Hexanol	1,574
919302	1-Propanamine, 3-(triethoxysilyl)	1,567
64742956	Aromatic 100	1,561
115968	Tris(2-Chloroethyl)Phosphate	1,469
0	Other Ingredients (<100 Lbs each)	1,418
78513	Tri(butyl cellosolve) phosphate	1,352
1559360	Diethylene Glycol Mono-2-Ethyl Hexyl Ether	1,304
112594	Diethylene Glycol Monohexyl Ether	1,290
110918	Morpholine	1,231
104687	Diethylene Glycol Phenyl Ether	1,136
108941	Cyclohexanone	1,078
123864	Butyl Acetate, 1-	1,077
127087870	Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	985
41593388	Phenoxypropanol	984
0	Bin 14 Hydrocarbon Solvent	916
50000	Formaldehyde	896
75912	Tert-Butyl Hydroperoxide	879
0	Bin 2 Hydrocarbon Solvent	829
51730940	Dipropylene glycol phenyl ether	810
64742478	Distillate (Petroleum), Hydrotreated Light	774
0	Glycol Ethers	717
100414	Ethyl Benzene	707
0	Biocide	683
112072	Butoxyethyl Acetate, 2-	669
8042475	Petroleum Distillate	642
111273	Hexanol, N-	519
0	Aliphatic Solvent	505
71195647	Pentanedioic acid, bis(2-methylpropyl) ester	501
52299204	2((Hydroxymethyl)amino)-iso-butanol	488
0	Petroleum Hydrocarbon	449

Table 10-3: ***VOC Ingredients (sorted by Weight) – Water-borne Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
102716	Triethanolamine	422
1760243	n-[3-(Trimethoxysilyl)propyl]-1,2-ethananediamine	366
107222	Glyoxal	348
0	Bin 16 Hydrocarbon Solvent	243
682111	Trimethylolpropane Monoallyl Ether	208
100425	Styrene	194
149575	2-Ethylhexanoic Acid	178
56709138	Bicyclic Oxazolidine	164
141048	Hexanedioic Acid, bis(2-methylpropyl) Ester	163
925064	Butanedioic Acid, bis(2-methylpropyl) Ester	163
64742525	Hydrotreated Heavy Naphthenic Distillate	140
79107	Acrylic Acid	119
0	Bin 24 Hydrocarbon Solvent	119
78831	1-Propanol, 2-Methyl-	106
0	Petroleum Distillate	105
110805	Ethoxyethanol, 2-	104
109897	Diethylamine	103
	Water-borne VOCs Subtotal (lbs) =	**33,005,105**
	Water-borne VOCs Subtotal (tons/yr) =	**16,503**
	Water-borne VOCs Subtotal (tons/day) =	**45.2**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-4: ***VOC Ingredients (sorted by CAS#) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
0	Alcohols	2,116
0	Aliphatic Solvent	505
0	Bin 1 Hydrocarbon Solvent	924
0	Bin 2 Hydrocarbon Solvent	281,473
0	Bin 5 Hydrocarbon Solvent	237,108
0	Bin 6 Hydrocarbon Solvent	1,900,944
0	Bin 7 Hydrocarbon Solvent	31,719
0	Bin 9 Hydrocarbon Solvent	521,645
0	Bin 10 Hydrocarbon Solvent	1,831,467
0	Bin 11 Hydrocarbon Solvent	16,005,880
0	Bin 12 Hydrocarbon Solvent	1,037,669
0	Bin 13 Hydrocarbon Solvent	11
0	Bin 14 Hydrocarbon Solvent	375,894
0	Bin 15 Hydrocarbon Solvent	3,645,733
0	Bin 16 Hydrocarbon Solvent	15,193
0	Bin 21 Hydrocarbon Solvent	12,772
0	Bin 22 Hydrocarbon Solvent	1,490,650
0	Bin 23 Hydrocarbon Solvent	235,248
0	Bin 24 Hydrocarbon Solvent	10,791
0	Biocide	683

Table 10-4: ***VOC Ingredients (sorted by CAS#) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
0	Dibasic Esters	20
0	Fatty Acids	53
0	Fuel Oil	4,135
0	Glycol Ethers	1,541
0	Mergal 395	196
0	Nopco NXZ Defoamer	12
0	Odorant	83
0	Petroleum Distillate	105
0	Petroleum Hydrocarbon	449
0	Preservative	4,342
0	Residual Monomer(s)	8,496
0	Saturated Hydrocarbon Distillates	7
9981	Aggregated VOCs < 0.1%	952,715
9985	Other VOC	14,517
50000	Formaldehyde	1,315
56235	Carbon Tetrachloride	110
57556	Propylene Glycol	4,844,997
64175	Ethanol	861,224
64197	Acetic Acid	3,924
67561	Methanol	516,647
67630	Isopropanol	426,553
67685	Dimethylsulfoxide	22,408
71238	n-Propyl Alcohol	269
71363	n-Butanol	106,183
71432	Benzene	75
75070	Acetaldehyde	10,352
75912	Tert-Butyl Hydroperoxide	879
77941	Tributyl Citrate	1
78104	Tetraethyl Orthosilicate	2,406
78513	Tri(butyl cellosolve) phosphate	1,352
78591	Isophorone	8
78831	1-Propanol, 2-Methyl-	183,545
78922	Butyl Alcohol, Sec-	33,695
78933	Methyl Ethyl Ketone	95,508
78966	1-Amino-2-Propanol	21
79107	Acrylic Acid	119
79243	Nitroethane	3,102
80159	Cumene Hydroperoxide	79
80466	t-Amyl Phenol	13
88164	Chlorobenzotrifluoride	133
90722	Tris(dimethylaminomethyl)phenol	5
91203	Naphthalene	3,216
95476	Ortho-Xylene	3,992
95636	1,2,4-Trimethylbenzene	256,413
96297	Ethyl Methyl Ketone Oxime	133,695
96480	gamma-Butyrolactone	6,971
97858	Isobutyl Isobutyrate	105,429
98000	Furfuryl mercaptan	646
98828	Cumene	6,163
98862	Acetophenone	4

Table 10-4: ***VOC Ingredients (sorted by CAS#) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
100378	Diethylaminoethanol	72
100414	Ethyl Benzene	159,802
100425	Styrene	2,793
100447	Benzyl Chloride	3
100516	Benzyl Alcohol	35,626
100743	Ethylmorpholine, n-	5
102716	Triethanolamine	463
103093	2-Ethylhexyl Acetate	177
103651	n-Propylbenzene	82
103833	Benzyldimethylamine	71
104687	Diethylene Glycol Phenyl Ether	1,139
104767	2-Ethyl-1-Hexanol	2,252
105533	Diethyl Malonate	1
106423	Para-Xylene	4,485
106650	Dimethyl Succinate	52
107153	Ethylenediamine	305
107211	Ethylene Glycol	9,679,387
107222	Glyoxal	348
107415	2-Methyl-2,4-Pentanediol	510
107879	2-Pentanone	21,743
107880	Butanediol, 1,3-	20
107982	Propylene Glycol Monomethyl Ether	87,373
108010	n,n-Dimethylethanolamine	6,511
108032	1-Nitropropane	19,345
108101	Methyl Isobutyl Ketone	98,625
108112	Methylisobutyl Carbinol	3
108327	Propylene carbonate	164,924
108383	Meta-Xylene	11,034
108656	Propylene Glycol Monomethyl Ether Acetate	121,734
108678	Mesitylene	54,289
108838	2,6-Dimethyl-4-Heptanone	6,566
108872	Methylcyclohexane	1
108883	Toluene	229,810
108930	Cyclohexanol	4,801
108941	Cyclohexanone	2,688
108952	Phenol	84
109591	2-Isopropoxyethanol	8
109604	n-Propyl Acetate	2,152
109897	Diethylamine	103
109999	Tetrahydrofuran	5
110123	Methyl Isoamyl Ketone	16,413
110190	Isobutyl Acetate	21,764
110430	Methyl-n-Amyl Ketone	458,986
110543	Hexane	173
110634	1,4-Butanediol	50
110805	Ethoxyethanol, 2-	104
110827	Cyclohexane	2
110850	Piperazine	12
110918	Morpholine	1,622
110985	1,1-Oxydi-2-propanol	2,450

Table 10-4: ***VOC Ingredients (sorted by CAS#) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
111159	Ethoxyethyl Acetate	330
111273	Hexanol, N-	519
111400	Diethylene Triamine	741
111422	Diethanolamine	22
111466	Diethylene Glycol	192,457
111762	2-Butoxy Ethanol	914,049
111773	2-(2-Methoxyethoxy) Ethanol	208,653
111900	Diethylene Glycol Monoethyl Ether	10,089
112072	Butoxyethyl Acetate, 2-	7,878
112243	Triethylenetetramine	52
112276	Triethylene Glycol	49,033
112345	2-(2-Butoxyethoxy) Ethanol	1,567,208
112572	Tetraethylenepentamine	17
112594	Diethylene Glycol Monohexyl Ether	1,290
115968	Tris(2-Chloroethyl)Phosphate	1,469
119642	1,2,3,4-Tetrahydronaphthalene	2,177
121437	Trimethyl Borate	21
121448	Triethylamine	15,029
122510	Ethyl orthoformate	3,621
122996	Ethylene Glycol Monophenyl Ether	14,523
123422	Diacetone Alcohol	5,628
123546	2,4-Pentanedione	1,879
123864	Butyl Acetate, 1-	811,801
123922	Isopentyl Acetate	610
124174	Diethylene Glycol Butyl Ether Acetate	45,116
124685	2-Amino-2-Methyl-1-Propanol	942,256
126738	Tributyl Phosphate	19,834
138863	Limonene	20,450
141048	Hexanedioic Acid, bis(2-methylpropyl) Ester	163
141435	Ethanolamine	1,778
141786	Ethyl Acetate	16,212
142825	Heptane	1,394
142905	2-Methyl-2-Propenoic Acid, Dodecyl Ester	71
142927	n-Hexyl Acetate	678
143226	Triethylene Glycol Monobutyl Ether	9,625
149575	2-Ethylhexanoic Acid	1,064
149735	Trimethoxymethane	2,547
328847	3,4-Dichlorobenzotrifluoride	45
526738	Trimethyl Benzene, 1,2,3-	1,124
540885	tert-Butyl acetate	5,208
590012	Butyl Propionate	8,772
614459	Peroxybenzoic Acid, tert-Butyl Ester	725
627930	Dimethyl Adipate	1,117
628637	Amyl Acetate	6,996
682111	Trimethylolpropane Monoallyl Ether	208
694837	1,2-Cyclohexanediamine	398
763699	Ethyl 3-ethoxypropionate	24,643
770354	Propylene Glycol Phenyl Ether	17,878
872504	1-Methyl-2-Pyrrolidinone	94,717
919302	1-Propanamine, 3-(triethoxysilyl)	1,567

Table 10-4: *VOC Ingredients (sorted by CAS#) – All Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
925064	Butanedioic Acid, bis(2-methylpropyl) Ester	163
1119400	Dimethyl Glutarate	3,132
1185553	Trimethoxymethylsilane	85
1241947	Phosphoric acid, 2-ethylhexyl diphenyl ester	1
1330207	Xylene	1,350,251
1477550	m-Xylene-a,a-diamine	250
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	9,174
1559360	Diethylene Glycol Mono-2-Ethyl Hexyl Ether	1,304
1569013	Propylene Glycol Monopropyl Ether	13,916
1589475	Propylene Glycol Monomethyl Ether	60
1760243	n-[3-(Trimethoxysilyl)propyl]-1,2-ethananediamine	407
2031676	Methyl Triethoxysilane	3
2171962	Methoxysilane	23,449
2320061	1-phenyl-1-(4-isopropyl-phenyl)-ethane	835
2426086	Butyl Glycidal Ether, N-	6
2466673	1-Butanol, 3-methyl-, dihydrogen phosphate	392
2530872	(3-Chloropropyl)trimethoxysilane	541
2807309	Ethylene Glycol Monopropyl Ether	92,752
2855132	Isophorone diamine	33
2943751	Triethoxyoctylsilane	14,486
3302101	3,5,5-Trimethylhexanoic Acid	1
3586558	(Ethylenedioxy)dimethanol	11
4253343	Methyltriacetoxysilane	5,419
4420740	(3-Mercaptopropyl)trimethoxysilane	4,346
4719044	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	11,622
5131668	Propylene Glycol Monobutyl Ether	72,747
5444757	2-Ethylhexyl Benzoate	128,168
5989275	D-limonene	12,513
6440580	Troysan 395	75
6846500	Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester	880
7397628	Butyl glycolate	204
8002093	Pine Oil	276
8008206	Kerosene	253,481
8012951	Mineral Oil	47,669
8030306	Naphtha	102
8032324	Petroleum Ether	8,364
8042475	Petroleum Distillate	642
8052413	Stoddard Solvent	408,577
9003138	Poly[oxy(methyl-1,2-ethanediyl)], alpha-butyl-omega-hydroxy-	1,950
9043305	Polyethylene glycol monoisotridecyl ether	18
13822565	1-Propanamine, 3-(trimethoxysilyl)-	342
15821837	2-Butoxy-1-Propanol	3,185
19549805	4,6-Dimethyl-2-heptanone	2,652
21564170	Thiocyanic acid (2-benzoathiazolythio)methyl ester	24,354
22984549	Methyltris(ethylmethylketoxime)silane	1,662
24800440	Tripropylene glycol	4
25013154	Vinyl Toluene	1,745
25265718	Dipropylene Glycol	30,556
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	11,065,895

Table 10-4: *VOC Ingredients (sorted by CAS#) – All Coatings*		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
25340174	Diethyl Benzene	1,036
25498491	Tripropylene Glycol Methyl Ether	18,975
25550145	Ethylmethylbenzene	6,914
25551137	Trimethyl Benzene (mixed isomers)	28,286
25707704	1,2-Ethanediamine, N,N'-bis (1,3-dimethylbutylidene)-	28
26183528	Polyethylene glycol monodecyl ether	6
26447143	Cresyl Glycidyl Ether (mixed isomers)	14
27138314	Propanol, oxybis-, dibenzoate	44
27646806	2(Methylamino)-2-methyl-1-propanol	4,287
29225910	1,1'-Biphenyl, tris(1-methylethyl)-	5
29911271	Dipropylene Glycol Monopropyl Ether	178,630
29911282	Dipropylene Glycol Monobutyl Ether	291,925
34375285	Troysan 174	6,393
34590948	Dipropylene Glycol Methyl Ether	311,443
41593388	Phenoxypropanol	984
51200874	4,4-Dimethyloxazolidine	41,124
51730940	Dipropylene glycol phenyl ether	810
52125538	Propylene Glycol Monoethyl Ether	13
52299204	2((Hydroxymethyl)amino)-iso-butanol	488
56709138	Bicyclic Oxazolidine	164
57018527	Propylene Glycol t-Butyl Ether	767
60864337	Benzyl ether of 1,1,3,3-tetramethylbutylphenoxypolyethoxy ethanol	39
61791535	Amines, N-tallow alkyltrimethylenedi-, oleates	495
64741419	Heavy Straight-Run Naphtha	6,918
64741442	Straight-Run Middle Distillate	367,597
64741657	Petroleum Naphtha, Heavy Alkylate	4,502
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897
64741895	Paraffinic Distillate	26,502
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917
64742467	Petroleum Distillates, Hydrotreated Middle	1,000
64742478	Distillate (Petroleum), Hydrotreated Light	23,340
64742489	Hydrotreated Heavy Naphtha	117,035
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360
64742525	Hydrotreated Heavy Naphthenic Distillate	51,297
64742536	Hydrotreated Light Naphthenic Distillate	177,452
64742547	Hydrotreated Heavy Paraffinic Distillate	55
64742650	Distillates, petroleum, solvent-dewaxed heavy paraffinic	64
64742821	Hydrodesulfurized Heavy Naphtha	1,670
64742887	Medium Aliphatic Solvent Naphtha	310,229
64742898	VM&P Naphtha	86,511
64742945	Heavy aromatic naphtha solvent	3,053
64742956	Aromatic 100	7,187
64771728	Isoparaffinic hydrocarbons	931
68154643	Fatty Acids	5,605
68410979	Hydrotreated Light Distillate	3,101
68439463	Alcohols, C9-11, ethoxylated	4
68439509	Fatty Alcohols	1
68476302	Fuel oil no. 2	134,535
68476346	Fuel oil no. 2	3,377

Table 10-4: ***VOC Ingredients (sorted by CAS#) – All Coatings***		
CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
68609972	Oxirane, mono ((C12 - 14 - alkyloxy) methyl) derivatives	64
68648873	Benzene, C10-16-alkyl derivs.	386
68956569	Terpenes	28
69009901	1,1'-Biphenyl, bis(1-methylethyl)-	11
70657704	Propylene Glycol Monomethyl Ether Acetate	17
71195647	Pentanedioic acid, bis(2-methylpropyl) ester	501
83817725	Di (ethylmethylketoxime) methoxy methyl silane	416
84852153	4-Nonylphenol (branched)	1,021
88230357	Oxohexyl Acetate	9,122
88917220	Dipropylene Glycol Methyl Ether Acetate	4,175
90438792	Oxo-Heptyl Acetate	70
108419325	Oxo-Octyl Acetate	7
108419358	Oxo-Tridecyl Acetate	5,007
111109774	Dipropylene Glycol Dimethyl Ether	7,844
127087870	Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	991
	All Coatings VOCs Total (lbs) =	**68,415,571**
	All Coatings VOCs Total (tons/yr) =	**34,208**
	All Coatings VOCs Total (tons/day) =	**93.7**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-5: ***VOC Ingredients (sorted by CAS#) – Solvent-borne Coatings***

CAS #	**Ingredient Name**	**Sales Quantity (lbs)**
0	Bin 1 Hydrocarbon Solvent	921
0	Bin 2 Hydrocarbon Solvent	280,644
0	Bin 5 Hydrocarbon Solvent	236,978
0	Bin 6 Hydrocarbon Solvent	1,881,536
0	Bin 7 Hydrocarbon Solvent	31,714
0	Bin 9 Hydrocarbon Solvent	502,591
0	Bin 10 Hydrocarbon Solvent	1,803,228
0	Bin 11 Hydrocarbon Solvent	15,652,663
0	Bin 12 Hydrocarbon Solvent	1,016,166
0	Bin 14 Hydrocarbon Solvent	374,897
0	Bin 15 Hydrocarbon Solvent	3,500,977
0	Bin 16 Hydrocarbon Solvent	14,948
0	Bin 21 Hydrocarbon Solvent	9,838
0	Bin 22 Hydrocarbon Solvent	1,437,304
0	Bin 23 Hydrocarbon Solvent	211,292
0	Bin 24 Hydrocarbon Solvent	10,672
0	Fuel Oil	4,135
0	Glycol Ethers	824
0	Mergal 395	196
0	Other Ingredients (<100 Lbs each)	1,904
9981	Aggregated VOCs < 0.1%	101,329

Table 10-5: ***VOC Ingredients (sorted by CAS#) – Solvent-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
9985	Other VOC	7,397
50000	Formaldehyde	419
56235	Carbon Tetrachloride	110
57556	Propylene Glycol	1,239
64175	Ethanol	815,249
67561	Methanol	27,624
67630	Isopropanol	392,517
71238	n-Propyl Alcohol	269
71363	n-Butanol	104,402
78104	Tetraethyl Orthosilicate	2,406
78831	1-Propanol, 2-Methyl-	183,439
78933	Methyl Ethyl Ketone	95,470
79243	Nitroethane	3,089
88164	Chlorobenzotrifluoride	133
91203	Naphthalene	3,192
95476	Ortho-Xylene	3,992
95636	1,2,4-Trimethylbenzene	233,201
96297	Ethyl Methyl Ketone Oxime	121,463
97858	Isobutyl Isobutyrate	105,429
98000	Furfuryl mercaptan	646
98828	Cumene	6,127
100414	Ethyl Benzene	159,096
100425	Styrene	2,600
100516	Benzyl Alcohol	32,076
103093	2-Ethylhexyl Acetate	177
104767	2-Ethyl-1-Hexanol	678
106423	Para-Xylene	4,485
107153	Ethylenediamine	305
107211	Ethylene Glycol	10,623
107415	2-Methyl-2,4-Pentanediol	486
107879	2-Pentanone	21,743
107982	Propylene Glycol Monomethyl Ether	45,963
108032	1-Nitropropane	10,985
108101	Methyl Isobutyl Ketone	98,625
108327	Propylene carbonate	164,924
108383	Meta-Xylene	11,034
108656	Propylene Glycol Monomethyl Ether Acetate	118,744
108678	Mesitylene	47,699
108838	2,6-Dimethyl-4-Heptanone	6,566
108883	Toluene	217,375
108930	Cyclohexanol	4,801
108941	Cyclohexanone	1,610
109604	n-Propyl Acetate	2,152
110123	Methyl Isoamyl Ketone	16,413
110190	Isobutyl Acetate	21,764
110430	Methyl-n-Amyl Ketone	458,986
110543	Hexane	173
110918	Morpholine	391
111159	Ethoxyethyl Acetate	330
111400	Diethylene Triamine	716

Table 10-5: ***VOC Ingredients (sorted by CAS#) – Solvent-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
111762	2-Butoxy Ethanol	292,202
111773	2-(2-Methoxyethoxy) Ethanol	10,801
112072	Butoxyethyl Acetate, 2-	7,210
112345	2-(2-Butoxyethoxy) Ethanol	9,191
119642	1,2,3,4-Tetrahydronaphthalene	2,177
121448	Triethylamine	199
122510	Ethyl orthoformate	3,621
122996	Ethylene Glycol Monophenyl Ether	114
123422	Diacetone Alcohol	3,504
123546	2,4-Pentanedione	1,879
123864	Butyl Acetate, 1-	810,724
123922	Isopentyl Acetate	610
124174	Diethylene Glycol Butyl Ether Acetate	17,085
124685	2-Amino-2-Methyl-1-Propanol	5,829
138863	Limonene	20,450
141786	Ethyl Acetate	3,154
142825	Heptane	1,394
142927	n-Hexyl Acetate	664
149575	2-Ethylhexanoic Acid	886
149735	Trimethoxymethane	2,547
526738	Trimethyl Benzene, 1,2,3-	1,122
540885	tert-Butyl acetate	5,208
590012	Butyl Propionate	8,772
614459	Peroxybenzoic Acid, tert-Butyl Ester	725
627930	Dimethyl Adipate	1,117
628637	Amyl Acetate	6,996
694837	1,2-Cyclohexanediamine	398
763699	Ethyl 3-ethoxypropionate	24,581
872504	1-Methyl-2-Pyrrolidinone	679
1119400	Dimethyl Glutarate	3,132
1330207	Xylene	1,332,737
1477550	m-Xylene-a,a-diamine	250
1569013	Propylene Glycol Monopropyl Ether	672
2320061	1-phenyl-1-(4-isopropyl-phenyl)-ethane	835
2466673	1-Butanol, 3-methyl-, dihydrogen phosphate	392
2530872	(3-Chloropropyl)trimethoxysilane	541
2807309	Ethylene Glycol Monopropyl Ether	28,190
2943751	Triethoxyoctylsilane	1,131
4253343	Methyltriacetoxysilane	5,419
4420740	(3-Mercaptopropyl)trimethoxysilane	4,346
5131668	Propylene Glycol Monobutyl Ether	4,079
5989275	D-limonene	12,511
6846500	Propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl ester	880
7397628	Butyl glycolate	204
8002093	Pine Oil	273
8008206	Kerosene	253,481
8012951	Mineral Oil	47,669
8030306	Naphtha	102
8032324	Petroleum Ether	8,364

Table 10-5: ***VOC Ingredients (sorted by CAS#) – Solvent-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
8052413	Stoddard Solvent	406,911
13822565	1-Propanamine, 3-(trimethoxysilyl)-	342
19549805	4,6-Dimethyl-2-heptanone	2,652
21564170	Thiocyanic acid (2-benzoathiazolythio)methyl ester	24,354
22984549	Methyltris(ethylmethylketoxime)silane	1,662
25013154	Vinyl Toluene	1,745
25265718	Dipropylene Glycol	1,156
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	18,437
25340174	Diethyl Benzene	949
25498491	Tripropylene Glycol Methyl Ether	16,748
25550145	Ethylmethylbenzene	6,909
25551137	Trimethyl Benzene (mixed isomers)	28,258
34590948	Dipropylene Glycol Methyl Ether	4,933
57018527	Propylene Glycol t-Butyl Ether	767
61791535	Amines, N-tallow alkyltrimethylenedi-, oleates	495
64741419	Heavy Straight-Run Naphtha	6,918
64741442	Straight-Run Middle Distillate	357,686
64741657	Petroleum Naphtha, Heavy Alkylate	2,237
64741895	Paraffinic Distillate	223
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917
64742467	Petroleum Distillates, Hydrotreated Middle	1,000
64742478	Distillate (Petroleum), Hydrotreated Light	22,566
64742489	Hydrotreated Heavy Naphtha	117,035
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360
64742525	Hydrotreated Heavy Naphthenic Distillate	51,157
64742536	Hydrotreated Light Naphthenic Distillate	166,749
64742821	Hydrodesulfurized Heavy Naphtha	1,670
64742887	Medium Aliphatic Solvent Naphtha	310,226
64742898	VM&P Naphtha	86,511
64742945	Heavy aromatic naphtha solvent	2,995
64742956	Aromatic 100	5,626
64771728	Isoparaffinic hydrocarbons	931
68154643	Fatty Acids	5,605
68410979	Hydrotreated Light Distillate	3,101
68476302	Fuel oil no. 2	132,090
68476346	Fuel oil no. 2	3,377
68648873	Benzene, C10-16-alkyl derivs.	386
83817725	Di (ethylmethylketoxime) methoxy methyl silane	416
84852153	4-Nonylphenol (branched)	1,021
88230357	Oxohexyl Acetate	9,094
88917220	Dipropylene Glycol Methyl Ether Acetate	4,119
	Solvent-borne VOCs Subtotal (lbs) =	**35,410,466**
	Solvent-borne VOCs Subtotal (tons/yr) =	**17,705**
	Solvent-borne VOCs Subtotal (tons/day) =	**48.5**

Notes:

1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-6: ***VOC Ingredients (sorted by CAS#) – Water-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
0	Alcohols	2,116
0	Aliphatic Solvent	505
0	Bin 2 Hydrocarbon Solvent	829
0	Bin 6 Hydrocarbon Solvent	19,346
0	Bin 9 Hydrocarbon Solvent	19,037
0	Bin 10 Hydrocarbon Solvent	28,214
0	Bin 11 Hydrocarbon Solvent	353,173
0	Bin 12 Hydrocarbon Solvent	21,437
0	Bin 14 Hydrocarbon Solvent	916
0	Bin 15 Hydrocarbon Solvent	144,648
0	Bin 16 Hydrocarbon Solvent	243
0	Bin 21 Hydrocarbon Solvent	2,934
0	Bin 22 Hydrocarbon Solvent	53,344
0	Bin 23 Hydrocarbon Solvent	23,851
0	Bin 24 Hydrocarbon Solvent	119
0	Biocide	683
0	Glycol Ethers	717
0	Other Ingredients (<100 Lbs each)	1,418
0	Petroleum Distillate	105
0	Petroleum Hydrocarbon	449
0	Preservative	4,337
0	Residual Monomer(s)	8,496
9981	Aggregated VOCs < 0.1%	851,385
9985	Other VOC	7,119
50000	Formaldehyde	896
57556	Propylene Glycol	4,843,757
64175	Ethanol	45,975
64197	Acetic Acid	3,869
67561	Methanol	489,024
67630	Isopropanol	34,035
67685	Dimethylsulfoxide	22,318
71363	n-Butanol	1,781
75070	Acetaldehyde	10,352
75912	Tert-Butyl Hydroperoxide	879
78513	Tri(butyl cellosolve) phosphate	1,352
78831	1-Propanol, 2-Methyl-	106
78922	Butyl Alcohol, Sec-	33,687
79107	Acrylic Acid	119
95636	1,2,4-Trimethylbenzene	23,212
96297	Ethyl Methyl Ketone Oxime	12,232
96480	gamma-Butyrolactone	6,971
100414	Ethyl Benzene	707
100425	Styrene	194
100516	Benzyl Alcohol	3,550
102716	Triethanolamine	422
104687	Diethylene Glycol Phenyl Ether	1,136
104767	2-Ethyl-1-Hexanol	1,574
107211	Ethylene Glycol	9,668,764
107222	Glyoxal	348
107982	Propylene Glycol Monomethyl Ether	41,410

Table 10-6: ***VOC Ingredients (sorted by CAS#) – Water-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
108010	n,n-Dimethylethanolamine	6,510
108032	1-Nitropropane	8,360
108656	Propylene Glycol Monomethyl Ether Acetate	2,990
108678	Mesitylene	6,590
108883	Toluene	12,435
108941	Cyclohexanone	1,078
109897	Diethylamine	103
110805	Ethoxyethanol, 2-	104
110918	Morpholine	1,231
110985	1,1-Oxydi-2-propanol	2,450
111273	Hexanol, N-	519
111466	Diethylene Glycol	192,411
111762	2-Butoxy Ethanol	621,847
111773	2-(2-Methoxyethoxy) Ethanol	197,852
111900	Diethylene Glycol Monoethyl Ether	10,089
112072	Butoxyethyl Acetate, 2-	669
112276	Triethylene Glycol	49,033
112345	2-(2-Butoxyethoxy) Ethanol	1,558,017
112594	Diethylene Glycol Monohexyl Ether	1,290
115968	Tris(2-Chloroethyl)Phosphate	1,469
121448	Triethylamine	14,831
122996	Ethylene Glycol Monophenyl Ether	14,409
123422	Diacetone Alcohol	2,124
123864	Butyl Acetate, 1-	1,077
124174	Diethylene Glycol Butyl Ether Acetate	28,031
124685	2-Amino-2-Methyl-1-Propanol	936,427
126738	Tributyl Phosphate	19,834
141048	Hexanedioic Acid, bis(2-methylpropyl) Ester	163
141435	Ethanolamine	1,778
141786	Ethyl Acetate	13,058
143226	Triethylene Glycol Monobutyl Ether	9,625
149575	2-Ethylhexanoic Acid	178
682111	Trimethylolpropane Monoallyl Ether	208
770354	Propylene Glycol Phenyl Ether	17,878
872504	1-Methyl-2-Pyrrolidinone	94,038
919302	1-Propanamine, 3-(triethoxysilyl)	1,567
925064	Butanedioic Acid, bis(2-methylpropyl) Ester	163
1330207	Xylene	17,514
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	9,174
1559360	Diethylene Glycol Mono-2-Ethyl Hexyl Ether	1,304
1569013	Propylene Glycol Monopropyl Ether	13,244
1760243	n-[3-(Trimethoxysilyl)propyl]-1,2-ethananediamine	366
2171962	Methoxysilane	23,449
2807309	Ethylene Glycol Monopropyl Ether	64,562
2943751	Triethoxyoctylsilane	13,354
4719044	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	11,622
5131668	Propylene Glycol Monobutyl Ether	68,667
5444757	2-Ethylhexyl Benzoate	128,168
8042475	Petroleum Distillate	642
8052413	Stoddard Solvent	1,666

Table 10-6: ***VOC Ingredients (sorted by CAS#) – Water-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
9003138	Poly[oxy(methyl-1,2-ethanediyl)], alpha-butyl-omega-hydroxy-	1,950
15821837	2-Butoxy-1-Propanol	3,185
25265718	Dipropylene Glycol	29,400
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	11,047,459
25498491	Tripropylene Glycol Methyl Ether	2,227
27646806	2(Methylamino)-2-methyl-1-propanol	4,287
29911271	Dipropylene Glycol Monopropyl Ether	178,630
29911282	Dipropylene Glycol Monobutyl Ether	291,920
34375285	Troysan 174	6,393
34590948	Dipropylene Glycol Methyl Ether	306,510
41593388	Phenoxypropanol	984
51200874	4,4-Dimethyloxazolidine	41,124
51730940	Dipropylene glycol phenyl ether	810
52299204	2((Hydroxymethyl)amino)-iso-butanol	488
56709138	Bicyclic Oxazolidine	164
64741442	Straight-Run Middle Distillate	9,911
64741657	Petroleum Naphtha, Heavy Alkylate	2,265
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897
64741895	Paraffinic Distillate	26,280
64742478	Distillate (Petroleum), Hydrotreated Light	774
64742525	Hydrotreated Heavy Naphthenic Distillate	140
64742536	Hydrotreated Light Naphthenic Distillate	10,703
64742956	Aromatic 100	1,561
68476302	Fuel oil no. 2	2,445
71195647	Pentanedioic acid, bis(2-methylpropyl) ester	501
108419358	Oxo-Tridecyl Acetate	5,007
111109774	Dipropylene Glycol Dimethyl Ether	7,844
127087870	Poly(oxy-1,2-ethanediyl), .alpha.-(4-nonylphenyl)-.omega.-hydroxy-, branched	985
	Water-borne VOCs Subtotal (lbs) =	**33,005,105**
	Water-borne VOCs Subtotal (tons/yr) =	**16,503**
	Water-borne VOCs Subtotal (tons/day) =	**45.2**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. This table does not include compounds that are exempt from ARB's VOC definition (e.g., acetone) or unknown ingredients.

Table 10-7: ***Exempt Compounds (sorted by Weight) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
67641	Acetone	4,165,403
98566	4-Chlorobenzotrifluoride	852,692
75092	Methylene Chloride	183,032
127184	Tetrachloroethylene	61,809
556672	Octamethylcyclotetrasiloxane	10,147
79209	Methyl Acetate	9,786
9982	Aggregated Exempt Compounds < 0.1%	2,824
107517	Octamethyltrisiloxane	1,247

Table 10-7: *Exempt Compounds (sorted by Weight) – All Coatings*

CAS #	Ingredient Name	Sales Quantity (lbs)
541026	Decamethylcyclopentasiloxane	1,130
141628	Decamethyltetrasiloxane	831
69430246	Dimethylcyclosiloxanes, D6 or greater	660
141639	Dodecamethylpentasiloxane	416
17980471	Silane, triethoxy(2-methylpropyl)-	46
	All Coatings ExemptsTotal (lbs) =	**5,290,021**
	All Coatings Exempts Total (tons/yr) =	**2,645**
	All Coatings Exempts Total (tons/day) =	**7.2**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.

Table 10-8: *Exempt Compounds (sorted by Weight) – Solvent-borne Coatings*

CAS #	Ingredient Name	Sales Quantity (lbs)
67641	Acetone	4,165,051
98566	4-Chlorobenzotrifluoride	852,692
75092	Methylene Chloride	183,032
127184	Tetrachloroethylene	61,809
79209	Methyl Acetate	9,786
556672	Octamethylcyclotetrasiloxane	8,437
107517	Octamethyltrisiloxane	1,247
141628	Decamethyltetrasiloxane	831
541026	Decamethylcyclopentasiloxane	807
141639	Dodecamethylpentasiloxane	416
69430246	Dimethylcyclosiloxanes, D6 or greater	125
9982	Aggregated Exempt Compounds < 0.1%	62
17980471	Silane, triethoxy(2-methylpropyl)-	46
	Solvent-borne Exempts Subtotal (lbs) =	**5,284,339**
	Solvent-borne Exempts Subtotal (tons/yr) =	**2,642**
	Solvent-borne Exempts Subtotal (tons/day) =	**7.2**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.

Table 10-9: *Exempt Compounds (sorted by Weight) – Water-borne Coatings*

CAS #	Ingredient Name	Sales Quantity (lbs)
9982	Aggregated Exempt Compounds < 0.1%	2,762
556672	Octamethylcyclotetrasiloxane	1,710
69430246	Dimethylcyclosiloxanes, D6 or greater	535
67641	Acetone	352
541026	Decamethylcyclopentasiloxane	323
	Water-borne Exempts Subtotal (lbs) =	**5,682**
	Water-borne Exempts Subtotal (tons/yr) =	**3**
	Water-borne Exempts Subtotal (tons/day) =	**0.0**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.

Table 10-10: ***Hydrocarbon Solvents Only (sorted by Bin and CAS#) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%
No Bin Reported			
0	Fuel Oil	4,135	
0	Aliphatic Solvent	505	
0	Petroleum Hydrocarbon	449	
0	Petroleum Distillate	105	
0	Saturated Hydrocarbon Distillates	7	
8008206	Kerosene	253,481	
8012951	Mineral Oil	47,669	
8030306	Naphtha	102	
8032324	Petroleum Ether	8,364	
8042475	Petroleum Distillate	642	
8052413	Stoddard Solvent	408,577	
64741419	Heavy Straight-Run Naphtha	6,918	
64741442	Straight-Run Middle Distillate	367,597	
64741657	Petroleum Naphtha, Heavy Alkylate	4,502	
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897	
64741895	Paraffinic Distillate	26,502	
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917	
64742467	Petroleum Distillates, Hydrotreated Middle	1,000	
64742478	Distillate (Petroleum), Hydrotreated Light	23,340	
64742489	Hydrotreated Heavy Naphtha	117,035	
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360	
64742525	Hydrotreated Heavy Naphthenic Distillate	51,297	
64742536	Hydrotreated Light Naphthenic Distillate	177,452	
64742547	Hydrotreated Heavy Paraffinic Distillate	55	
64742650	Distillates, petroleum, solvent-dewaxed heavy paraffinic	64	
64742821	Hydrodesulfurized Heavy Naphtha	1,670	
64742887	Medium Aliphatic Solvent Naphtha	310,229	
64742898	VM&P Naphtha	86,511	
64742945	Heavy aromatic naphtha solvent	3,053	
64742956	Aromatic 100	7,187	
64742967	Solvent naphtha, petroleum, heavy aliph.	0	
64771728	Isoparaffinic hydrocarbons	931	
68410979	Hydrotreated Light Distillate	3,101	
68476302	Fuel oil no. 2	134,535	
68476346	Fuel oil no. 2	3,377	
	No Bin Reported Subtotal =	**2,101,567**	**7%**
Bin 1			
8052412	Petroleum Distillate	921	
64742490	Naphtha, Petroleum, Hydrotreated Light	3	
	Bin 1 Subtotal (MIR 2.08) =	**924**	**0%**
Bin 2			
8052413	Stoddard Solvent	279,532	
64742821	Hydrodesulfurized Heavy Naphtha	1,941	
	Bin 2 Subtotal (MIR 1.59) =	**281,473**	**1%**
Bin 5			
8032324	Petroleum Ether	0	
8052413	Stoddard Solvent	67	
64741419	Heavy Straight-Run Naphtha	63	

Table 10-10: ***Hydrocarbon Solvents Only (sorted by Bin and CAS#) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%
64742898	VM&P Naphtha	236,978	
	Bin 5 Subtotal (MIR 2.56) =	**237,108**	**1%**
Bin 6			
0	Hydrocarbons	174,653	
0	Petroleum Hydrocarbon	125	
8002059	Petroleum Distillate	30,778	
8030306	Naphtha	2,670	
8032324	Petroleum Ether	89,900	
8052413	Stoddard Solvent	316,497	
64741657	Petroleum Naphtha, Heavy Alkylate	6,039	
64742478	Distillate (Petroleum), Hydrotreated Light	65,425	
64742489	Hydrotreated Heavy Naphtha	5,849	
64742490	Naphtha, Petroleum, Hydrotreated Light	28,677	
64742525	Hydrotreated Heavy Naphthenic Distillate	18,886	
64742887	Medium Aliphatic Solvent Naphtha	179,522	
64742898	VM&P Naphtha	926,592	
64742945	Heavy aromatic naphtha solvent	8	
64742956	Aromatic 100	50,808	
68920069	Hydrocarbons, C7-C9	4,516	
	Bin 6 Subtotal (MIR 1.41) =	**1,900,944**	**6%**
Bin 7			
64741668	Naphtha, Petroleum	3	
64742489	Hydrotreated Heavy Naphtha	31,714	
64742898	VM&P Naphtha	2	
	Bin 7 Subtotal (MIR 1.17) =	**31,719**	**0%**
Bin 9			
0	Mineral Spirits	16	
8030306	Naphtha	9,050	
8052413	Stoddard Solvent	499,525	
64742490	Naphtha, Petroleum, Hydrotreated Light	13,053	
	Bin 9 Subtotal (MIR 1.62) =	**521,645**	**2%**
Bin 10			
8052413	Stoddard Solvent	809,069	
64742478	Distillate (Petroleum), Hydrotreated Light	337	
64742489	Hydrotreated Heavy Naphtha	126	
64742547	Hydrotreated Heavy Paraffinic Distillate	3,142	
64742887	Medium Aliphatic Solvent Naphtha	1,018,111	
64742956	Aromatic 100	366	
68410979	Hydrotreated Light Distillate	317	
	Bin 10 Subtotal (MIR 2.03) =	**1,831,467**	**6%**
Bin 11			
0	Mineral Spirits	13,383	
8008206	Kerosene	24,623	
8032324	Petroleum Ether	31,133	
8052413	Stoddard Solvent	7,840,463	
64741657	Petroleum Naphtha, Heavy Alkylate	134,161	
64741884	Solvent-Refined Heavy Paraffinic Distillate	38	
64742467	Petroleum Distillates, Hydrotreated Middle	6	
64742478	Distillate (Petroleum), Hydrotreated Light	1,004,454	
64742489	Hydrotreated Heavy Naphtha	356,741	

Table 10-10: ***Hydrocarbon Solvents Only (sorted by Bin and CAS#) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%
64742490	Naphtha, Petroleum, Hydrotreated Light	0	
64742536	Hydrotreated Light Naphthenic Distillate	805	
64742650	Distillates, petroleum, solvent-dewaxed heavy paraffinic	657	
64742887	Medium Aliphatic Solvent Naphtha	6,307,624	
64742898	VM&P Naphtha	290,706	
64742956	Aromatic 100	1,086	
	Bin 11 Subtotal (MIR 0.91) =	**16,005,880**	**54%**
Bin 12			
0	Naphtha	35	
0	Petroleum Hydrocarbon	15	
8052413	Stoddard Solvent	541,711	
64741657	Petroleum Naphtha, Heavy Alkylate	2,267	
64742478	Distillate (Petroleum), Hydrotreated Light	341,320	
64742489	Hydrotreated Heavy Naphtha	151,972	
64742887	Medium Aliphatic Solvent Naphtha	349	
	Bin 12 Subtotal (MIR 0.81) =	**1,037,669**	**3%**
Bin 13			
64742536	Hydrotreated Light Naphthenic Distillate	11	
	Bin 13 Subtotal (MIR 1.01) =	**11**	**0%**
Bin 14			
8052413	Stoddard Solvent	374,060	
64742478	Distillate (Petroleum), Hydrotreated Light	1,396	
64742887	Medium Aliphatic Solvent Naphtha	80	
64742898	VM&P Naphtha	1	
64742945	Heavy aromatic naphtha solvent	357	
	Bin 14 Subtotal (MIR 1.21) =	**375,894**	**1%**
Bin 15			
8052413	Stoddard Solvent	2,632,704	
64741419	Heavy Straight-Run Naphtha	127,744	
64741657	Petroleum Naphtha, Heavy Alkylate	539,525	
64741895	Paraffinic Distillate	10,299	
64742478	Distillate (Petroleum), Hydrotreated Light	317,133	
64742489	Hydrotreated Heavy Naphtha	407	
64742558	Distillates(Petroleum), Hydrotreated Light Paraffinic	1	
64742650	Distillates, petroleum, solvent-dewaxed heavy paraffinic	1,000	
64742821	Hydrodesulfurized Heavy Naphtha	1,450	
64742887	Medium Aliphatic Solvent Naphtha	9,040	
64742898	VM&P Naphtha	10	
64742945	Heavy aromatic naphtha solvent	94	
64742956	Aromatic 100	6,325	
	Bin 15 Subtotal (MIR 1.82) =	**3,645,733**	**12%**
Bin 16			
64742467	Petroleum Distillates, Hydrotreated Middle	1,455	
64742478	Distillate (Petroleum), Hydrotreated Light	13,736	
64742525	Hydrotreated Heavy Naphthenic Distillate	2	
	Bin 16 Subtotal (MIR 0.57) =	**15,193**	**0%**

Table 10-10: ***Hydrocarbon Solvents Only (sorted by Bin and CAS#) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%
Bin 21			
64742945	Heavy aromatic naphtha solvent	2,934	
64742956	Aromatic 100	9,838	
	Bin 21 Subtotal (MIR 7.37) =	**12,772**	**0%**
Bin 22			
64742478	Distillate (Petroleum), Hydrotreated Light	2	
64742898	VM&P Naphtha	673	
64742945	Heavy aromatic naphtha solvent	9,979	
64742956	Aromatic 100	1,479,995	
	Bin 22 Subtotal (MIR 7.51) =	**1,490,650**	**5%**
Bin 23			
0	Petroleum Distillate	46	
64742945	Heavy aromatic naphtha solvent	99,269	
64742956	Aromatic 100	135,931	
70693060	Aromatic Hydrocarbons, C9-11	2	
	Bin 23 Subtotal (MIR 8.07) =	**235,248**	**1%**
Bin 24			
64742945	Heavy aromatic naphtha solvent	10,791	
	Bin 24 Subtotal (MIR 5.00) =	**10,791**	**0%**
	All Coatings Hydrocarbons Subtotal (lbs) =	**29,736,689**	
	All Coatings Hydrocarbons Subtotal (tons/yr) =	**14,868**	
	All Coatings Hydrocarbons Subtotal (tons/day) =	**40.7**	

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.

Table 10-11: ***Hydrocarbon Solvents Only (sorted by Weight) – Solvent-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
0	Bin 11 Hydrocarbon Solvent	15,652,663
0	Bin 15 Hydrocarbon Solvent	3,500,977
0	Bin 6 Hydrocarbon Solvent	1,881,536
0	Bin 10 Hydrocarbon Solvent	1,803,228
0	Bin 22 Hydrocarbon Solvent	1,437,304
0	Bin 12 Hydrocarbon Solvent	1,016,166
0	Bin 9 Hydrocarbon Solvent	502,591
8052413	Stoddard Solvent	406,911
0	Bin 14 Hydrocarbon Solvent	374,897
64741442	Straight-Run Middle Distillate	357,686
64742887	Medium Aliphatic Solvent Naphtha	310,226
0	Bin 2 Hydrocarbon Solvent	280,644
8008206	Kerosene	253,481
0	Bin 5 Hydrocarbon Solvent	236,978
0	Bin 23 Hydrocarbon Solvent	211,292
64742536	Hydrotreated Light Naphthenic Distillate	166,749
68476302	Fuel oil no. 2	132,090
64742489	Hydrotreated Heavy Naphtha	117,035
64742898	VM&P Naphtha	86,511
64742525	Hydrotreated Heavy Naphthenic Distillate	51,157

Table 10-11: ***Hydrocarbon Solvents Only (sorted by Weight) – Solvent-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
8012951	Mineral Oil	47,669
0	Bin 7 Hydrocarbon Solvent	31,714
64742478	Distillate (Petroleum), Hydrotreated Light	22,566
0	Bin 16 Hydrocarbon Solvent	14,948
0	Bin 24 Hydrocarbon Solvent	10,672
0	Bin 21 Hydrocarbon Solvent	9,838
8032324	Petroleum Ether	8,364
64741419	Heavy Straight-Run Naphtha	6,918
64742047	Heavy Paraffinic Distillate Solvent Extract	6,917
64742956	Aromatic 100	5,626
0	Fuel Oil	4,135
68476346	Fuel oil no. 2	3,377
68410979	Hydrotreated Light Distillate	3,101
64742945	Heavy aromatic naphtha solvent	2,995
64741657	Petroleum Naphtha, Heavy Alkylate	2,237
64742821	Hydrodesulfurized Heavy Naphtha	1,670
64742490	Naphtha, Petroleum, Hydrotreated Light	1,360
64742467	Petroleum Distillates, Hydrotreated Middle	1,000
64771728	Isoparaffinic hydrocarbons	931
0	Bin 1 Hydrocarbon Solvent	921
0	Other Ingredients (<100 Lbs each)	455
64741895	Paraffinic Distillate	223
8030306	Naphtha	102
	Solvent-borne Hydrocarbons Subtotal (lbs) =	**28,967,860**
	Solvent-borne Hydrocarbons Subtotal (tons/yr) =	**14,484**
	Solvent-borne Hydrocarbons Subtotal (tons/day) =	**39.7**

Notes:

1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. "Other Ingredients (<100 Lbs each)" is the sum of all hydrocarbon solvents that were reported in quantities of 100 pounds or less.

Table 10-12: ***Hydrocarbon Solvents Only (sorted by Weight) – Water-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
0	Bin 11 Hydrocarbon Solvent	353,173
0	Bin 15 Hydrocarbon Solvent	144,648
0	Bin 22 Hydrocarbon Solvent	53,344
64741884	Solvent-Refined Heavy Paraffinic Distillate	42,897
0	Bin 10 Hydrocarbon Solvent	28,214
64741895	Paraffinic Distillate	26,280
0	Bin 23 Hydrocarbon Solvent	23,851
0	Bin 12 Hydrocarbon Solvent	21,437
0	Bin 6 Hydrocarbon Solvent	19,346
0	Bin 9 Hydrocarbon Solvent	19,037
64742536	Hydrotreated Light Naphthenic Distillate	10,703
64741442	Straight-Run Middle Distillate	9,911
0	Bin 21 Hydrocarbon Solvent	2,934
68476302	Fuel oil no. 2	2,445

Table 10-12: ***Hydrocarbon Solvents Only (sorted by Weight) – Water-borne Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)
64741657	Petroleum Naphtha, Heavy Alkylate	2,265
8052413	Stoddard Solvent	1,666
64742956	Aromatic 100	1,561
0	Bin 14 Hydrocarbon Solvent	916
0	Bin 2 Hydrocarbon Solvent	829
64742478	Distillate (Petroleum), Hydrotreated Light	774
8042475	Petroleum Distillate	642
0	Aliphatic Solvent	505
0	Petroleum Hydrocarbon	449
0	Other Ingredients (<100 Lbs each)	394
0	Bin 16 Hydrocarbon Solvent	243
64742525	Hydrotreated Heavy Naphthenic Distillate	140
0	Bin 24 Hydrocarbon Solvent	119
0	Petroleum Distillate	105
	Water-borne Hydrocarbons Subtotal (lbs) =	**768,828**
	Water-borne Hydrocarbons Subtotal (tons/yr) =	**384**
	Water-borne Hydrocarbons Subtotal (tons/day) =	**1.1**

Notes:
1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. "Other Ingredients (<100 Lbs each)" is the sum of all hydrocarbon solvents that were reported in quantities of 100 pounds or less.

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Bituminous Roof - Solventborne				
	Bin 15 Hydrocarbon Solvent	235,545	84%	84%
	Bin 22 Hydrocarbon Solvent	43,062	15%	99%
	Other Ingredients	3,135	1%	100%
	Subtotal:	**281,742**		
Bituminous Roof - Waterborne				
57556	Propylene Glycol	17,038	89%	89%
	Other Ingredients	2,189	11%	100%
	Subtotal:	**19,227**		
Bituminous Roof Primer - Solventborne				
	Bin 15 Hydrocarbon Solvent	80,214	48%	48%
	Bin 6 Hydrocarbon Solvent	43,343	26%	73%
	Bin 14 Hydrocarbon Solvent	21,281	13%	86%
	Bin 22 Hydrocarbon Solvent	12,620	7%	93%
	Other Ingredients	11,055	7%	100%
	Subtotal:	**168,514**		
Bituminous Roof Primer - Waterborne				
1569013	Propylene Glycol Monopropyl Ether	4,733	100%	100%
	Other Ingredients	19	0%	100%
	Subtotal:	**4,752**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Concrete Curing Compounds - Solventborne				
	Bin 22 Hydrocarbon Solvent	58,744	66%	66%
	Bin 15 Hydrocarbon Solvent	11,324	13%	78%
	Bin 11 Hydrocarbon Solvent	8,364	9%	88%
67641	Acetone	6,968	8%	95%
	Other Ingredients	4,145	5%	100%
	Subtotal:	**89,543**		
Concrete Curing Compounds - Waterborne				
	Bin 15 Hydrocarbon Solvent	101,247	49%	49%
111762	2-Butoxy Ethanol	38,274	18%	67%
	Bin 22 Hydrocarbon Solvent	17,403	8%	75%
9981	Aggregated VOCs < 0.1%	16,284	8%	83%
107211	Ethylene Glycol	10,407	5%	88%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	10,070	5%	93%
64741442	Straight-Run Middle Distillate	4,219	2%	95%
	Other Ingredients	10,134	5%	100%
	Subtotal:	**208,038**		
Dry Fog - Solventborne				
	Bin 5 Hydrocarbon Solvent	220,033	44%	44%
	Bin 6 Hydrocarbon Solvent	91,043	18%	63%
	Bin 11 Hydrocarbon Solvent	66,124	13%	76%
64742489	Hydrotreated Heavy Naphtha	40,942	8%	84%
	Bin 10 Hydrocarbon Solvent	17,931	4%	88%
	Bin 9 Hydrocarbon Solvent	13,557	3%	90%
	Bin 15 Hydrocarbon Solvent	13,077	3%	93%
1330207	Xylene	9,279	2%	95%
	Other Ingredients	25,072	5%	100%
	Subtotal:	**497,057**		
Dry Fog - Waterborne				
	Bin 11 Hydrocarbon Solvent	29,791	32%	32%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	14,214	15%	48%
67630	Isopropanol	12,599	14%	61%
	Bin 6 Hydrocarbon Solvent	12,261	13%	74%
64175	Ethanol	10,845	12%	86%
111762	2-Butoxy Ethanol	3,700	4%	90%
9981	Aggregated VOCs < 0.1%	2,707	3%	93%
1330207	Xylene	1,599	2%	95%
	Other Ingredients	4,722	5%	100%
	Subtotal:	**92,440**		
Faux Finishing - Solventborne				
	Bin 11 Hydrocarbon Solvent	10,373	71%	71%
	Bin 9 Hydrocarbon Solvent	2,536	17%	89%
64741657	Petroleum Naphtha, Heavy Alkylate	808	6%	94%
1330207	Xylene	345	2%	97%
	Other Ingredients	490	3%	100%
	Subtotal:	**14,551**		
Faux Finishing - Waterborne				
57556	Propylene Glycol	96,403	41%	41%
107211	Ethylene Glycol	67,149	29%	70%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	37,130	16%	85%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
	Bin 11 Hydrocarbon Solvent	10,055	4%	90%
111466	Diethylene Glycol	9,847	4%	94%
124685	2-Amino-2-Methyl-1-Propanol	4,722	2%	96%
	Other Ingredients	9,472	4%	100%
	Subtotal:	**234,777**		
Flat - Solventborne				
1330207	Xylene	9,567	84%	84%
	Bin 11 Hydrocarbon Solvent	445	4%	88%
	Bin 6 Hydrocarbon Solvent	327	3%	91%
110430	Methyl-n-Amyl Ketone	279	2%	93%
8052413	Stoddard Solvent	229	2%	95%
67641	Acetone	224	2%	97%
	Other Ingredients	330	3%	100%
	Subtotal:	**11,400**		
Flat - Waterborne				
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	4,719,147	47%	47%
107211	Ethylene Glycol	2,543,951	25%	73%
57556	Propylene Glycol	1,339,892	13%	86%
124685	2-Amino-2-Methyl-1-Propanol	444,866	4%	91%
9981	Aggregated VOCs < 0.1%	323,919	3%	94%
112345	2-(2-Butoxyethoxy) Ethanol	295,365	3%	97%
	Other Ingredients	319,707	3%	100%
	Subtotal:	**9,986,847**		
Floor – Solventborne				
	Bin 22 Hydrocarbon Solvent	84,073	60%	60%
	Bin 15 Hydrocarbon Solvent	29,895	21%	81%
	Bin 11 Hydrocarbon Solvent	18,250	13%	94%
	Bin 9 Hydrocarbon Solvent	3,824	3%	97%
	Bin 10 Hydrocarbon Solvent	1,980	1%	98%
1330207	Xylene	1,125	1%	99%
	Other Ingredients	1,746	1%	100%
	Subtotal:	**140,894**		
Floor – Waterborne				
29911271	Dipropylene Glycol Monopropyl Ether	174,494	40%	40%
107211	Ethylene Glycol	61,036	14%	53%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	59,590	14%	67%
29911282	Dipropylene Glycol Monobutyl Ether	32,393	7%	74%
57556	Propylene Glycol	28,155	6%	81%
111762	2-Butoxy Ethanol	25,784	6%	86%
112345	2-(2-Butoxyethoxy) Ethanol	16,359	4%	90%
2807309	Ethylene Glycol Monopropyl Ether	14,674	3%	93%
9981	Aggregated VOCs < 0.1%	9,226	2%	96%
124685	2-Amino-2-Methyl-1-Propanol	5,390	1%	97%
111466	Diethylene Glycol	5,357	1%	98%
	Other Ingredients	8,840	2%	100%
	Subtotal:	**441,300**		
Form Release Compounds - Solventborne				
64741442	Straight-Run Middle Distillate	357,686	61%	61%
68476302	Fuel oil no. 2	131,864	23%	84%
8012951	Mineral Oil	46,711	8%	92%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
	Bin 15 Hydrocarbon Solvent	12,861	2%	94%
64742536	Hydrotreated Light Naphthenic Distillate	12,462	2%	96%
	Other Ingredients	21,917	4%	100%
	Subtotal:	**583,501**		
Form Release Compounds - Waterborne				
64741442	Straight-Run Middle Distillate	5,692	59%	59%
68476302	Fuel oil no. 2	2,445	25%	84%
25498491	Tripropylene Glycol Methyl Ether	631	7%	91%
64742536	Hydrotreated Light Naphthenic Distillate	501	5%	96%
	Other Ingredients	370	4%	100%
	Subtotal:	**9,639**		
High Temperature - Solventborne				
	Bin 11 Hydrocarbon Solvent	16,329	33%	33%
98566	4-Chlorobenzotrifluoride	12,154	24%	57%
1330207	Xylene	5,175	10%	67%
110430	Methyl-n-Amyl Ketone	4,632	9%	76%
	Bin 6 Hydrocarbon Solvent	3,411	7%	83%
67641	Acetone	2,789	6%	89%
	Bin 23 Hydrocarbon Solvent	1,676	3%	92%
100516	Benzyl Alcohol	1,101	2%	94%
78933	Methyl Ethyl Ketone	514	1%	95%
	Other Ingredients	2,318	5%	100%
	Subtotal:	**50,100**		
Industrial Maintenance - Solventborne				
1330207	Xylene	488,028	18%	18%
	Bin 11 Hydrocarbon Solvent	431,605	16%	34%
110430	Methyl-n-Amyl Ketone	159,397	6%	40%
	Bin 14 Hydrocarbon Solvent	154,288	6%	45%
	Bin 22 Hydrocarbon Solvent	141,494	5%	50%
123864	Butyl Acetate, 1-	122,047	4%	55%
	Bin 15 Hydrocarbon Solvent	109,552	4%	59%
	Bin 10 Hydrocarbon Solvent	96,828	4%	62%
	Bin 12 Hydrocarbon Solvent	91,080	3%	66%
95636	1,2,4-Trimethylbenzene	83,949	3%	69%
108101	Methyl Isobutyl Ketone	79,733	3%	72%
100414	Ethyl Benzene	71,441	3%	74%
	Bin 6 Hydrocarbon Solvent	69,175	3%	77%
	Bin 23 Hydrocarbon Solvent	64,992	2%	79%
98566	4-Chlorobenzotrifluoride	49,246	2%	81%
108656	Propylene Glycol Monomethyl Ether Acetate	47,704	2%	83%
	Bin 9 Hydrocarbon Solvent	36,339	1%	84%
71363	n-Butanol	32,259	1%	85%
100516	Benzyl Alcohol	29,989	1%	87%
108883	Toluene	29,937	1%	88%
107982	Propylene Glycol Monomethyl Ether	29,266	1%	89%
78933	Methyl Ethyl Ketone	29,018	1%	90%
67641	Acetone	28,112	1%	91%
67630	Isopropanol	19,604	1%	92%
9981	Aggregated VOCs < 0.1%	17,885	1%	92%
8052413	Stoddard Solvent	17,044	1%	93%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
763699	Ethyl 3-ethoxypropionate	15,556	1%	93%
108678	Mesitylene	14,711	1%	94%
64175	Ethanol	12,189	0%	94%
111762	2-Butoxy Ethanol	11,799	0%	95%
	Other Ingredients	142,349	5%	100%
	Subtotal:	**2,726,618**		
Industrial Maintenance - Waterborne				
111762	2-Butoxy Ethanol	90,678	20%	20%
111773	2-(2-Methoxyethoxy) Ethanol	65,672	15%	35%
112345	2-(2-Butoxyethoxy) Ethanol	45,616	10%	45%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	44,846	10%	55%
2807309	Ethylene Glycol Monopropyl Ether	28,497	6%	61%
29911282	Dipropylene Glycol Monobutyl Ether	27,362	6%	67%
57556	Propylene Glycol	26,472	6%	73%
78922	Butyl Alcohol, Sec-	17,457	4%	77%
107211	Ethylene Glycol	12,155	3%	79%
	Bin 10 Hydrocarbon Solvent	10,811	2%	82%
34590948	Dipropylene Glycol Methyl Ether	8,495	2%	84%
9981	Aggregated VOCs < 0.1%	6,593	1%	85%
5131668	Propylene Glycol Monobutyl Ether	6,337	1%	86%
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	5,880	1%	88%
107982	Propylene Glycol Monomethyl Ether	5,648	1%	89%
108419358	Oxo-Tridecyl Acetate	4,463	1%	90%
67630	Isopropanol	3,721	1%	91%
770354	Propylene Glycol Phenyl Ether	3,359	1%	92%
1569013	Propylene Glycol Monopropyl Ether	2,855	1%	92%
64175	Ethanol	2,689	1%	93%
	Bin 23 Hydrocarbon Solvent	2,481	1%	93%
108656	Propylene Glycol Monomethyl Ether Acetate	2,177	0%	94%
64197	Acetic Acid	2,140	0%	94%
872504	1-Methyl-2-Pyrrolidinone	2,101	0%	95%
	Other Ingredients	23,486	5%	100%
	Subtotal:	**451,990**		
Lacquers - Solventborne				
67641	Acetone	2,932,886	57%	57%
123864	Butyl Acetate, 1-	637,252	12%	69%
67630	Isopropanol	227,144	4%	73%
110430	Methyl-n-Amyl Ketone	219,173	4%	77%
111762	2-Butoxy Ethanol	196,378	4%	81%
78831	1-Propanol, 2-Methyl-	176,040	3%	85%
1330207	Xylene	131,040	3%	87%
108883	Toluene	118,024	2%	89%
	Bin 11 Hydrocarbon Solvent	95,882	2%	91%
	Bin 6 Hydrocarbon Solvent	82,116	2%	93%
78933	Methyl Ethyl Ketone	46,714	1%	94%
97858	Isobutyl Isobutyrate	39,537	1%	95%
98566	4-Chlorobenzotrifluoride	38,055	1%	95%
	Other Ingredients	246,221	5%	100%
	Subtotal:	**5,186,462**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Lacquers - Waterborne				
111762	2-Butoxy Ethanol	41,468	22%	22%
64175	Ethanol	21,064	11%	34%
34590948	Dipropylene Glycol Methyl Ether	17,745	10%	43%
872504	1-Methyl-2-Pyrrolidinone	17,525	9%	53%
5131668	Propylene Glycol Monobutyl Ether	16,251	9%	62%
112345	2-(2-Butoxyethoxy) Ethanol	14,110	8%	69%
107982	Propylene Glycol Monomethyl Ether	11,826	6%	76%
107211	Ethylene Glycol	11,178	6%	82%
29911282	Dipropylene Glycol Monobutyl Ether	8,556	5%	86%
57556	Propylene Glycol	5,458	3%	89%
	Bin 22 Hydrocarbon Solvent	4,182	2%	91%
95636	1,2,4-Trimethylbenzene	3,561	2%	93%
9981	Aggregated VOCs < 0.1%	3,064	2%	95%
	Other Ingredients	9,371	5%	100%
	Subtotal:	**185,359**		
Low Solids – Waterborne				
	Bin 11 Hydrocarbon Solvent	13,574	42%	42%
107211	Ethylene Glycol	6,458	20%	62%
111762	2-Butoxy Ethanol	3,662	11%	73%
34590948	Dipropylene Glycol Methyl Ether	1,781	5%	78%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	1,561	5%	83%
872504	1-Methyl-2-Pyrrolidinone	1,425	4%	88%
9981	Aggregated VOCs < 0.1%	1,147	4%	91%
57556	Propylene Glycol	541	2%	93%
121448	Triethylamine	468	1%	94%
2943751	Triethoxyoctylsilane	458	1%	96%
	Other Ingredients	1,420	4%	100%
	Subtotal:	**32,494**		
Metallic Pigmented - Solventborne				
	Bin 15 Hydrocarbon Solvent	972,712	63%	63%
	Bin 22 Hydrocarbon Solvent	235,476	15%	78%
	Bin 6 Hydrocarbon Solvent	150,922	10%	88%
	Bin 11 Hydrocarbon Solvent	87,990	6%	93%
1330207	Xylene	22,890	1%	95%
	Other Ingredients	78,609	5%	100%
	Subtotal:	**1,548,598**		
Metallic Pigmented -Waterborne				
	Bin 15 Hydrocarbon Solvent	9,686	32%	32%
108032	1-Nitropropane	8,339	28%	60%
4719044	Hexahydro-1,3,5-tris(2-hydroxyethyl)-s-triazine	2,703	9%	69%
57556	Propylene Glycol	2,667	9%	77%
111773	2-(2-Methoxyethoxy) Ethanol	2,306	8%	85%
5131668	Propylene Glycol Monobutyl Ether	1,011	3%	88%
1559359	Ethylene Glycol Mono-2-Ethyl Hexyl Ether	718	2%	91%
	Bin 22 Hydrocarbon Solvent	576	2%	93%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	523	2%	94%
67630	Isopropanol	441	1%	96%
	Other Ingredients	1,286	4%	100%
	Subtotal:	**30,256**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Nonflat - High Gloss - Solventborne				
	Bin 11 Hydrocarbon Solvent	84,963	69%	69%
	Bin 9 Hydrocarbon Solvent	9,640	8%	77%
8052413	Stoddard Solvent	7,702	6%	83%
1330207	Xylene	3,653	3%	86%
	Bin 15 Hydrocarbon Solvent	3,140	3%	88%
64742489	Hydrotreated Heavy Naphtha	2,735	2%	91%
	Bin 10 Hydrocarbon Solvent	2,651	2%	93%
9981	Aggregated VOCs < 0.1%	1,503	1%	94%
107982	Propylene Glycol Monomethyl Ether	993	1%	95%
	Other Ingredients	6,514	5%	100%
	Subtotal:	**123,495**		
Nonflat - High Gloss - Waterborne				
107211	Ethylene Glycol	253,796	30%	30%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	243,293	29%	58%
57556	Propylene Glycol	126,865	15%	73%
5444757	2-Ethylhexyl Benzoate	123,592	15%	88%
124685	2-Amino-2-Methyl-1-Propanol	38,232	4%	92%
112345	2-(2-Butoxyethoxy) Ethanol	32,463	4%	96%
	Other Ingredients	32,419	4%	100%
	Subtotal:	**850,659**		
Nonflat - Low Gloss - Solventborne				
	Bin 11 Hydrocarbon Solvent	10,092	78%	78%
	Bin 10 Hydrocarbon Solvent	1,294	10%	88%
	Bin 12 Hydrocarbon Solvent	409	3%	92%
	Bin 9 Hydrocarbon Solvent	320	2%	94%
1330207	Xylene	275	2%	96%
	Other Ingredients	497	4%	100%
	Subtotal:	**12,888**		
Nonflat - Low Gloss - Waterborne				
107211	Ethylene Glycol	1,904,233	40%	40%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	1,414,011	30%	69%
57556	Propylene Glycol	680,198	14%	83%
112345	2-(2-Butoxyethoxy) Ethanol	215,838	5%	88%
9981	Aggregated VOCs < 0.1%	155,515	3%	91%
124685	2-Amino-2-Methyl-1-Propanol	109,591	2%	94%
29911282	Dipropylene Glycol Monobutyl Ether	73,474	2%	95%
	Other Ingredients	236,315	5%	100%
	Subtotal:	**4,789,174**		
Nonflat - Medium Gloss – Solventborne				
	Bin 11 Hydrocarbon Solvent	159,780	66%	66%
	Bin 15 Hydrocarbon Solvent	40,243	17%	83%
	Bin 9 Hydrocarbon Solvent	20,007	8%	91%
8052413	Stoddard Solvent	3,077	1%	92%
	Bin 10 Hydrocarbon Solvent	2,883	1%	94%
	Bin 14 Hydrocarbon Solvent	2,501	1%	95%
	Other Ingredients	12,884	5%	100%
	Subtotal:	**241,375**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Nonflat - Medium Gloss - Waterborne				
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	2,799,212	34%	34%
107211	Ethylene Glycol	2,416,582	29%	63%
57556	Propylene Glycol	1,967,848	24%	87%
112345	2-(2-Butoxyethoxy) Ethanol	602,084	7%	94%
9981	Aggregated VOCs < 0.1%	195,205	2%	96%
	Other Ingredients	312,892	4%	100%
	Subtotal:	**8,293,823**		
Other – Solventborne				
1330207	Xylene	3,732	33%	33%
108883	Toluene	1,580	14%	47%
123864	Butyl Acetate, 1-	1,347	12%	58%
78933	Methyl Ethyl Ketone	931	8%	67%
71363	n-Butanol	884	8%	74%
100414	Ethyl Benzene	726	6%	81%
	Bin 22 Hydrocarbon Solvent	677	6%	87%
67641	Acetone	652	6%	92%
	Bin 10 Hydrocarbon Solvent	353	3%	96%
	Other Ingredients	507	4%	100%
	Subtotal:	**11,389**		
Other – Waterborne				
64175	Ethanol	1,252	37%	37%
9981	Aggregated VOCs < 0.1%	587	18%	55%
111900	Diethylene Glycol Monoethyl Ether	399	12%	67%
770354	Propylene Glycol Phenyl Ether	222	7%	74%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	213	6%	80%
112345	2-(2-Butoxyethoxy) Ethanol	194	6%	86%
872504	1-Methyl-2-Pyrrolidinone	163	5%	91%
67630	Isopropanol	157	5%	95%
	Other Ingredients	153	5%	100%
	Subtotal:	**3,341**		
Primer, Sealer, and Undercoater - Solventborne				
	Bin 11 Hydrocarbon Solvent	551,598	75%	75%
67641	Acetone	36,326	5%	80%
	Bin 6 Hydrocarbon Solvent	29,707	4%	84%
	Bin 12 Hydrocarbon Solvent	18,438	3%	87%
1330207	Xylene	11,005	2%	88%
	Bin 10 Hydrocarbon Solvent	10,738	1%	90%
127184	Tetrachloroethylene	9,322	1%	91%
	Bin 7 Hydrocarbon Solvent	8,565	1%	92%
	Bin 22 Hydrocarbon Solvent	8,430	1%	93%
	Bin 9 Hydrocarbon Solvent	6,266	1%	94%
98566	4-Chlorobenzotrifluoride	5,654	1%	95%
123864	Butyl Acetate, 1-	5,511	1%	96%
	Other Ingredients	31,612	4%	100%
	Subtotal:	**733,171**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Primer, Sealer, and Undercoater - Waterborne				
107211	Ethylene Glycol	1,893,142	48%	48%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	1,216,951	31%	79%
57556	Propylene Glycol	246,151	6%	85%
124685	2-Amino-2-Methyl-1-Propanol	178,214	5%	90%
112345	2-(2-Butoxyethoxy) Ethanol	154,373	4%	94%
9981	Aggregated VOCs < 0.1%	51,088	1%	95%
	Other Ingredients	205,215	5%	100%
	Subtotal:	**3,945,133**		
Quick Dry Enamel -Solventborne				
	Bin 11 Hydrocarbon Solvent	1,703,563	73%	73%
	Bin 10 Hydrocarbon Solvent	251,012	11%	84%
	Bin 12 Hydrocarbon Solvent	165,370	7%	91%
	Bin 15 Hydrocarbon Solvent	43,398	2%	93%
1330207	Xylene	35,532	2%	94%
	Bin 6 Hydrocarbon Solvent	34,672	1%	96%
	Other Ingredients	102,611	4%	100%
	Subtotal:	**2,336,158**		
Quick Dry Enamel - Waterborne				
111762	2-Butoxy Ethanol	33,682	78%	78%
112345	2-(2-Butoxyethoxy) Ethanol	3,082	7%	86%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	3,012	7%	93%
107211	Ethylene Glycol	1,325	3%	96%
	Other Ingredients	1,856	4%	100%
	Subtotal:	**42,956**		
Quick Dry Primer, Sealer, and Undercoater - Solventborne				
	Bin 6 Hydrocarbon Solvent	459,997	62%	62%
	Bin 11 Hydrocarbon Solvent	161,981	22%	84%
67641	Acetone	31,453	4%	88%
8052413	Stoddard Solvent	18,193	2%	90%
1330207	Xylene	12,913	2%	92%
64742898	VM&P Naphtha	9,153	1%	93%
64742478	Distillate (Petroleum), Hydrotreated Light	7,627	1%	94%
78933	Methyl Ethyl Ketone	5,701	1%	95%
	Other Ingredients	35,803	5%	100%
	Subtotal:	**742,821**		
Quick Dry Primer, Sealer, and Undercoater - Waterborne				
51200874	4,4-Dimethyloxazolidine	623	33%	33%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	409	22%	55%
9981	Aggregated VOCs < 0.1%	234	13%	68%
57556	Propylene Glycol	221	12%	80%
112345	2-(2-Butoxyethoxy) Ethanol	170	9%	89%
770354	Propylene Glycol Phenyl Ether	108	6%	95%
	Other Ingredients	102	5%	100%
	Subtotal:	**1,867**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Recycled -Waterborne				
9981	Aggregated VOCs < 0.1%	6,904	41%	41%
9985	Other VOC	6,562	39%	80%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	1,701	10%	90%
	Other Ingredients	1,668	10%	100%
	Subtotal:	**16,835**		
Roof – Solventborne				
	Bin 6 Hydrocarbon Solvent	51,968	59%	59%
	Bin 22 Hydrocarbon Solvent	5,616	6%	66%
96297	Ethyl Methyl Ketone Oxime	5,576	6%	72%
	Bin 15 Hydrocarbon Solvent	4,265	5%	77%
98566	4-Chlorobenzotrifluoride	2,794	3%	80%
124174	Diethylene Glycol Butyl Ether Acetate	2,401	3%	83%
95636	1,2,4-Trimethylbenzene	2,381	3%	86%
1330207	Xylene	1,674	2%	88%
22984549	Methyltris(ethylmethylketoxime)silane	1,662	2%	90%
107517	Octamethyltrisiloxane	1,247	1%	91%
5989275	D-limonene	1,175	1%	92%
84852153	4-Nonylphenol (branched)	853	1%	93%
141628	Decamethyltetrasiloxane	831	1%	94%
	Other Ingredients	5,003	6%	100%
	Subtotal:	**87,446**		
Roof – Waterborne				
107211	Ethylene Glycol	83,907	40%	40%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	78,178	37%	78%
57556	Propylene Glycol	19,224	9%	87%
9981	Aggregated VOCs < 0.1%	11,925	6%	92%
34375285	Troysan 174	4,115	2%	94%
112345	2-(2-Butoxyethoxy) Ethanol	1,689	1%	95%
	Other Ingredients	9,998	5%	100%
	Subtotal:	**209,036**		
Rust Preventative - Solventborne				
	Bin 11 Hydrocarbon Solvent	2,817,304	45%	45%
	Bin 10 Hydrocarbon Solvent	1,362,976	22%	66%
	Bin 15 Hydrocarbon Solvent	884,398	14%	80%
	Bin 12 Hydrocarbon Solvent	264,434	4%	85%
	Bin 9 Hydrocarbon Solvent	230,126	4%	88%
1330207	Xylene	183,481	3%	91%
	Bin 6 Hydrocarbon Solvent	115,492	2%	93%
	Bin 14 Hydrocarbon Solvent	104,278	2%	95%
	Other Ingredients	330,381	5%	100%
	Subtotal:	**6,292,870**		
Rust Preventative - Waterborne				
111762	2-Butoxy Ethanol	23,945	36%	36%
78922	Butyl Alcohol, Sec-	11,920	18%	54%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	8,151	12%	67%
29911282	Dipropylene Glycol Monobutyl Ether	4,786	7%	74%
9981	Aggregated VOCs < 0.1%	4,004	6%	80%
57556	Propylene Glycol	3,443	5%	85%
111773	2-(2-Methoxyethoxy) Ethanol	2,562	4%	89%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
67561	Methanol	2,307	3%	92%
112345	2-(2-Butoxyethoxy) Ethanol	1,683	3%	95%
	Other Ingredients	3,328	5%	100%
	Subtotal:	**66,128**		
Sanding Sealers - Solventborne				
	Bin 11 Hydrocarbon Solvent	163,555	62%	62%
	Bin 15 Hydrocarbon Solvent	63,273	24%	85%
	Bin 6 Hydrocarbon Solvent	8,972	3%	89%
98566	4-Chlorobenzotrifluoride	8,123	3%	92%
64175	Ethanol	5,060	2%	94%
1330207	Xylene	4,928	2%	96%
	Other Ingredients	11,916	4%	100%
	Subtotal:	**265,829**		
Sanding Sealers - Waterborne				
34590948	Dipropylene Glycol Methyl Ether	3,578	34%	34%
111900	Diethylene Glycol Monoethyl Ether	2,457	23%	57%
29911282	Dipropylene Glycol Monobutyl Ether	1,111	11%	68%
111773	2-(2-Methoxyethoxy) Ethanol	850	8%	76%
57556	Propylene Glycol	751	7%	83%
71195647	Pentanedioic acid, bis(2-methylpropyl) ester	501	5%	88%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	389	4%	91%
9981	Aggregated VOCs < 0.1%	223	2%	93%
107211	Ethylene Glycol	194	2%	95%
	Other Ingredients	507	5%	100%
	Subtotal:	**10,560**		
Specialty Primer, Sealer, and Undercoater - Solventborne				
	Bin 11 Hydrocarbon Solvent	3,222,930	76%	76%
	Bin 22 Hydrocarbon Solvent	447,429	11%	87%
	Bin 15 Hydrocarbon Solvent	150,914	4%	90%
	Bin 6 Hydrocarbon Solvent	125,736	3%	93%
	Bin 9 Hydrocarbon Solvent	106,560	3%	96%
	Other Ingredients	179,854	4%	100%
	Subtotal:	**4,233,422**		
Specialty Primer, Sealer, and Undercoater - Waterborne				
112345	2-(2-Butoxyethoxy) Ethanol	67,678	47%	47%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	23,210	16%	63%
107211	Ethylene Glycol	23,197	16%	80%
9981	Aggregated VOCs < 0.1%	8,473	6%	85%
57556	Propylene Glycol	6,199	4%	90%
	Bin 15 Hydrocarbon Solvent	4,607	3%	93%
111762	2-Butoxy Ethanol	2,348	2%	95%
	Other Ingredients	7,744	5%	100%
	Subtotal:	**143,456**		
Stains - Clear/Semitransparent - Solventborne				
	Bin 11 Hydrocarbon Solvent	2,738,966	60%	60%
	Bin 15 Hydrocarbon Solvent	301,280	7%	67%
8052413	Stoddard Solvent	246,241	5%	73%
8008206	Kerosene	230,535	5%	78%
64742887	Medium Aliphatic Solvent Naphtha	229,334	5%	83%
98566	4-Chlorobenzotrifluoride	227,190	5%	88%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
	Bin 12 Hydrocarbon Solvent	112,200	2%	90%
	Bin 6 Hydrocarbon Solvent	70,409	2%	92%
1330207	Xylene	66,210	1%	93%
64742489	Hydrotreated Heavy Naphtha	64,920	1%	95%
	Other Ingredients	240,849	5%	100%
	Subtotal:	**4,528,135**		
Stains - Clear/Semitransparent - Waterborne				
	Bin 11 Hydrocarbon Solvent	87,426	37%	37%
57556	Propylene Glycol	42,954	18%	56%
34590948	Dipropylene Glycol Methyl Ether	28,205	12%	68%
107211	Ethylene Glycol	16,589	7%	75%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	15,296	7%	81%
29911282	Dipropylene Glycol Monobutyl Ether	10,002	4%	86%
112345	2-(2-Butoxyethoxy) Ethanol	9,724	4%	90%
2807309	Ethylene Glycol Monopropyl Ether	7,204	3%	93%
111762	2-Butoxy Ethanol	3,682	2%	94%
9981	Aggregated VOCs < 0.1%	3,329	1%	96%
	Other Ingredients	9,945	4%	100%
	Subtotal:	**234,355**		
Stains - Opaque – Solventborne				
	Bin 15 Hydrocarbon Solvent	20,269	35%	35%
	Bin 11 Hydrocarbon Solvent	11,060	19%	54%
98566	4-Chlorobenzotrifluoride	9,152	16%	69%
8052413	Stoddard Solvent	7,017	12%	81%
	Bin 9 Hydrocarbon Solvent	2,707	5%	86%
	Bin 10 Hydrocarbon Solvent	2,604	4%	90%
1330207	Xylene	2,475	4%	94%
95636	1,2,4-Trimethylbenzene	489	1%	95%
	Other Ingredients	2,737	5%	100%
	Subtotal:	**58,509**		
Stains - Opaque - Waterborne				
107211	Ethylene Glycol	157,457	51%	51%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	67,819	22%	74%
57556	Propylene Glycol	28,232	9%	83%
	Bin 11 Hydrocarbon Solvent	19,250	6%	89%
124685	2-Amino-2-Methyl-1-Propanol	6,412	2%	91%
9981	Aggregated VOCs < 0.1%	5,648	2%	93%
29911282	Dipropylene Glycol Monobutyl Ether	4,514	1%	95%
	Other Ingredients	16,456	5%	100%
	Subtotal:	**305,787**		
Swimming Pool - Solventborne				
1330207	Xylene	10,653	42%	42%
71363	n-Butanol	4,631	18%	61%
	Bin 22 Hydrocarbon Solvent	3,583	14%	75%
108101	Methyl Isobutyl Ketone	2,172	9%	84%
	Bin 9 Hydrocarbon Solvent	1,801	7%	91%
78933	Methyl Ethyl Ketone	912	4%	95%
	Other Ingredients	1,324	5%	100%
	Subtotal:	**25,076**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Swimming Pool - Waterborne				
111762	2-Butoxy Ethanol	2,138	30%	30%
123422	Diacetone Alcohol	1,763	24%	54%
2807309	Ethylene Glycol Monopropyl Ether	1,462	20%	74%
107211	Ethylene Glycol	881	12%	86%
111773	2-(2-Methoxyethoxy) Ethanol	501	7%	93%
	Bin 22 Hydrocarbon Solvent	284	4%	97%
	Other Ingredients	198	3%	100%
	Subtotal:	**7,227**		
Traffic Marking - Solventborne				
67641	Acetone	594,242	59%	59%
75092	Methylene Chloride	182,782	18%	78%
1330207	Xylene	177,576	18%	95%
	Other Ingredients	45,885	5%	100%
	Subtotal:	**1,000,485**		
Traffic Marking - Waterborne				
67561	Methanol	475,741	50%	50%
111762	2-Butoxy Ethanol	215,077	23%	73%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	201,520	21%	94%
57556	Propylene Glycol	18,144	2%	96%
	Other Ingredients	36,639	4%	100%
	Subtotal:	**947,121**		
Varnishes - Clear - Solventborne				
	Bin 11 Hydrocarbon Solvent	2,023,261	76%	76%
	Bin 15 Hydrocarbon Solvent	300,854	11%	87%
	Bin 12 Hydrocarbon Solvent	64,983	2%	90%
	Bin 14 Hydrocarbon Solvent	61,978	2%	92%
2807309	Ethylene Glycol Monopropyl Ether	26,386	1%	93%
	Bin 9 Hydrocarbon Solvent	22,529	1%	94%
1330207	Xylene	21,060	1%	95%
	Other Ingredients	144,158	5%	100%
	Subtotal:	**2,665,208**		
Varnishes - Clear - Waterborne				
872504	1-Methyl-2-Pyrrolidinone	62,424	29%	29%
34590948	Dipropylene Glycol Methyl Ether	55,586	26%	55%
107982	Propylene Glycol Monomethyl Ether	23,346	11%	66%
29911282	Dipropylene Glycol Monobutyl Ether	20,978	10%	76%
111109774	Dipropylene Glycol Dimethyl Ether	7,844	4%	79%
96480	gamma-Butyrolactone	6,971	3%	83%
57556	Propylene Glycol	6,853	3%	86%
121448	Triethylamine	5,019	2%	88%
107211	Ethylene Glycol	3,678	2%	90%
29911271	Dipropylene Glycol Monopropyl Ether	3,247	2%	91%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	3,238	2%	93%
100516	Benzyl Alcohol	2,788	1%	94%
111900	Diethylene Glycol Monoethyl Ether	2,750	1%	96%
	Other Ingredients	9,557	4%	100%
	Subtotal:	**214,280**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Varnishes - Semitransparent - Solventborne				
	Bin 12 Hydrocarbon Solvent	193,535	61%	61%
	Bin 11 Hydrocarbon Solvent	113,094	36%	97%
	Other Ingredients	9,363	3%	100%
	Subtotal:	**315,993**		
Varnishes - Semitransparent - Waterborne				
57556	Propylene Glycol	627	56%	56%
107211	Ethylene Glycol	382	34%	90%
112594	Diethylene Glycol Monohexyl Ether	26	2%	92%
872504	1-Methyl-2-Pyrrolidinone	19	2%	94%
34590948	Dipropylene Glycol Methyl Ether	16	1%	95%
	Other Ingredients	54	5%	100%
	Subtotal:	**1,125**		
Waterproofing Concrete/Masonry Sealers - Solventborne				
	Bin 6 Hydrocarbon Solvent	474,525	19%	19%
98566	4-Chlorobenzotrifluoride	421,934	16%	35%
67641	Acetone	405,223	16%	51%
	Bin 22 Hydrocarbon Solvent	286,549	11%	62%
108327	Propylene carbonate	155,958	6%	68%
64742536	Hydrotreated Light Naphthenic Distillate	154,287	6%	74%
	Bin 15 Hydrocarbon Solvent	149,479	6%	80%
95636	1,2,4-Trimethylbenzene	63,036	2%	82%
108656	Propylene Glycol Monomethyl Ether Acetate	58,776	2%	85%
	Bin 11 Hydrocarbon Solvent	58,350	2%	87%
64742525	Hydrotreated Heavy Naphthenic Distillate	45,754	2%	89%
64742887	Medium Aliphatic Solvent Naphtha	37,069	1%	90%
1330207	Xylene	34,069	1%	92%
108883	Toluene	33,906	1%	93%
64742898	VM&P Naphtha	30,026	1%	94%
	Bin 7 Hydrocarbon Solvent	22,807	1%	95%
	Other Ingredients	127,988	5%	100%
	Subtotal:	**2,559,737**		
Waterproofing Concrete/Masonry Sealers -Waterborne				
111773	2-(2-Methoxyethoxy) Ethanol	72,401	20%	20%
111762	2-Butoxy Ethanol	64,261	18%	37%
107211	Ethylene Glycol	61,714	17%	54%
57556	Propylene Glycol	43,613	12%	66%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	29,424	8%	74%
112345	2-(2-Butoxyethoxy) Ethanol	27,078	7%	81%
5131668	Propylene Glycol Monobutyl Ether	12,346	3%	85%
2807309	Ethylene Glycol Monopropyl Ether	9,424	3%	87%
2943751	Triethoxyoctylsilane	7,533	2%	89%
9981	Aggregated VOCs < 0.1%	6,335	2%	91%
29911282	Dipropylene Glycol Monobutyl Ether	5,194	1%	92%
	Bin 10 Hydrocarbon Solvent	3,885	1%	94%
124685	2-Amino-2-Methyl-1-Propanol	3,628	1%	95%
770354	Propylene Glycol Phenyl Ether	2,786	1%	95%
	Other Ingredients	17,331	5%	100%
	Subtotal:	**366,953**		

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
Waterproofing Sealers -Solventborne				
	Bin 11 Hydrocarbon Solvent	333,234	56%	56%
67641	Acetone	59,462	10%	66%
98566	4-Chlorobenzotrifluoride	55,912	9%	75%
127184	Tetrachloroethylene	44,376	7%	83%
	Bin 23 Hydrocarbon Solvent	29,152	5%	88%
	Bin 22 Hydrocarbon Solvent	13,008	2%	90%
1330207	Xylene	11,728	2%	92%
95636	1,2,4-Trimethylbenzene	8,949	2%	93%
25498491	Tripropylene Glycol Methyl Ether	7,191	1%	94%
108656	Propylene Glycol Monomethyl Ether Acetate	6,077	1%	96%
	Other Ingredients	26,813	4%	100%
	Subtotal:	**595,903**		
Waterproofing Sealers -Waterborne				
34590948	Dipropylene Glycol Methyl Ether	143,432	25%	25%
	Bin 11 Hydrocarbon Solvent	109,494	19%	45%
107211	Ethylene Glycol	89,980	16%	61%
112345	2-(2-Butoxyethoxy) Ethanol	59,044	10%	71%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	33,877	6%	77%
2171962	Methoxysilane	21,853	4%	81%
111762	2-Butoxy Ethanol	20,546	4%	85%
111773	2-(2-Methoxyethoxy) Ethanol	17,524	3%	88%
5131668	Propylene Glycol Monobutyl Ether	12,015	2%	90%
96297	Ethyl Methyl Ketone Oxime	9,483	2%	92%
9981	Aggregated VOCs < 0.1%	8,779	2%	93%
872504	1-Methyl-2-Pyrrolidinone	6,602	1%	94%
2943751	Triethoxyoctylsilane	4,956	1%	95%
	Other Ingredients	26,513	5%	100%
	Subtotal:	**564,096**		
Wood Preservatives -Solventborne				
	Bin 2 Hydrocarbon Solvent	278,703	62%	62%
	Bin 11 Hydrocarbon Solvent	81,383	18%	81%
	Bin 15 Hydrocarbon Solvent	42,838	10%	90%
8052413	Stoddard Solvent	34,622	8%	98%
	Other Ingredients	9,349	2%	100%
	Subtotal:	**446,894**		
Wood Preservatives -Waterborne				
141435	Ethanolamine	1,200	36%	36%
	Bin 11 Hydrocarbon Solvent	1,086	32%	68%
	Bin 2 Hydrocarbon Solvent	829	25%	93%
107211	Ethylene Glycol	136	4%	97%
	Other Ingredients	116	3%	100%
	Subtotal:	**3,367**		
Protected Categories - Solventborne				
64175	Ethanol	724,002	34%	34%
	Bin 11 Hydrocarbon Solvent	680,509	32%	66%
67630	Isopropanol	130,484	6%	72%
	Bin 12 Hydrocarbon Solvent	86,417	4%	77%
1330207	Xylene	70,402	3%	80%
97858	Isobutyl Isobutyrate	65,584	3%	83%

Table 10-13: ***Ingredient Listing by Category (VOCs & EXEMPTS) – All Coatings***

CAS #	Ingredient Name	Sales Quantity (lbs)	%	Cumu-lative %
67641	Acetone	56,108	3%	86%
110430	Methyl-n-Amyl Ketone	54,725	3%	88%
111762	2-Butoxy Ethanol	53,831	3%	91%
	Bin 6 Hydrocarbon Solvent	45,937	2%	93%
	Bin 23 Hydrocarbon Solvent	39,099	2%	95%
	Other Ingredients	111,925	5%	100%
	Subtotal:	**2,119,023**		
Protected Categories – Waterborne				
57556	Propylene Glycol	131,346	44%	44%
107211	Ethylene Glycol	36,608	12%	57%
124685	2-Amino-2-Methyl-1-Propanol	24,977	8%	65%
	Bin 15 Hydrocarbon Solvent	20,011	7%	72%
25265774	2,2,4-Trimethyl-1,3-Pentanediol Isobutyrate	18,337	6%	78%
141786	Ethyl Acetate	13,058	4%	82%
108883	Toluene	10,202	3%	86%
64742536	Hydrotreated Light Naphthenic Distillate	10,202	3%	89%
9981	Aggregated VOCs < 0.1%	9,857	3%	93%
	Bin 22 Hydrocarbon Solvent	8,772	3%	96%
	Other Ingredients	13,019	4%	100%
	Subtotal:	**296,389**		
	All Categories Ingredient Total (lbs) =	**73,705,593**		
	All Categories Ingredient Total (tons/yr) =	**36,853**		
	All Categories Ingredient Total (tons/day) =	**101**		

Notes:

1. Sales of exempt small containers (1 quart or less) were included when calculating ingredient quantities.
2. Ingredients include VOCs, exempt compounds, and hydrocarbon solvents. This table does not include unknown ingredients.
3. All coating categories that had protected sales data were combined under "Protected Categories". Protected data means that fewer than three companies reported sales. "Protected Categories" include: Bond Breakers; Clear Brushing Lacquer; Driveway Sealer; Fire Resistive; Fire Retardant – Clear; Fire Retardant – Opaque; Graphic Arts; Magnesite Cement; Mastic Texture; Multi-Color; Pre-Treatment Wash Primer; Shellacs – Clear; Shellacs – Opaque; and Swimming Pool Repair and Maintenance.
4. For the Floor Coating category, the ingredient data are questionable, because a significant portion of the reported sales volume did not have corresponding ingredient information. This table only summarizes the ingredients that could be identified as VOCs or exempt compounds.

Chapter 11 -- Survey Comparisons

This section compares, where possible, the data from ARB's 2001 survey (2000 sales) with the 2005 survey (2004 sales). Data in this chapter include sales of small containers (1 quart or less.)

As shown in Table 11-1, the percent change in sales volume from 2000 to 2004 represents an annual growth rate of approximately 3%. This increase appears to be consistent with industry reports of sales growth for architectural coatings.

The list of major companies remains relatively constant from survey to survey and these companies report the majority of the sales volume. In the 2005 survey, we received responses from approximately 70 new companies who accounted for approximately 4 million gallons. In addition, approximately 50 previous participants, who accounted for about 9 million gallons in the 2001 survey, did not respond for the following reasons:

- they no longer had California sales;
- they no longer manufactured architectural coatings; or
- they were purchased by a larger company who reported for them.

The 5 million gallon difference between the 50 previous responders and the 70 new responders was more than made up for by the roughly 130 repeating companies that consistently participate in the survey.

Table 11-2 provides a comparison between the 2001 survey and the 2005 survey, sorted by category. For most coating categories, it was possible to make a direct comparison. However, in some cases, it was not possible to make a direct comparison because data were not available for both survey years. If it was not possible to make a comparison, the category was not listed in Table 11-2. In some categories, there were significant changes in sales volume and emissions. Table 11-3 summarizes the primary reasons for these changes. Tables 11-4 and 11-5 contain comparisons between the 2001 survey and the 2005 survey, for solvent-borne and water-borne coatings, respectively. Tables 11-6 through 11-8 provide historical survey comparisons for all of the architectural coating surveys conducted by ARB since 1975.

This chapter includes the following data summaries:

Table 11-1: ***Summary Comparison Between 2001 and 2005 Surveys***

	2001 Survey (2000 Sales, including quarts)	2005 Survey (2004 Sales, including quarts)	Percent Change
COATING SALES VOLUME DATA			
Total Sales Volume Reported (gallons)	**98,455,172**	**110,407,721**	**12%**
Water-borne Coating Sales Volume	81,548,961	97,354,686	19%
Solvent-borne Coating Sales Volume	16,906,211	13,053,035	-23%
Percent Water-borne Sales	83%	88%	
Percent Solvent-borne Sales	17%	12%	
Coating Sales Volume Per Capita (gals per person)	2.9	3.0	
EMISSIONS DATA – COATINGS ONLY			
Total Coating Emissions (tons/day)	**110**	**95**	**-14%**
Water-borne Coating Emissions	45.5	45.7	0%
Solvent-borne Coating Emissions	64.2	49.0	-24%
Percent Water-borne Emissions	41%	48%	
Percent Solvent-borne Emissions	59%	52%	
Emissions per capita (lbs VOC emitted per person)	2.4	1.9	
Emission Factor - Coatings Only (lb VOC/gal)	**0.81**	**0.63**	**-23%**
Water-borne Coating Emission Factor	0.41	0.34	-16%
Solvent-borne Coating Emission Factor	2.77	2.74	-1%
EMISSIONS DATA – COATINGS, SOLVENTS & ADDITIVES			
Grand Total Emissions (tons/day)	**128**	**115**	**-10%**
Water-borne Coating Emissions	45.5	45.7	0%
Solvent-borne Coating Emissions	64.2	49.0	-24%
Thinning/Cleanup/Additive Emissions	18.5	20.7	12%
Percent Water-borne Emissions	35%	40%	
Percent Solvent-borne Emissions	50%	43%	
Percent Thinning/Cleanup/Additive Emissions	14%	18%	
Emissions per capita (lbs VOC emitted per person)	2.8	2.3	
Emission Factor with Thinning/Cleanup/Additives (lb VOC/gal coating)	**1.0**	**0.8**	**-20%**

Notes:

1. For the 2001 Survey, VOC emissions totals included emissions from:
   a) thinning solvents added to solventborne coatings; and
   b) cleanup solvents used for solventborne coatings only.
2. For the 2005 Survey, VOC emissions totals included emissions from:
   a) (1) thinning solvents added to solventborne coatings;
   b) (2) cleanup solvents used for both solventborne and waterborne coatings; and
   c) (3) additives in waterborne coatings.
3. CA Population in 2000 = 33,871,648 people (U.S. Census Bureau NST-EST2004-01)
4. CA Population in 2004 = 36,522,000 people (CA Department of Finance, Table E-7, 1900-2006)
5. Emissions data is on an "Annual Average" basis.

Table 11-2: ***Detailed Comparison of 2001 and 2005 Surveys - Total***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Bituminous Roof	3,245,397	1,464,326	-55%	1,579	150	-90%	120	26	-79%	59	50	-15%
Bituminous Roof Primer	170,520	68,092	-60%	133	88	-34%	211	324	54%	55	56	2%
Bond Breakers	93,896	187,785	100%	25	62	148%	244	302	24%	14	18	22%
Clear Brushing Lacquer	PD	PD	PD	193	192	-1%	667	666	0%	19	19	0%
Concrete Curing Compounds	692,419	793,566	15%	135	157	16%	145	166	14%	22	17	-20%
Dry Fog	459,756	377,707	-18%	400	298	-26%	258	233	-10%	41	42	1%
Faux Finishing	173,737	303,810	75%	79	125	60%	261	257	-2%	28	29	3%
Fire Resistive	PD	12,577	PD	0	6	4867%	45	123	175%	51	58	14%
Fire Retardant - Clear	PD	PD	PD	0	2	17212%	4	531	13838%	30	39	29%
Fire Retardant - Opaque	29,055	200,150	589%	6	263	4106%	94	317	237%	41	54	33%
Flat	34,810,257	37,264,874	7%	5,693	5,038	-12%	96	82	-15%	36	36	0%
Floor	1,425,064	1,239,892	-13%	318	264	-17%	101	106	5%	60	39	-36%
Form Release Compounds	255,724	323,612	27%	223	292	31%	213	233	9%	67	65	-4%
Graphic Arts	26,389	PD	PD	26	6	-78%	274	352	28%	43	48	11%
High Temperature	18,632	11,736	-37%	30	18	-40%	401	407	2%	49	43	-12%
Industrial Maintenance	4,740,079	2,137,772	-55%	5,637	1,555	-72%	298	205	-31%	58	61	6%
Lacquers	447,352	1,291,571	189%	912	1,314	44%	567	455	-20%	23	25	6%
Low Solids	13,413	65,680	390%	3	16	400%	59	60	2%	8	9	14%
Magnesite Cement	PD	PD	PD	42	33	-21%	443	446	1%	34	33	-3%
Mastic Texture	628,590	677,063	8%	248	187	-24%	133	101	-24%	52	52	1%
Metallic Pigmented	625,944	570,977	-9%	1,027	791	-23%	409	344	-16%	42	48	15%
Multi-Color	7,580	13,635	80%	3	2	-36%	227	103	-55%	22	23	2%
Nonflat - High Gloss	1,926,436	1,760,459	-9%	1,332	490	-63%	244	151	-38%	42	35	-16%
Nonflat - Low Gloss	6,594,890	12,023,079	82%	1,479	2,424	64%	129	118	-8%	36	35	-1%
Nonflat - Medium Gloss	18,102,739	20,072,832	11%	5,686	4,281	-25%	171	129	-25%	34	34	-2%
Other	1,510,316	89,473	-94%	8	9	18%	1	66	4702%	35	19	-45%
Pre-Treatment Wash Primer	75,342	4,959	-93%	36	4	-89%	252	266	6%	31	19	-39%
Primer, Sealer, and Undercoater	8,125,823	10,402,018	28%	3,120	2,340	-25%	155	128	-18%	39	34	-14%
Quick Dry Enamel	623,666	763,266	22%	909	1,179	30%	358	380	6%	51	49	-5%

Table 11-2: ***Detailed Comparison of 2001 and 2005 Surveys - Total***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Quick Dry Primer, Sealer, and Undercoater	1,660,227	249,710	-85%	2,367	373	-84%	364	364	0%	41	42	3%
Recycled	323,216	223,381	-31%	0	0	NA	204	193	-6%	33	41	25%
Roof	1,137,354	1,406,889	24%	209	144	-31%	68	46	-33%	47	45	-5%
Rust Preventative	209,899	2,095,500	898%	274	3,167	1058%	339	368	9%	50	51	3%
Sanding Sealers	28,268	84,273	198%	50	134	168%	471	418	-11%	29	32	10%
Shellacs - Clear	PD	PD	PD	39	128	230%	600	617	3%	23	21	-9%
Shellacs - Opaque	PD	PD	PD	184	297	62%	538	521	-3%	30	31	4%
Specialty Primer, Sealer, and Undercoater	376,521	2,009,464	434%	112	2,275	1931%	120	283	137%	46	52	13%
Stains - Clear/Semitransparent	2,171,595	1,865,237	-14%	2,870	2,292	-20%	349	339	-3%	43	45	4%
Stains - Opaque	1,087,373	957,506	-12%	498	177	-64%	180	107	-41%	37	36	-3%
Swimming Pool	22,086	20,364	-8%	20	16	-21%	274	250	-9%	50	48	-3%
Swimming Pool Repair and Maintenance	15,266	PD	PD	36	5	-85%	573	588	3%	34	35	1%
Traffic Marking	3,338,918	2,214,451	-34%	1,108	609	-45%	116	101	-13%	62	57	-8%
Varnishes - Clear	1,087,860	970,695	-11%	1,470	1,430	-3%	375	397	6%	39	38	-3%
Varnishes - Semitransparent	61,505	89,303	45%	108	159	47%	431	433	1%	42	42	1%
Waterproofing Concrete/Masonry Sealers	707,921	1,908,378	170%	474	1,025	116%	209	194	-7%	41	49	20%
Waterproofing Sealers	1,017,611	1,511,911	49%	699	522	-25%	251	186	-26%	38	29	-25%
Wood Preservatives	177,444	173,846	-2%	249	226	-10%	345	325	-6%	54	57	7%

Notes:

1. PD = Protected Data. Fewer than three companies reported sales.
2. Sales volumes contained in this table include sales of small containers (1 quart or less).
3. VOC emissions are for coatings only and do not contain emissions from associated thinning solvents, cleanup solvents, and additives. For Recycled Coatings, emissions are zero because it is assumed that the emissions should be associated with the sales of the original product, prior to recycling.
4. NA = Not Applicable.

ARB staff investigated the causes for significant changes between the sales volume data from 2001 and 2005 for some of the major categories, as summarized in Table 11-3.

Table 11-3: ***Reasons for Significant Changes in Sales Volumes***

Coating Category	Change	Major Reasons for Changes in Sales Volumes
Bituminous Roof	Significant Decrease	• Quality control was improved and adhesives/cements were removed from survey responses. • Sales decreased.
Fire Retardant – Opaque	Very Significant Increase	• It appears that a small number of companies repositioned Quick Dry Enamel or Industrial Maintenance alkyd coatings as Fire Retardant coatings.
Industrial Maintenance	Significant Decrease	• Companies re-classified Industrial Maintenance coatings as Rust Preventative and Waterproofing Concrete/Masonry Sealers. This was expected to occur as new categories were introduced. • Sales decreased.
Lacquers	Significant Increase	• New products were introduced. • New companies and divisions submitted survey data.
Nonflat – Low Gloss	Significant Increase	• Sales increased, most likely due to shift in lower gloss demand in market. • New products were introduced.
Other	Significant Decrease	• Most of the sales volume that was reported as "Other" in the 2001 survey consisted of driveway sealers. In the 2005 survey, these products were reported under the new Driveway Sealer category.
Quick Dry Primer, Sealer, Undercoater	Significant Decrease	• Companies re-classified Quick Dry PSUs as Specialty PSUs, Rust Preventative, and regular PSUs. This was expected to occur as new categories were introduced.
Rust Preventative	Very Significant Increase	• Companies re-classified Industrial Maintenance coatings as Rust Preventative coatings. This was expected to occur as new categories were introduced. • New products were introduced.
Sanding Sealers	Very Significant Increase	• New products were introduced. • Sales increased. • Quality control was improved to ensure that Sanding Sealers were not included in the Primer, Sealer, and Undercoater category.

Table 11-3: ***Reasons for Significant Changes in Sales Volumes***

Coating Category	Change	Major Reasons for Changes in Sales Volumes
Specialty Primer, Sealer, Undercoater	Very Significant Increase	• Companies re-classified PSUs and Quick Dry PSUs as Specialty PSUs. This was expected to occur as new categories were introduced. • New products were introduced.
Waterproofing Concrete/Masonry Sealer	Significant Increase	• Sales increased. • New products were introduced. • Companies re-classified Industrial Maintenance coatings as Waterproofing Concrete/Masonry Sealers. This was expected to occur as new categories were introduced.
Waterproofing Sealers	Significant Increase	• New products were introduced. • Sales increased.

Table 11-4: ***Detailed Comparison of 2001 and 2005 Surveys – Solvent-borne***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Bituminous Roof	1,608,033	133,728	-92%	1,570	140	-91%	240	252	5%	70	69	-2%
Bituminous Roof Primer	69,993	59,968	-14%	114	85	-25%	391	346	-12%	56	59	6%
Bond Breakers	0	PD	PD	NA	3	NA	NA	717	NA	NA	11	NA
Clear Brushing Lacquer	PD	PD	PD	193	192	-1%	667	666	0%	19	19	0%
Concrete Curing Compounds	32,395	43,771	35%	30	41	38%	350	344	-2%	39	25	-36%
Dry Fog	243,047	187,112	-23%	311	250	-20%	346	361	4%	45	46	3%
Faux Finishing	6,948	4,430	-36%	12	7	-38%	404	392	-3%	47	45	-4%
Fire Resistive	0	PD	NA	NA	6	NA	NA	279	NA	NA	76	NA
Fire Retardant – Clear	0	PD	NA	NA	2	NA	NA	531	NA	NA	39	NA
Fire Retardant - Opaque	2,365	PD	PD	3	261	10239%	257	348	35%	70	55	-21%
Flat	11,952	4,082	-66%	18	6	-70%	373	331	-11%	51	61	19%
Floor	149,939	71,170	-53%	87	71	-18%	139	239	72%	82	72	-12%
Form Release Compounds	223,634	284,655	27%	221	287	30%	238	243	2%	74	71	-4%
Graphic Arts	13,667	PD	PD	24	5	-77%	413	385	-7%	48	50	4%
High Temperature	18,621	11,736	-37%	30	18	-40%	401	407	2%	49	43	-12%
Industrial Maintenance	4,126,134	1,422,836	-66%	5,407	1,318	-76%	315	224	-29%	60	72	21%
Lacquers	374,503	937,855	150%	876	1,222	39%	622	570	-8%	22	22	-1%
Low Solids	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesite Cement	PD	PD	PD	42	33	-21%	443	446	1%	34	33	-3%
Mastic Texture	210,143	PD	PD	165	96	-42%	229	248	8%	49	53	7%
Metallic Pigmented	513,541	438,025	-15%	1,003	775	-23%	469	425	-9%	44	52	18%
Multi-Color	63	PD	PD	0	0	299%	526	551	5%	19	16	-13%
Nonflat - High Gloss	596,788	40,777	-93%	833	63	-92%	338	373	10%	57	52	-8%
Nonflat - Low Gloss	24,525	3,856	-84%	38	6	-83%	372	402	8%	52	48	-8%
Nonflat - Medium Gloss	567,173	77,878	-86%	772	121	-84%	329	372	13%	57	54	-6%
Other	15,971	2,576	-84%	8	5	-30%	117	520	345%	86	35	-59%
Pre-Treatment Wash Primer	4,188	PD	PD	9	3	-61%	486	747	54%	37	8	-79%
Primer, Sealer, and Undercoater	1,369,924	225,380	-84%	1,886	340	-82%	339	371	9%	52	51	-1%
Quick Dry Enamel	607,372	713,196	17%	902	1,157	28%	361	390	8%	52	50	-3%

Table 11-4: ***Detailed Comparison of 2001 and 2005 Surveys – Solvent-borne***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Quick Dry Primer, Sealer, and Undercoater	1,259,524	220,361	-83%	2,271	372	-84%	434	410	-6%	43	43	1%
Recycled	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Roof	89,448	42,967	-52%	78	41	-47%	211	232	10%	75	71	-5%
Rust Preventative	166,748	2,004,661	1102%	263	3,134	1090%	381	376	-1%	52	52	0%
Sanding Sealers	20,452	60,457	196%	47	129	171%	557	516	-7%	30	33	11%
Shellacs - Clear	PD	PD	PD	39	128	230%	600	617	3%	23	21	-9%
Shellacs - Opaque	PD	PD	PD	184	297	62%	538	521	-3%	30	31	4%
Specialty Primer, Sealer, and Undercoater	21,461	1,532,541	7041%	36	2,192	6024%	400	343	-14%	48	55	15%
Stains - Clear/Semitransparent	1,690,513	1,462,300	-13%	2,725	2,173	-20%	387	367	-5%	49	52	7%
Stains - Opaque	224,925	20,627	-91%	309	25	-92%	331	300	-9%	56	58	5%
Swimming Pool	12,399	9,828	-21%	17	12	-25%	321	304	-5%	62	64	3%
Swimming Pool Repair and Maintenance	15,266	PD	PD	36	5	-85%	573	588	3%	34	35	1%
Traffic Marking	799,677	329,369	-59%	273	132	-52%	103	147	43%	74	55	-26%
Varnishes - Clear	715,117	694,415	-3%	1,286	1,324	3%	432	458	6%	45	42	-6%
Varnishes - Semitransparent	58,300	86,302	48%	107	158	48%	439	439	0%	43	43	1%
Waterproofing Concrete/Masonry Sealers	225,227	955,355	324%	374	817	119%	426	248	-42%	43	64	49%
Waterproofing Sealers	442,989	195,212	-56%	601	219	-64%	342	297	-13%	57	57	1%
Wood Preservatives	166,982	164,236	-2%	248	224	-10%	356	327	-8%	56	60	7%

Notes:

1. NA = Not Applicable. No solvent-borne sales were reported for this category during at least one of the survey years.
2. PD = Protected Data. Fewer than three companies reported sales.
3. Sales volumes contained in this table include sales of small containers (1 quart or less).
4. VOC emissions are for coatings only and do not contain emissions from associated thinning solvents, cleanup solvents, and additives.

Table 11-5: ***Detailed Comparison of 2001 and 2005 Surveys – Water-borne***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Bituminous Roof	1,637,364	1,330,598	-19%	9	11	16%	2	3	35%	48	48	0%
Bituminous Roof Primer	100,527	8,124	-92%	19	2	-88%	85	167	95%	55	35	-35%
Bond Breakers	93,896	PD	PD	25	59	136%	244	300	23%	14	18	23%
Clear Brushing Lacquer	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Concrete Curing Compounds	660,024	749,795	14%	106	116	10%	135	155	15%	21	17	-18%
Dry Fog	216,709	190,595	-12%	90	48	-47%	160	107	-33%	38	38	0%
Faux Finishing	166,789	299,379	79%	67	118	77%	255	255	0%	28	29	5%
Fire Resistive	PD	PD	PD	0	0	112%	45	18	-60%	51	46	-10%
Fire Retardant – Clear	PD	0	NA	0	NA	NA	4	NA	NA	30	NA	NA
Fire Retardant - Opaque	26,690	PD	PD	4	1	-66%	80	39	-51%	38	39	2%
Flat	34,798,306	37,260,792	7%	5,674	5,032	-11%	96	82	-15%	36	36	0%
Floor	1,275,125	1,168,722	-8%	232	193	-17%	96	98	2%	58	37	-36%
Form Release Compounds	32,090	38,957	21%	2	5	182%	41	158	282%	20	15	-22%
Graphic Arts	12,722	PD	PD	3	0	-87%	125	211	69%	38	39	3%
High Temperature	11	0	NA	0	NA	NA	261	NA	NA	32	NA	NA
Industrial Maintenance	613,946	714,936	16%	231	236	2%	179	168	-6%	44	39	-10%
Lacquers	72,849	353,715	386%	36	93	155%	282	151	-47%	30	33	11%
Low Solids	13,413	65,680	390%	3	16	400%	59	60	2%	8	9	14%
Magnesite Cement	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mastic Texture	418,447	PD	PD	82	91	11%	85	70	-18%	51	52	4%
Metallic Pigmented	112,402	132,953	18%	24	16	-34%	134	77	-43%	31	36	13%
Multi-Color	7,517	PD	PD	3	1	-47%	224	94	-58%	23	23	2%
Nonflat - High Gloss	1,329,648	1,719,682	29%	499	426	-15%	203	146	-28%	35	35	0%
Nonflat - Low Gloss	6,570,365	12,019,222	83%	1,441	2,417	68%	128	118	-8%	36	35	-1%
Nonflat - Medium Gloss	17,535,565	19,994,953	14%	4,914	4,160	-15%	166	128	-23%	33	34	1%
Other	1,494,345	86,896	-94%	0	4	5577%	0	53	37411%	34	19	-45%
Pre-Treatment Wash Primer	71,154	PD	PD	28	1	-98%	238	132	-45%	31	22	-28%
Primer, Sealer, and Undercoater	6,755,899	10,176,638	51%	1,234	2,000	62%	118	122	3%	36	33	-8%
Quick Dry Enamel	16,294	50,070	207%	7	22	201%	234	237	1%	35	33	-5%

Table 11-5: ***Detailed Comparison of 2001 and 2005 Surveys – Water-borne***

Coating Category	*Sales Volume (gallons)*			*VOC Emissions (tons per year)*			*Sales-Weighted Average VOC Regulatory (g/l)*			*Sales-Weighted % by Volume Solids*		
	2001	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*	*2001*	*2005*	*% change*
Quick Dry Primer, Sealer, and Undercoater	400,703	29,349	-93%	97	1	-99%	146	20	-86%	35	35	1%
Recycled	323,216	223,381	-31%	0	0		204	193	-6%	16	41	152%
Roof	1,047,906	1,363,922	30%	131	103	-22%	56	40	-29%	45	44	-2%
Rust Preventative	43,151	90,839	111%	10	33	223%	177	198	12%	41	33	-19%
Sanding Sealers	7,816	23,816	205%	3	5	105%	245	170	-30%	26	28	7%
Shellacs - Clear	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Shellacs - Opaque	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Specialty Primer, Sealer, and Undercoater	355,060	476,924	34%	76	83	9%	103	89	-13%	46	41	-10%
Stains - Clear/Semitransparent	481,082	402,937	-16%	146	118	-19%	215	240	12%	23	19	-16%
Stains - Opaque	862,448	936,880	9%	188	152	-19%	141	103	-27%	32	35	11%
Swimming Pool	9,687	10,536	9%	4	4	-3%	215	199	-8%	33	33	0%
Swimming Pool Repair and Maintenance	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Traffic Marking	2,539,241	1,885,082	-26%	834	477	-43%	120	93	-23%	58	57	-1%
Varnishes - Clear	372,743	276,280	-26%	184	106	-42%	266	243	-9%	29	28	-3%
Varnishes - Semitransparent	3,205	3,001	-6%	1	1	-44%	270	260	-4%	27	17	-36%
Waterproofing Concrete/Masonry Sealers	482,694	953,023	97%	100	207	106%	108	140	30%	40	34	-14%
Waterproofing Sealers	574,622	1,316,699	129%	98	304	210%	181	170	-6%	24	24	3%
Wood Preservatives	10,462	9,610	-8%	2	2	-5%	164	292	79%	11	11	-4%

Notes:

1. NA = Not Applicable. No water-borne sales were reported for this category during at least one of the survey years.
2. PD = Protected Data. Fewer than three companies reported sales.
3. Sales volumes contained in this table include sales of small containers (1 quart or less).
4. VOC emissions are for coatings only and do not contain emissions from associated thinning solvents, cleanup solvents, and additives.

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Antenna	SB	NA	NA	NA	NA	NA	NA	PD	NA
	WB	NA	NA	NA	NA	NA	NA	PD	NA
	Total	NA	NA	NA	NA	NA	NA	PD	NA
Antifouling	SB	NA	NA	NA	NA	NA	PD	NA	NA
	WB	NA	NA	NA	NA	NA	PD	NA	NA
	Total	NA	NA	NA	NA	NA	PD	NA	NA
Bituminous Roof	SB	1,158,000	1,953,271	1,254,751	1,224,930	308,356	1,295,827	1,608,033	133,728
	WB	1,427,000	106,307	283,876	606,011	682,614	3,623,800	1,637,364	1,330,598
	Total	2,585,000	2,059,579	1,538,626	1,830,941	990,969	4,919,627	3,245,397	1,464,326
Bituminous Roof Primer	SB	NA	NA	NA	NA	NA	NA	69,993	59,968
	WB	NA	NA	NA	NA	NA	NA	100,527	8,124
	Total	NA	NA	NA	NA	NA	NA	170,520	68,092
Bond Breakers	SB	NA	NA	176,930	0	1,420	PD	0	PD
	WB	NA	NA	8,023	0	5	PD	93,896	PD
	Total	NA	NA	184,953	0	1,425	PD	93,896	187,785
Clear Brushing Lacquer	SB	NA	NA	NA	NA	NA	NA	PD	PD
	WB	NA	NA	NA	NA	NA	NA	PD	0
	Total	NA	NA	NA	NA	NA	NA	PD	PD
Concrete Curing Compounds	SB	NA	NA	210,110	205	28,530	11,820	32,395	43,771
	WB	NA	NA	2,805	4,369	168,908	399,298	660,024	749,795
	Total	NA	NA	212,915	4,574	197,438	411,118	692,419	793,566
Driveway Sealer	SB	NA	NA	NA	NA	NA	NA	NA	PD
	WB	NA	NA	NA	NA	NA	NA	NA	PD
	Total	NA	NA	NA	NA	NA	NA	NA	2,205,366
Dry Fog	SB	NA	22,057	67,701	86,421	80,778	76,661	243,047	187,112
	WB	NA	571	3,022	9,110	24,272	126,241	216,709	190,595
	Total	NA	22,629	70,723	95,531	105,050	202,902	459,756	377,707
Faux Finishing	SB	NA	NA	NA	NA	NA	NA	6,948	4,430
	WB	NA	NA	NA	NA	NA	NA	166,789	299,379
	Total	NA	NA	NA	NA	NA	NA	173,737	303,810

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Fire Resistive	SB	NA	NA	NA	NA	NA	NA	PD	PD
	WB	NA	NA	NA	NA	NA	NA	PD	PD
	Total	NA	NA	NA	NA	NA	NA	PD	12,577
Fire Retardant - Clear	SB	NA	NA	NA	NA	1,882	PD	PD	PD
	WB	NA	NA	NA	NA	0	PD	PD	0
	Total	NA	NA	NA	NA	1,882	PD	PD	PD
Fire Retardant - Opaque	SB	NA	5,229	8,000	3,844	16,120	10,297	PD	PD
	WB	NA	5,429	40,248	12,880	6,600	45,912	PD	PD
	Total	NA	10,657	48,248	16,724	22,720	56,209	29,055	200,150
Flat	SB	1,570,000	175,671	32,808	0	61,063	27,837	11,952	4,082
	WB	6,912,000	23,335,271	22,743,619	34,083,714	32,116,211	31,800,868	34,798,306	37,260,792
	Total	8,482,000	23,510,943	22,776,427	34,083,714	32,177,274	31,828,705	34,810,257	37,264,874
Floor	SB	498,000	NA	NA	NA	NA	493,568	149,939	71,170
	WB	339,000	NA	NA	NA	NA	657,393	1,275,125	1,168,722
	Total	837,000	NA	NA	NA	NA	1,150,961	1,425,064	1,239,892
Flow	SB	NA	NA	NA	NA	NA	NA	PD	NA
	WB	NA	NA	NA	NA	NA	NA	PD	NA
	Total	NA	NA	NA	NA	NA	NA	PD	NA
Form Release Compounds	SB	NA	NA	NA	1,540	5,937	11,025	223,634	284,655
	WB	NA	NA	NA	0	4,304	72,218	32,090	38,957
	Total	NA	NA	NA	1,540	10,241	83,243	255,724	323,612
Graphic Arts	SB	NA	49,757	53,678	32,802	527,945	PD	13,667	PD
	WB	NA	1,571	680	0	5,425	PD	12,722	PD
	Total	NA	51,329	54,358	32,802	533,370	40,366	26,389	PD
High Temperature	SB	NA	NA	NA	NA	13,265	22,839	PD	11,736
	WB	NA	NA	NA	NA	0	175	PD	0
	Total	NA	NA	NA	NA	13,265	23,014	PD	11,736
Industrial Maintenance	SB	1,972,000	3,131,586	3,228,962	2,856,021	2,845,462	3,948,166	4,126,134	1,422,836
	WB	42,000	127,543	5,061	316,215	270,612	381,615	613,946	714,936
	Total	2,014,000	3,259,129	3,234,023	3,172,236	3,116,074	4,329,781	4,740,079	2,137,772

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Lacquers	SB	910,000	1,653,836	2,065,906	1,403,422	844,923	625,938	374,503	937,855
	WB	9,000	40,350	34,847	11,860	48,365	43,679	72,849	353,715
	Total	919,000	1,694,186	2,100,753	1,415,282	893,288	669,617	447,352	1,291,571
Low Solids	SB	NA	NA	NA	NA	NA	PD	0	0
	WB	NA	NA	NA	NA	NA	PD	13,413	65,680
	Total	NA	NA	NA	NA	NA	PD	13,413	65,680
Magnesite Cement	SB	NA	NA	NA	52,564	44,225	PD	PD	PD
	WB	NA	NA	NA	0	0	PD	PD	0
	Total	NA	NA	NA	52,564	44,225	PD	PD	PD
Mastic Texture	SB	NA	7,114	442,775	442,213	171,875	PD	210,143	PD
	WB	NA	165,143	405,098	745,936	603,307	PD	418,447	PD
	Total	NA	172,257	847,873	1,188,149	775,182	299,727	628,590	677,063
Metallic Pigmented	SB	492,000	84,943	33,229	233,373	355,461	272,965	513,541	438,025
	WB	3,000	0	40	24,422	10,917	119,862	112,402	132,953
	Total	495,000	84,943	33,269	257,795	366,378	392,827	625,944	570,977
Multi-Color	SB	NA	600	70,000	13,880	0	PD	PD	PD
	WB	NA	57,143	0	14,912	30,000	PD	PD	PD
	Total	NA	57,743	70,000	28,792	30,000	PD	PD	13,635
Nonflat - High Gloss	SB	1,182,000	1,259,343	1,165,747	862,517	1,330,462	532,033	596,788	40,777
	WB	891,000	3,382,995	3,087,996	5,369,168	686,929	1,618,786	1,329,648	1,719,682
	Total	2,073,000	4,642,338	4,253,743	6,231,685	2,017,391	2,150,818	1,926,436	1,760,459
Nonflat - Low Gloss	SB	1,422,000	1,259,343	1,165,747	862,517	94,305	34,373	24,525	3,856
	WB	6,610,000	3,382,995	3,087,996	5,369,168	2,967,097	4,440,720	6,570,365	12,019,222
	Total	8,032,000	4,642,338	4,253,743	6,231,685	3,061,401	4,475,094	6,594,890	12,023,079
Nonflat - Medium Gloss	SB	1,422,000	1,259,343	1,165,747	862,517	1,471,167	522,186	567,173	77,878
	WB	6,610,000	3,382,995	3,087,996	5,369,168	12,644,902	15,107,606	17,535,565	19,994,953
	Total	8,032,000	4,642,338	4,253,743	6,231,685	14,116,069	15,629,792	18,102,739	20,072,832
Other	SB	1,707,000	214	NA	NA	156,354	PD	15,971	2,576
	WB	2,604,000	0	NA	NA	316,511	PD	1,494,345	86,896
	Total	4,311,000	214	NA	NA	472,865	PD	1,510,316	89,473

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Pre-Treatment Wash Primer	SB	NA	NA	NA	25,559	17,530	PD	4,188	PD
	WB	NA	NA	NA	3,969	3,810	PD	71,154	PD
	Total	NA	NA	NA	29,528	21,340	71,940	75,342	4,959
Primer, Sealer, and Undercoater	SB	1,617,000	2,135,271	1,764,741	1,990,029	1,870,856	1,573,273	1,369,924	225,380
	WB	1,084,000	1,324,043	1,736,199	3,748,118	3,916,979	4,689,604	6,755,899	10,176,638
	Total	2,701,000	3,459,314	3,500,940	5,738,147	5,787,835	6,262,877	8,125,823	10,402,018
Quick Dry Enamel	SB	NA	NA	343,978	1,341,102	482,859	904,739	PD	713,196
	WB	NA	NA	10,066	8,069	1,332	0	PD	50,070
	Total	NA	NA	354,044	1,349,171	484,191	904,739	PD	763,266
Quick Dry Primer, Sealer, and Undercoater	SB	NA	NA	223,533	704,992	285,353	1,076,267	1,259,524	220,361
	WB	NA	NA	12,265	119,141	91,634	836,648	400,703	29,349
	Total	NA	NA	235,798	824,133	376,987	1,912,915	1,660,227	249,710
Recycled	SB	NA	NA	NA	NA	NA	NA	0	0
	WB	NA	NA	NA	NA	NA	NA	323,216	223,381
	Total	NA	NA	NA	NA	NA	NA	323,216	223,381
Roof	SB	1,158,000	1,953,271	1,254,751	1,224,930	308,356	PD	89,448	42,967
	WB	1,427,000	106,307	283,876	606,011	682,614	PD	1,047,906	1,363,922
	Total	2,585,000	2,059,579	1,538,626	1,830,941	990,969	PD	1,137,354	1,406,889
Rust Preventative	SB	NA	NA	NA	NA	NA	PD	166,748	2,004,661
	WB	NA	NA	NA	NA	NA	PD	43,151	90,839
	Total	NA	NA	NA	NA	NA	PD	209,899	2,095,500
Sanding Sealers	SB	NA	NA	NA	NA	377,811	110,767	20,452	60,457
	WB	NA	NA	NA	NA	8,923	5,166	7,816	23,816
	Total	NA	NA	NA	NA	386,734	115,933	28,268	84,273
Shellacs - Clear	SB	NA	NA	45,108	36,335	34,263	PD	PD	PD
	WB	NA	NA	0	0	0	PD	PD	0
	Total	NA	NA	45,108	36,335	34,263	PD	PD	PD
Shellacs - Opaque	SB	NA	NA	45,108	36,335	74,311	PD	PD	PD
	WB	NA	NA	0	0	0	PD	PD	0
	Total	NA	NA	45,108	36,335	74,311	PD	PD	PD

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Specialty Primer, Sealer, and Undercoater	SB	NA	NA	312,289	187,108	NA	NA	21,461	1,532,541
	WB	NA	NA	80,862	164,086	NA	NA	355,060	476,924
	Total	NA	NA	393,151	351,194	NA	NA	376,521	2,009,464
Stains - Clear/Semitransparent	SB	684,000	1,761,343	1,665,303	1,039,254	1,162,658	1,007,681	1,690,513	1,462,300
	WB	602,500	249,429	85,369	486,998	573,580	434,104	481,082	402,937
	Total	1,286,500	2,010,771	1,750,672	1,526,252	1,736,238	1,441,785	2,171,595	1,865,237
Stains - Opaque	SB	684,000	766,857	408,832	270,298	257,514	127,373	224,925	20,627
	WB	602,500	2,039,986	1,633,753	2,296,689	1,527,783	1,391,817	862,448	936,880
	Total	1,286,500	2,806,843	2,042,585	2,566,987	1,785,297	1,519,190	1,087,373	957,506
Swimming Pool	SB	NA	42,643	34,873	14,970	3,234	PD	12,399	9,828
	WB	NA	0	268	432	0	PD	9,687	10,536
	Total	NA	42,643	35,141	15,401	3,234	3,492	22,086	20,364
Swimming Pool Repair and Maintenance	SB	NA	42,643	34,873	14,970	4,094	PD	15,266	PD
	WB	NA	0	268	432	0	PD	0	0
	Total	NA	42,643	35,141	15,401	4,094	PD	15,266	PD
Temperature Indicator Safety	SB	NA	NA	NA	NA	NA	NA	NA	NA
	WB	NA	NA	NA	NA	NA	NA	NA	NA
	Total	NA	NA	NA	NA	NA	NA	NA	NA
Traffic Marking	SB	1,604,000	1,488,513	1,373,025	535,159	3,199,602	885,126	799,677	329,369
	WB	44,000	411,843	779,686	666,896	1,037,326	1,998,244	2,539,241	1,885,082
	Total	1,648,000	1,900,356	2,152,711	1,202,055	4,236,928	2,883,370	3,338,918	2,214,451
Varnishes - Clear	SB	910,000	1,653,836	1,005,433	603,151	816,021	445,397	715,117	694,415
	WB	9,000	40,350	12,548	62,924	44,765	172,031	372,743	276,280
	Total	919,000	1,694,186	1,017,981	666,075	860,787	617,428	1,087,860	970,695
Varnishes - Semitransparent	SB	NA	NA	NA	NA	NA	100,292	58,300	86,302
	WB	NA	NA	NA	NA	NA	61,917	3,205	3,001
	Total	NA	NA	NA	NA	NA	162,209	61,505	89,303
Waterproofing Concrete/Masonry Sealers	SB	NA	NA	NA	NA	NA	NA	225,227	955,355
	WB	NA	NA	NA	NA	NA	NA	482,694	953,023
	Total	NA	NA	NA	NA	NA	NA	707,921	1,908,378

Table 11-6: ***Summary of All ARB Architectural Coating Surveys – Sales Data***

ARCHITECTURAL COATING SALES (gallons)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Waterproofing Sealers	SB	NA	694,614	750,079	140,549	736,269	616,356	442,989	195,212
	WB	NA	44,886	11,039	118,307	287,667	453,650	574,622	1,316,699
	Total	NA	739,500	761,118	258,856	1,023,936	1,070,006	1,017,611	1,511,911
Wood Preservatives	SB	NA	882,300	623,900	272,170	270,196	PD	166,982	164,236
	WB	NA	1,000	15,583	280,920	32,877	PD	10,462	9,610
	Total	NA	883,300	639,483	553,090	303,073	375,832	177,444	173,846
SALES TOTALS (gallons)									
Solvent-borne:		**18,990,000**	**22,283,599**	**21,027,914**	**17,375,674**	**18,260,455**	**15,685,996**	**16,906,211**	**13,053,035**
Water-borne:		**29,216,000**	**38,206,157**	**37,453,089**	**60,499,924**	**58,796,269**	**71,809,644**	**81,548,961**	**97,354,686**
Grand Total:		**48,206,000**	**60,489,756**	**58,481,003**	**77,875,598**	**77,056,724**	**87,495,639**	**98,455,172**	**110,407,721**

Notes:

1. NA = Not Applicable. No sales were reported for this category or this category did not exist in the given survey year.
2. PD = Protected Data. Fewer than three companies reported sales.
3. Sales volumes contained in this table include sales of small containers (1 quart or less).
4. Totals don't include aerosol coatings which were listed in some of the older coating surveys.
5. Totals don't include thinning solvents, cleanup solvents, or additives.
6. ARB staff established the correlation between the categories that were originally reported and the current list of coating categories. If multiple current categories were selected, sales and emissions data were divided evenly. For example, "Roof" was originally reported and ARB staff selected two corresponding current categories: "Roof" and "Bituminous Roof". Half of the sales was attributed to "Roof" and the other half was attributed to "Bituminous Roof".

Table 11-7: ***Summary of All ARB Architectural Coating Surveys – Emissions Data***

		ARCHITECTURAL COATING VOC EMISSIONS (tons/day)							
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Antenna	SB	NA	NA	NA	NA	NA	NA	PD	NA
	WB	NA	NA	NA	NA	NA	NA	PD	NA
	Total	NA	NA	NA	NA	NA	NA	PD	NA
Antifouling	SB	NA	NA	NA	NA	NA	PD	NA	NA
	WB	NA	NA	NA	NA	NA	PD	NA	NA
	Total	NA	NA	NA	NA	NA	PD	NA	NA
Bituminous Roof	SB	5.05	6.27	4.57	4.18	0.92	2.52	4.30	0.38
	WB	0.00	0.01	0.05	0.08	0.28	0.07	0.03	0.03
	Total	5.05	6.29	4.62	4.26	1.21	2.59	4.33	0.41
Bituminous Roof Primer	SB	NA	NA	NA	NA	NA	NA	0.31	0.23
	WB	NA	NA	NA	NA	NA	NA	0.05	0.01
	Total	NA	NA	NA	NA	NA	NA	0.37	0.24
Bond Breakers	SB	NA	NA	1.22	0.00	0.01	0.00	0.00	0.01
	WB	NA	NA	0.00	0.00	0.00	0.03	0.07	0.16
	Total	NA	NA	1.22	0.00	0.01	0.03	0.07	0.17
Clear Brushing Lacquer	SB	NA	NA	NA	NA	NA	NA	0.53	0.53
	WB	NA	NA	NA	NA	NA	NA	0.00	0.00
	Total	NA	NA	NA	NA	NA	NA	0.53	0.53
Concrete Curing Compounds	SB	NA	NA	1.73	0.00	0.26	0.09	0.08	0.11
	WB	NA	NA	0.00	0.01	0.05	0.35	0.29	0.32
	Total	NA	NA	1.73	0.01	0.31	0.45	0.37	0.43
Driveway Sealer	SB	NA	NA	NA	NA	NA	NA	NA	0.02
	WB	NA	NA	NA	NA	NA	NA	NA	0.02
	Total	NA	NA	NA	NA	NA	NA	NA	0.04
Dry Fog	SB	NA	0.10	0.32	0.40	0.34	0.31	0.85	0.68
	WB	NA	0.00	0.00	0.01	0.01	0.16	0.25	0.13
	Total	NA	0.10	0.32	0.41	0.36	0.48	1.10	0.82
Faux Finishing	SB	NA	NA	NA	NA	NA	NA	0.03	0.02
	WB	NA	NA	NA	NA	NA	NA	0.18	0.32
	Total	NA	NA	NA	NA	NA	NA	0.22	0.34
Fire Resistive	SB	NA	NA	NA	NA	NA	NA	0.00	0.02
	WB	NA	NA	NA	NA	NA	NA	0.00	0.00
	Total	NA	NA	NA	NA	NA	NA	0.00	0.02
Fire Retardant - Clear	SB	NA	NA	NA	NA	0.01	0.00	0.00	0.00
	WB	NA	NA	NA	NA	0.00	0.00	0.00	0.00
	Total	NA	NA	NA	NA	0.01	0.00	0.00	0.00
Fire Retardant - Opaque	SB	NA	0.00	0.02	0.03	0.07	0.03	0.01	0.72
	WB	NA	0.00	0.02	0.04	0.00	0.02	0.01	0.00
	Total	NA	0.00	0.04	0.06	0.07	0.05	0.02	0.72
Flat	SB	6.93	0.85	0.16	0.00	0.24	0.12	0.05	0.02
	WB	6.57	13.17	13.96	17.51	16.16	14.43	15.55	13.79
	Total	13.51	14.02	14.13	17.51	16.40	14.55	15.60	13.80
Floor	SB	2.50	NA	NA	NA	NA	0.84	0.24	0.19
	WB	0.10	NA	NA	NA	NA	0.59	0.63	0.53
	Total	2.60	NA	NA	NA	NA	1.43	0.87	0.72

Table 11-7: ***Summary of All ARB Architectural Coating Surveys – Emissions Data***

		ARCHITECTURAL COATING VOC EMISSIONS (tons/day)							
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Flow	SB	NA	NA	NA	NA	NA	NA	PD	NA
	WB	NA	NA	NA	NA	NA	NA	PD	NA
	Total	NA	NA	NA	NA	NA	NA	PD	NA
Form Release Compounds	SB	NA	NA	NA	0.01	0.04	0.03	0.61	0.79
	WB	NA	NA	NA	0.00	0.00	0.00	0.01	0.01
	Total	NA	NA	NA	0.01	0.04	0.03	0.61	0.80
Graphic Arts	SB	NA	0.16	0.25	0.16	2.48	0.05	0.06	0.01
	WB	NA	0.00	0.00	0.00	0.00	0.00	0.01	0.00
	Total	NA	0.16	0.25	0.16	2.48	0.06	0.07	0.02
High Temperature	SB	NA	NA	NA	NA	0.08	0.10	0.08	0.05
	WB	NA	NA	NA	NA	0.00	0.00	0.00	0.00
	Total	NA	NA	NA	NA	0.08	0.10	0.08	0.05
Industrial Maintenance	SB	8.70	16.20	15.78	12.49	11.82	14.00	14.81	3.61
	WB	0.04	0.10	0.01	0.69	0.29	0.36	0.63	0.65
	Total	8.74	16.31	15.78	13.18	12.11	14.36	15.44	4.26
Lacquers	SB	4.70	10.79	15.10	10.46	6.42	4.51	2.40	3.35
	WB	0.00	0.05	0.04	0.02	0.07	0.04	0.10	0.25
	Total	4.70	10.84	15.14	10.47	6.49	4.56	2.50	3.60
Low Solids	SB	NA	NA	NA	NA	NA	0.00	0.00	0.00
	WB	NA	NA	NA	NA	NA	0.01	0.01	0.04
	Total	NA	NA	NA	NA	NA	0.01	0.01	0.04
Magnesite Cement	SB	NA	NA	NA	0.36	0.29	0.25	0.12	0.09
	WB	NA	NA	NA	0.00	0.00	0.00	0.00	0.00
	Total	NA	NA	NA	0.36	0.29	0.25	0.12	0.09
Mastic Texture	SB	NA	0.03	0.91	0.87	0.36	0.15	0.45	0.26
	WB	NA	0.06	0.21	1.89	0.31	0.12	0.23	0.25
	Total	NA	0.09	1.12	2.76	0.67	0.27	0.68	0.51
Metallic Pigmented	SB	2.60	0.46	0.19	1.28	1.91	1.41	2.75	2.12
	WB	0.00	0.00	0.00	0.01	0.00	0.07	0.06	0.04
	Total	2.60	0.46	0.19	1.28	1.91	1.47	2.81	2.17
Multi-Color	SB	NA	0.00	0.32	0.05	0.00	0.01	0.00	0.00
	WB	NA	0.22	0.00	0.05	0.11	0.07	0.01	0.00
	Total	NA	0.22	0.32	0.10	0.11	0.08	0.01	0.00
Nonflat - High Gloss	SB	4.60	5.13	4.85	2.82	4.76	2.23	2.28	0.17
	WB	1.30	2.61	2.92	4.47	0.77	1.71	1.37	1.17
	Total	5.90	7.73	7.77	7.29	5.53	3.94	3.65	1.34
Nonflat - Low Gloss	SB	6.33	5.13	4.85	2.82	0.40	0.13	0.10	0.02
	WB	6.47	2.61	2.92	4.47	2.15	3.00	3.95	6.62
	Total	12.80	7.73	7.77	7.29	2.56	3.14	4.05	6.64
Nonflat - Medium Gloss	SB	6.33	5.13	4.85	2.82	4.73	1.71	2.12	0.33
	WB	6.47	2.61	2.92	4.47	10.15	10.55	13.46	11.40
	Total	12.80	7.73	7.77	7.29	14.88	12.26	15.58	11.73
Other	SB	8.20	0.00	NA	NA	0.88	0.52	0.02	0.01
	WB	1.50	0.00	NA	NA	0.15	0.02	0.00	0.01
	Total	9.70	0.00	NA	NA	1.04	0.54	0.02	0.02

Table 11-7: ***Summary of All ARB Architectural Coating Surveys – Emissions Data***

		ARCHITECTURAL COATING VOC EMISSIONS (tons/day)							
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Pre-Treatment Wash Primer	SB	NA	NA	NA	0.12	0.15	0.01	0.02	0.01
	WB	NA	NA	NA	0.00	0.01	0.08	0.08	0.00
	Total	NA	NA	NA	0.13	0.16	0.09	0.10	0.01
Primer, Sealer, and Undercoater	SB	7.30	10.83	7.73	6.84	6.87	6.19	5.17	0.93
	WB	1.09	0.61	0.98	2.21	2.00	2.18	3.38	5.48
	Total	8.39	11.44	8.71	9.05	8.87	8.37	8.55	6.41
Quick Dry Enamel	SB	NA	NA	1.76	6.06	2.22	4.07	2.47	3.17
	WB	NA	NA	0.01	0.01	0.00	0.00	0.02	0.06
	Total	NA	NA	1.77	6.08	2.22	4.07	2.49	3.23
Quick Dry Primer, Sealer, and Undercoater	SB	NA	NA	1.35	3.97	1.20	5.28	6.22	1.02
	WB	NA	NA	0.01	0.07	0.04	0.67	0.26	0.00
	Total	NA	NA	1.36	4.04	1.25	5.95	6.49	1.02
Recycled	SB	NA	NA	NA	NA	NA	NA	0.00	0.00
	WB	NA	NA	NA	NA	NA	NA	0.00	0.00
	Total	NA	NA	NA	NA	NA	NA	0.00	0.00
Roof	SB	5.05	6.27	4.57	4.18	0.92	0.34	0.21	0.11
	WB	0.00	0.01	0.05	0.08	0.28	0.20	0.36	0.28
	Total	5.05	6.29	4.62	4.26	1.21	0.54	0.57	0.39
Rust Preventative	SB	NA	NA	NA	NA	NA	0.26	0.72	8.59
	WB	NA	NA	NA	NA	NA	0.00	0.03	0.09
	Total	NA	NA	NA	NA	NA	0.26	0.75	8.68
Sanding Sealers	SB	NA	NA	NA	NA	2.88	0.84	0.13	0.35
	WB	NA	NA	NA	NA	0.01	0.00	0.01	0.01
	Total	NA	NA	NA	NA	2.89	0.84	0.14	0.37
Shellacs - Clear	SB	NA	NA	0.29	0.23	0.24	0.21	0.11	0.35
	WB	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
	Total	NA	NA	0.29	0.23	0.24	0.21	0.11	0.35
Shellacs - Opaque	SB	NA	NA	0.29	0.23	0.44	0.74	0.50	0.81
	WB	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00
	Total	NA	NA	0.29	0.23	0.44	0.74	0.50	0.81
Specialty Primer, Sealer, and Undercoater	SB	NA	NA	1.72	0.87	NA	NA	0.10	6.01
	WB	NA	NA	0.06	0.16	NA	NA	0.21	0.23
	Total	NA	NA	1.78	1.03	NA	NA	0.31	6.23
Stains - Clear/Semitransparent	SB	4.00	12.00	11.29	5.26	5.59	5.16	7.46	5.95
	WB	0.65	0.23	0.07	0.21	0.48	0.49	0.40	0.32
	Total	4.65	12.23	11.36	5.47	6.07	5.65	7.86	6.28
Stains - Opaque	SB	4.00	3.41	2.01	1.13	1.16	0.54	0.85	0.07
	WB	0.65	1.20	0.98	1.36	0.95	0.89	0.52	0.42
	Total	4.65	4.61	2.99	2.50	2.11	1.43	1.36	0.48
Swimming Pool	SB	NA	0.24	0.25	0.13	0.02	0.02	0.05	0.03
	WB	NA	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	Total	NA	0.24	0.25	0.13	0.02	0.02	0.06	0.04
Swimming Pool Repair and Maintenance	SB	NA	0.24	0.25	0.13	0.01	0.08	0.10	0.01
	WB	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	NA	0.24	0.25	0.13	0.01	0.08	0.10	0.01

Table 11-7: ***Summary of All ARB Architectural Coating Surveys – Emissions Data***

		ARCHITECTURAL COATING VOC EMISSIONS (tons/day)							
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Temperature Indicator Safety	SB	NA	NA	NA	NA	NA	NA	NA	NA
	WB	NA	NA	NA	NA	NA	NA	NA	NA
	Total	NA	NA	NA	NA	NA	NA	NA	NA
Traffic Marking	SB	7.10	6.75	6.41	2.18	4.29	1.98	0.75	0.36
	WB	0.03	0.13	0.24	0.60	0.93	1.69	2.29	1.31
	Total	7.13	6.89	6.64	2.78	5.22	3.67	3.03	1.67
Varnishes - Clear	SB	4.70	10.79	5.52	2.86	4.03	2.35	3.52	3.63
	WB	0.00	0.05	0.02	0.32	0.04	0.20	0.51	0.29
	Total	4.70	10.84	5.54	3.18	4.07	2.55	4.03	3.92
Varnishes - Semitransparent	SB	NA	NA	NA	NA	NA	0.53	0.29	0.43
	WB	NA	NA	NA	NA	NA	0.08	0.00	0.00
	Total	NA	NA	NA	NA	NA	0.61	0.30	0.43
Waterproofing Concrete/Masonry Sealers	SB	NA	NA	NA	NA	NA	NA	1.02	2.24
	WB	NA	NA	NA	NA	NA	NA	0.28	0.57
	Total	NA	NA	NA	NA	NA	NA	1.30	2.81
Waterproofing Sealers	SB	NA	5.56	5.85	0.79	3.44	2.51	1.65	0.60
	WB	NA	0.02	0.00	0.03	0.07	0.30	0.27	0.83
	Total	NA	5.57	5.86	0.82	3.51	2.81	1.92	1.43
Wood Preservatives	SB	NA	6.68	3.93	1.40	1.14	0.89	0.68	0.61
	WB	NA	0.00	0.04	1.33	0.02	0.04	0.00	0.00
	Total	NA	6.68	3.97	2.73	1.16	0.93	0.68	0.62
EMISSIONS TOTALS (tons/day)									
	Solvent-borne:	**88.1**	**113.0**	**108.4**	**75.1**	**70.6**	**61.0**	**64.2**	**49.0**
	Water-borne:	**24.9**	**23.7**	**25.5**	**40.1**	**35.3**	**38.4**	**45.5**	**45.7**
	Grand Total:	**113.0**	**136.7**	**133.9**	**115.2**	**106.0**	**99.4**	**109.7**	**94.7**

Notes:

1. NA = Not Applicable. No sales were reported for this category or this category did not exist in the given survey year.
2. This table includes VOC emissions from small containers (1 quart or less).
3. VOC emissions are for coatings only and do not contain emissions from associated thinning solvents, cleanup solvents, and additives.

Table 11-8: ***Summary of All ARB Architectural Coating Surveys – Emission Factors***

ARCHITECTURAL COATING EMISSION FACTORS (lbs VOC/gal coating)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Bituminous Roof	SB	3.18	2.34	2.66	2.49	2.19	1.42	1.95	2.09
	WB	0.00	0.09	0.12	0.10	0.30	0.01	0.01	0.02
	All	1.43	2.23	2.19	1.70	0.89	0.38	0.97	0.20
Bituminous Roof Primer	SB	NA	NA	NA	NA	NA	NA	3.26	2.84
	WB	NA	NA	NA	NA	NA	NA	0.38	0.59
	All	NA	NA	NA	NA	NA	NA	1.56	2.57
Bond Breakers	SB	NA	NA	5.03	NA	4.33	PD	NA	PD
	WB	NA	NA	0.00	NA	1.09	PD	0.53	PD
	All	NA	NA	4.81	NA	4.32	PD	0.53	0.66
Clear Brushing Lacquer	SB	NA	NA	NA	NA	NA	NA	PD	PD
	WB	NA	NA	NA	NA	NA	NA	PD	NA
	All	NA	NA	NA	NA	NA	NA	PD	PD
Concrete Curing Compounds	SB	NA	NA	6.01	9.76	6.62	5.65	1.84	1.88
	WB	NA	NA	0.00	1.37	0.21	0.65	0.32	0.31
	All	NA	NA	5.93	1.75	1.14	0.79	0.39	0.40
Driveway Sealer	SB	NA	NA	NA	NA	NA	NA	NA	PD
	WB	NA	NA	NA	NA	NA	NA	NA	PD
	All	NA	NA	NA	NA	NA	NA	NA	0.01
Dry Fog	SB	NA	3.37	3.46	3.38	3.10	2.95	2.56	2.67
	WB	NA	0.00	0.00	0.44	0.42	0.95	0.83	0.50
	All	NA	3.28	3.31	3.10	2.48	1.71	1.74	1.58
Faux Finishing	SB	NA	NA	NA	NA	NA	NA	3.36	3.27
	WB	NA	NA	NA	NA	NA	NA	0.80	0.79
	All	NA	NA	NA	NA	NA	NA	0.91	0.83
Fire Resistive	SB	NA	NA	NA	NA	NA	NA	PD	PD
	WB	NA	NA	NA	NA	NA	NA	PD	PD
	All	NA	NA	NA	NA	NA	NA	PD	0.98
Fire Retardant - Clear	SB	NA	NA	NA	NA	4.80	PD	PD	PD
	WB	NA	NA	NA	NA	NA	PD	PD	NA
	All	NA	NA	NA	NA	4.80	PD	PD	PD
Fire Retardant - Opaque	SB	NA	0.00	2.00	5.20	3.11	2.23	PD	PD
	WB	NA	0.00	0.30	2.02	0.08	0.25	PD	PD
	All	NA	0.00	0.58	2.75	2.23	0.61	0.43	2.62
Flat	SB	3.22	3.51	3.66	NA	2.89	3.11	3.08	2.74
	WB	0.69	0.41	0.45	0.37	0.37	0.33	0.33	0.27
	All	1.16	0.44	0.45	0.37	0.37	0.33	0.33	0.27
Floor	SB	3.66	NA	NA	NA	NA	1.24	1.15	1.98
	WB	0.22	NA	NA	NA	NA	0.66	0.36	0.33
	All	2.27	NA	NA	NA	NA	0.91	0.45	0.43
Form Release Compounds	SB	NA	NA	NA	5.19	4.97	2.06	1.98	2.02
	WB	NA	NA	NA	NA	0.41	0.01	0.11	0.27
	All	NA	NA	NA	5.19	3.06	0.28	1.74	1.81
Graphic Arts	SB	NA	2.30	3.39	3.54	3.43	PD	3.45	PD
	WB	NA	0.00	2.94	NA	0.37	PD	0.44	PD
	All	NA	2.23	3.38	3.54	3.40	1.00	2.00	PD

Table 11-8: ***Summary of All ARB Architectural Coating Surveys – Emission Factors***

ARCHITECTURAL COATING EMISSION FACTORS (lbs VOC/gal coating)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
High Temperature	SB	NA	NA	NA	NA	4.49	3.05	PD	3.04
	WB	NA	NA	NA	NA	NA	0.82	PD	NA
	All	NA	NA	NA	NA	4.49	3.03	PD	3.04
Industrial Maintenance	SB	3.22	3.78	3.57	3.19	3.03	2.59	2.62	1.85
	WB	0.64	0.58	0.79	1.59	0.78	0.69	0.75	0.66
	All	3.17	3.65	3.56	3.03	2.84	2.42	2.38	1.45
Lacquers	SB	3.77	4.76	5.34	5.44	5.55	5.26	4.68	2.61
	WB	0.32	0.92	0.86	1.01	1.02	0.73	1.00	0.52
	All	3.74	4.67	5.26	5.40	5.30	4.97	4.08	2.04
Low Solids	SB	NA	NA	NA	NA	NA	PD	NA	NA
	WB	NA	NA	NA	NA	NA	PD	0.49	0.50
	All	NA	NA	NA	NA	NA	PD	0.49	0.50
Magnesite Cement	SB	NA	NA	NA	4.98	4.74	PD	PD	PD
	WB	NA	NA	NA	NA	NA	PD	PD	NA
	All	NA	NA	NA	4.98	4.74	PD	PD	PD
Mastic Texture	SB	NA	2.81	1.50	1.44	1.55	PD	1.57	PD
	WB	NA	0.26	0.38	1.85	0.37	PD	0.39	PD
	All	NA	0.36	0.96	1.70	0.63	0.65	0.79	0.55
Metallic Pigmented	SB	3.86	3.94	4.15	4.00	3.91	3.76	3.91	3.54
	WB	0.24	NA	0.00	0.16	0.08	0.41	0.42	0.24
	All	3.84	3.94	4.15	3.64	3.80	2.74	3.28	2.77
Multi-Color	SB	NA	0.00	3.37	2.74	NA	PD	PD	PD
	WB	NA	2.75	NA	2.28	2.70	PD	PD	PD
	All	NA	2.72	3.37	2.50	2.70	PD	PD	0.25
Nonflat - High Gloss	SB	2.84	2.97	3.04	2.38	2.61	3.05	2.79	3.11
	WB	1.07	0.56	0.69	0.61	0.82	0.77	0.75	0.50
	All	2.08	1.22	1.33	0.85	2.00	1.34	1.38	0.56
Nonflat - Low Gloss	SB	3.25	2.97	3.04	2.38	3.12	2.85	3.09	3.34
	WB	0.71	0.56	0.69	0.61	0.53	0.49	0.44	0.40
	All	1.16	1.22	1.33	0.85	0.61	0.51	0.45	0.40
Nonflat - Medium Gloss	SB	3.25	2.97	3.04	2.38	2.35	2.39	2.72	3.10
	WB	0.71	0.56	0.69	0.61	0.59	0.51	0.56	0.42
	All	1.16	1.22	1.33	0.85	0.77	0.57	0.63	0.43
Other	SB	3.51	0.00	NA	NA	4.13	PD	0.96	4.16
	WB	0.42	NA	NA	NA	0.35	PD	0.00	0.09
	All	1.64	0.00	NA	NA	1.60	PD	0.01	0.20
Pre-Treatment Wash Primer	SB	NA	NA	NA	3.52	6.07	PD	4.08	PD
	WB	NA	NA	NA	0.50	2.44	PD	0.78	PD
	All	NA	NA	NA	3.12	5.42	0.87	0.97	1.57
Primer, Sealer, and Undercoater	SB	3.30	3.70	3.20	2.51	2.68	2.87	2.75	3.01
	WB	0.73	0.34	0.41	0.43	0.37	0.34	0.37	0.39
	All	2.27	2.42	1.82	1.15	1.12	0.98	0.77	0.45
Quick Dry Enamel	SB	NA	NA	3.73	3.30	3.35	3.28	PD	3.24
	WB	NA	NA	0.79	1.24	0.37	NA	PD	0.89
	All	NA	NA	3.64	3.29	3.34	3.28	PD	3.09

Table 11-8: ***Summary of All ARB Architectural Coating Surveys – Emission Factors***

ARCHITECTURAL COATING EMISSION FACTORS (lbs VOC/gal coating)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Quick Dry Primer, Sealer, and Undercoater	SB	NA	NA	4.41	4.11	3.07	3.58	3.61	3.38
	WB	NA	NA	0.33	0.44	0.35	0.58	0.48	0.08
	All	NA	NA	4.20	3.58	2.41	2.27	2.85	2.99
Recycled	SB	NA	NA	NA	NA	NA	NA	NA	NA
	WB	NA	NA	NA	NA	NA	NA	0.00	0.00
	All	NA	NA	NA	NA	NA	NA	0.00	0.00
Roof	SB	3.18	2.34	2.66	2.49	2.19	PD	1.74	1.91
	WB	0.00	0.09	0.12	0.10	0.30	PD	0.25	0.15
	All	1.43	2.23	2.19	1.70	0.89	PD	0.37	0.20
Rust Preventative	SB	NA	NA	NA	NA	NA	PD	3.16	3.13
	WB	NA	NA	NA	NA	NA	PD	0.47	0.73
	All	NA	NA	NA	NA	NA	PD	2.61	3.02
Sanding Sealers	SB	NA	NA	NA	NA	5.56	5.52	4.64	4.25
	WB	NA	NA	NA	NA	0.70	0.51	0.66	0.44
	All	NA	NA	NA	NA	5.45	5.30	3.54	3.18
Shellacs - Clear	SB	NA	NA	4.77	4.60	5.04	PD	PD	PD
	WB	NA	NA	NA	NA	NA	PD	PD	NA
	All	NA	NA	4.77	4.60	5.04	PD	PD	PD
Shellacs - Opaque	SB	NA	NA	4.77	4.60	4.36	PD	PD	PD
	WB	NA	NA	NA	NA	NA	PD	PD	NA
	All	NA	NA	4.77	4.60	4.36	PD	PD	PD
Specialty Primer, Sealer, and Undercoater	SB	NA	NA	4.01	3.39	NA	NA	3.34	2.86
	WB	NA	NA	0.54	0.72	NA	NA	0.43	0.35
	All	NA	NA	3.30	2.14	NA	NA	0.60	2.26
Stains - Clear/Semitransparent	SB	4.27	4.97	4.95	3.69	3.51	3.74	3.22	2.97
	WB	0.79	0.66	0.63	0.32	0.61	0.82	0.61	0.59
	All	2.64	4.44	4.74	2.62	2.55	2.86	2.64	2.46
Stains - Opaque	SB	4.27	3.25	3.59	3.06	3.29	3.07	2.75	2.40
	WB	0.79	0.43	0.44	0.43	0.45	0.47	0.44	0.32
	All	2.64	1.20	1.07	0.71	0.86	0.69	0.92	0.37
Swimming Pool	SB	NA	4.15	5.19	6.21	4.77	PD	2.67	2.53
	WB	NA	NA	0.00	2.32	NA	PD	0.76	0.68
	All	NA	4.15	5.15	6.10	4.77	3.34	1.83	1.57
Swimming Pool Repair and Maintenance	SB	NA	4.15	5.19	6.21	1.72	PD	4.76	PD
	WB	NA	NA	0.00	2.32	NA	PD	NA	NA
	All	NA	4.15	5.15	6.10	1.72	PD	4.76	PD
Traffic Marking	SB	3.23	3.31	3.41	2.97	0.98	1.63	0.68	0.80
	WB	0.50	0.24	0.22	0.66	0.65	0.62	0.66	0.51
	All	3.16	2.65	2.25	1.69	0.90	0.93	0.66	0.55
Varnishes - Clear	SB	3.77	4.76	4.01	3.46	3.60	3.86	3.60	3.81
	WB	0.32	0.92	1.12	3.66	0.66	0.85	0.99	0.77
	All	3.74	4.67	3.97	3.48	3.45	3.02	2.70	2.95
Varnishes - Semitransparent	SB	NA	NA	NA	NA	NA	3.83	3.66	3.66
	WB	NA	NA	NA	NA	NA	0.99	0.83	0.50
	All	NA	NA	NA	NA	NA	2.74	3.51	3.55

Table 11-8: ***Summary of All ARB Architectural Coating Surveys – Emission Factors***

ARCHITECTURAL COATING EMISSION FACTORS (lbs VOC/gal coating)									
Coating Category	**Type**	**1975**	**1980**	**1984**	**1988**	**1990**	**1996**	**2000**	**2004**
Waterproofing Concrete/Masonry Sealers	SB	NA	NA	NA	NA	NA	NA	3.32	1.71
	WB	NA	NA	NA	NA	NA	NA	0.42	0.44
	All	NA	NA	NA	NA	NA	NA	1.34	1.07
Waterproofing Sealers	SB	NA	5.84	5.70	4.10	3.41	2.97	2.71	2.24
	WB	NA	0.25	0.18	0.20	0.17	0.49	0.34	0.46
	All	NA	5.50	5.62	2.32	2.50	1.92	1.37	0.69
Wood Preservatives	SB	NA	5.53	4.59	3.76	3.08	PD	2.97	2.73
	WB	NA	0.00	1.93	3.45	0.40	PD	0.35	0.36
	All	NA	5.52	4.53	3.60	2.79	1.80	2.81	2.59
EMISSION FACTORS (lb VOC/gal coating)									
Solvent-borne:		3.39	3.70	3.76	3.16	2.82	2.84	2.77	2.74
Water-borne:		0.62	0.45	0.50	0.48	0.44	0.39	0.41	0.34
Overall:		**1.71**	**1.65**	**1.67**	**1.08**	**1.00**	**0.83**	**0.81**	**0.63**

Notes:

1. NA = Not Applicable. No sales were reported for this category or this category did not exist in the given survey year.
2. PD = Protected Data. Fewer than three companies reported sales.
3. This table includes VOC emissions from small containers (1 quart or less).
4. VOC emission factors are for coatings only and do not include emissions from associated thinning solvents, cleanup solvents, and additives.

Chapter 12 – Averaging Programs

This section provides an analysis of the survey data for products that were included in an architectural coating averaging program.

On June 22, 2000, the Board approved an update to the Suggested Control Measure (SCM) for Architectural Coatings. The 2000 SCM specified VOC limits for 47 coating categories. The SCM also contained a voluntary compliance option referred to as the averaging provision. This provision was intended to provide additional flexibility to the regulated industry, by allowing manufacturers to average emissions from higher-VOC products with emissions from low-VOC products. During 2003 and 2004, ARB staff managed the statewide averaging program for the eighteen local air districts that adopted rules based on the SCM, at that time. The averaging program in these rules ended on January 1, 2005.

In 2001, the SCAQMD began managing their own averaging program under their Architectural Coating Rule 1113. The averaging programs managed by the SCAQMD and the ARB were very similar, with one major exception - the SCAQMD averaging program is still in effect because it has no sunset date (i.e., expiration date).

The following table lists the categories that have been included in the averaging programs administered by the ARB and the SCAQMD.

Table 12-1: ***Categories Included in the Averaging Programs***

Categories Included in the ARB & SCAQMD Averaging Programs
Bituminous Roof
Flat
Floor
Industrial Maintenance
Nonflat (excluding recycled coatings)
Primer, Sealer, Undercoater
Quick Dry Enamel
Quick Dry Primer, Sealer, Undercoater
Roof
Rust Preventative
Stains
Waterproofing Sealers
Additional Categories Only in the SCAQMD Averaging Program as of December 31, 2004
Bituminous Roof Primers
Interior Stains
Sanding Sealers
Specialty Primers
Varnishes
Waterproofing Concrete/Masonry Sealers

The previous chapters of this survey report contain analyses of the data as reported, without any special consideration for high-VOC products that were included in averaging programs. The results contained in this chapter highlight the products that were averaged.

This chapter includes the following data summaries:

Table 12-1: *Categories Included in the Averaging Programs*

Table 12-2: *Sales Volume - Only for Categories That Allowed Averaging*

Table 12-3: *VOC Emissions - Only for Categories That Allowed Averaging*

Table 12-4: *VOC Contents - Only for Categories That Allowed Averaging (no quarts)*

Table 12-5: *Complying Marketshares – Excluding High-VOC Products Included in Averaging Programs – SCM Limits*

Table 12-6: *Complying Marketshares – Excluding High-VOC Products Included in Averaging Programs – SCAQMD Future Limits*

Table 12-2 lists sales for coating categories that were included in the ARB and SCAQMD averaging programs. Sales sub-totals are provided for solvent-borne and water-borne sales and for averaged products. For the purposes of this table, total sales are divided into three subcategories:

- High-VOC Averaged: Products in large containers that were included in an averaging program and had VOC levels that exceeded SCM limits.
- Low-VOC Averaged: Products in small and large containers that were included in an averaging program and had VOC levels below SCM VOC limits.
- Not Averaged: Products in small and large containers that were not included in an averaging program.

Table 12-2: ***Sales Volume - Only for Categories That Allowed Averaging***

Coating Category	Solventborne Sales (gallons)			Waterborne Sales (gallons)			Total Sales (gallons)	% of Total Sales			
	High-VOC Averaged	Low-VOC Averaged	Not Averaged	High-VOC Averaged	Low-VOC Averaged	Not Averaged		SB High-VOC Avg.	SB Low-VOC Avg. & Not Avg.	WB High-VOC Avg.	WB Low-VOC Avg. & Not Avg.
Flat	0	0	4,082	554,167	11,004,979	25,701,646	37,264,874	0%	0%	1%	99%
Floor	0	0	71,170	0	122,898	1,045,824	1,239,892	0%	6%	0%	94%
Industrial Maintenance	156,632	3,381	1,262,823	3,409	101,642	609,885	2,137,772	7%	59%	0%	33%
Nonflat - Low Gloss	0	0	3,856	4,848	1,916,046	10,098,328	12,023,079	0%	0%	0%	100%
Nonflat - Medium Gloss	29,396	0	48,482	939,215	2,775,633	16,280,105	20,072,832	0%	0%	5%	95%
Nonflat - High Gloss	2,010	0	38,767	0	654,123	1,065,559	1,760,459	0%	2%	0%	98%
Primer, Sealer, and Undercoater	117,946	5,989	101,445	0	2,289,818	7,886,821	10,402,018	1%	1%	0%	98%
Quick Dry Enamel	684,810	0	28,386	0	0	50,070	763,266	90%	4%	0%	7%
Quick Dry Primer, Sealer, and Undercoater	153,434	0	66,927	0	0	29,349	249,710	61%	27%	0%	12%
Rust Preventative	658	123,008	1,880,995	0	19,568	71,271	2,095,500	0%	96%	0%	4%
Specialty Primer, Sealer, and Undercoater	1,526	3,356	1,527,659	0	0	476,924	2,009,464	0%	76%	0%	24%

Table 12-2: *Sales Volume - Only for Categories That Allowed Averaging*

Coating Category	Solventborne Sales (gallons)			Waterborne Sales (gallons)			Total Sales (gallons)	% of Total Sales			
	High-VOC Averaged	Low-VOC Averaged	Not Averaged	High-VOC Averaged	Low-VOC Averaged	Not Averaged		SB High-VOC Avg.	SB Low-VOC Avg. & Not Avg.	WB High-VOC Avg.	WB Low-VOC Avg. & Not Avg.
Stains - Clear/Semitransparent	0	0	1,462,300	0	48	402,889	1,865,237	0%	78%	0%	22%
Stains - Opaque	0	0	20,627	0	194,848	742,032	957,506	0%	2%	0%	98%
Waterproofing Sealers	110,871	0	84,341	0	0	1,316,699	1,511,911	7%	6%	0%	87%
TOTALS:	**1,257,283**	**135,734**	**6,601,859**	**1,501,639**	**19,079,603**	**65,777,401**	**94,353,519**	**1%**	**7%**	**2%**	**90%**

Notes:

1. This table only contains sales for categories that were included in averaging programs. Bituminous Roof and Roof are categories that are eligible for averaging, but no companies reported that these types of products were averaged in 2004.
2. High-VOC Averaged: Products in large containers that were included in an averaging program and had VOC levels that exceeded SCM limits.
3. Low-VOC Averaged: Products in small and large containers that were included in an averaging program and had VOC levels below SCM VOC limits.
4. Not Averaged: Products in small and large containers that were not included in an averaging program.
5. Small Containers: One quart or less. Large Containers: Greater than one quart.

Table 12-3 lists VOC emissions for coating categories that were included in the ARB and SCAQMD averaging programs.

Table 12-3: ***VOC Emissions - Only for Categories That Allowed Averaging***

Coating Category	VOC Emissions (tons/day)			Total Emissions (tons/day)	% of Emissions	
	High-VOC Averaged	Low-VOC Averaged	Not Averaged		High-VOC Avg.	Low-VOC Avg. & Not Avg.
Flat	0.3	3.8	9.6	13.8	2%	98%
Floor	0.0	0.1	0.6	0.7	0%	100%
Industrial Maintenance	0.7	0.1	3.5	4.3	15%	85%
Nonflat - Low Gloss	0.0	1.1	5.5	6.6	0%	100%
Nonflat - Medium Gloss	1.3	1.4	9.0	11.7	11%	89%
Nonflat - High Gloss	0.0	0.5	0.9	1.3	1%	99%
Primer, Sealer, and Undercoater	0.5	0.8	5.1	6.4	7%	93%
Quick Dry Enamel	3.1	0.0	0.2	3.2	95%	5%
Quick Dry Primer, Sealer, and Undercoater	0.8	0.0	0.3	1.0	75%	25%
Rust Preventative	0.0	0.5	8.2	8.7	0%	100%
Specialty Primer, Sealer, and Undercoater	0.0	0.0	6.2	6.2	0%	100%
Stains - Clear/Semitransparent	0.0	0.0	6.3	6.3	0%	100%
Stains - Opaque	0.0	0.1	0.4	0.5	0%	100%
Waterproofing Sealers	0.3	0.0	1.1	1.4	23%	77%
TOTALS:	**7**	**8**	**57**	**72**	**10%**	**90%**

Notes:

1. This table only contains sales for categories that were included in averaging programs. Bituminous Roof and Roof are categories that are eligible for averaging, but no companies reported that these types of products were averaged.
2. High-VOC Averaged: Products in large containers that were included in an averaging program and had VOC levels that exceeded SCM limits.
3. Low-VOC Averaged: Products in small and large containers that were included in an averaging program and had VOC levels below SCM VOC limits.
4. Not Averaged: Products in small and large containers that were not included in an averaging program.
5. Small Containers: One quart or less. Large Containers: Greater than one quart.

Table 12-4 lists sales-weighted average VOC Regulatory contents for coating categories that were included in the ARB and SCAQMD averaging programs. This table only includes VOC Regulatory contents for large containers.

Table 12-4: ***VOC Contents - Only for Categories That Allowed Averaging (no quarts)***

Coating Category	2000 SCM VOC Limit (g/l)	High-VOC Averaged		Low-VOC Averaged & Not Averaged	
		Large Container Sales (gals)	SWA VOC Reg. (g/l)	Large Container Sales (gals)	SWA VOC Reg. (g/l)
Flat	100	554,167	125	36,139,181	81
Floor	250	NA	NA	1,230,431	105
Industrial Maintenance	250	160,041	366	1,951,876	191
Nonflat - Low Gloss	150	4,848	188	11,596,074	118
Nonflat - Medium Gloss	150	968,611	235	18,293,058	122
Nonflat - High Gloss	250	2,010	394	1,710,794	148
Primer, Sealer, and Undercoater	200	117,946	340	10,100,714	123
Quick Dry Enamel	250	684,810	391	62,195	257
Quick Dry Primer, Sealer, and Undercoater	200	153,434	439	87,681	234
Rust Preventative	400	658	446	1,862,452	362
Specialty Primer, Sealer, and Undercoater	350	1,526	426	1,960,623	282
Stains - Clear/Semitransparent	250	NA	NA	1,326,001	279
Stains - Opaque	250	NA	NA	954,075	106
Waterproofing Sealers	250	110,871	265	1,396,337	180

Notes:

1. This table only contains sales for categories that were included in averaging programs. Bituminous Roof and Roof are categories that are eligible for averaging, but no companies reported that these types of products were averaged.
2. High-VOC Averaged: Products in large containers that were included in an averaging program and had VOC levels that exceeded SCM limits.
3. Low-VOC Averaged: Products in large containers that were included in an averaging program and had VOC levels below SCM VOC limits.
4. Not Averaged: Products in large containers that were not included in an averaging program.
5. Large Containers: Greater than one quart.
6. SWA: Sales-Weighted Average based on sales volume.

Table 12-5 lists complying marketshares for coating categories that were included in the ARB and SCAQMD averaging programs. The table excludes high-VOC products that exceeded SCM VOC limits and were included in averaging programs. Compliance rates were based on the 2000 SCM VOC limits and the table only includes data for large containers. Since high-VOC averaged products are not included in Table 12-5, complying marketshares for some categories are higher than the overall complying marketshares provided previously in Chapter 6. For comparison purposes, the last column of the table provides the complying marketshares from Chapter 6.

Table 12-5: ***Complying Marketshares – Excluding High-VOC Products Included in Averaging Programs – 2000 SCM Limits***
(does not include small containers ≤ 1 quart)

Coating Category	SCM VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales	% of Complying Sales From Table 6-1
Flat	100	81	2,360	2,129	90%	36,139,181	33,056,944	91%	90%
Floor	250	105	335	250	75%	1,230,431	1,216,257	99%	99%
Industrial Maintenance	250	191	2,841	1,660	58%	1,951,876	1,464,332	75%	69%
Nonflat - High Gloss	250	148	309	192	62%	1,710,794	1,679,619	98%	98%
Nonflat - Low Gloss	150	118	1,111	1,067	96%	11,596,074	11,526,738	99%	99%
Nonflat - Medium Gloss	150	122	1,931	1,717	89%	18,293,058	17,718,295	97%	92%
Primer, Sealer, and Undercoater	200	123	584	507	87%	10,100,714	9,998,293	99%	98%
Quick Dry Enamel	250	257	76	46	61%	62,195	55,317	89%	7%
Quick Dry Primer, Sealer, and Undercoater	200	234	22	5	23%	87,681	37,192	42%	15%
Rust Preventative	400	362	361	313	87%	1,862,452	1,753,383	94%	94%
Specialty Primer, Sealer, and Undercoater	350	282	96	84	88%	1,960,623	1,913,485	98%	98%
Stains - Clear/Semitransparent	250	279	766	308	40%	1,326,001	958,201	72%	72%
Stains - Opaque	250	106	427	327	77%	954,075	936,390	98%	98%
Waterproofing Sealers	250	180	188	133	71%	1,396,337	1,299,812	93%	86%

Notes:
1. This table only contains sales for categories that were included in averaging programs. Bituminous Roof and Roof are categories that are eligible for averaging, but no companies reported that these types of products were averaged in 2004.
2. This table does not include products that exceeded the 2000 SCM VOC limits and were included in an averaging program. However, it does include products that complied with SCM VOC limits and were included in an averaging program.
3. This table reflects complying marketshares based on the 2000 SCM VOC limits.

Table 12-6 lists complying marketshares for coating categories that were included in the ARB and SCAQMD averaging programs. The table excludes high-VOC products that exceeded SCAQMD's future VOC limits and were included in averaging programs. Compliance rates were based on SCAQMD's future VOC limits that take effect in and before 2008 and the table only includes data for large containers. Since high-VOC averaged products are not included in Table 12-6, complying marketshares for some categories are higher than the overall complying marketshares provided previously in Chapter 6. For comparison purposes, the last column of the table provides the complying marketshares from Chapter 6.

Table 12-6: ***Complying Marketshares – Excluding High-VOC Products Included in Averaging Programs – SCAQMD Future Limits***
(does not include small containers ≤ 1 quart)

Coating Category	SCM VOC Limit (g/l)	SWA VOC Reg. (g/l)	Total No. of Products	No. of Complying Products	% of Complying Products	Total Sales (gals)	Sales of Complying Products (gals)	% of Complying Sales	% of Complying Sales From Table 6-5
Flat	50	81	2,182	358	16%	26,176,545	2,385,114	9%	7%
Floor	50	104	311	4	1%	1,107,593	5,276	0%	0%
Industrial Maintenance	100	191	2,705	733	27%	1,875,262	444,131	24%	21%
Nonflat - High Gloss	50	146	283	3	1%	1,061,310	63,745	6%	4%
Nonflat - Low Gloss (Nonflat Coating)	50	117	1,078	82	8%	9,723,857	383,376	4%	3%
Nonflat - Medium Gloss (Nonflat Coating)	50	123	1,883	179	10%	15,640,982	721,543	5%	4%
Primer, Sealer, and Undercoater	100	123	567	312	55%	9,485,518	3,796,714	40%	37%
Quick Dry Enamel	50	257	76	1	1%	62,195	215	0%	0%
Quick Dry Primer, Sealer, and Undercoater	100	234	22	1	5%	87,681	25,253	29%	10%
Rust Preventative	100	363	314	11	4%	1,734,526	7,909	0%	0%
Specialty Primer, Sealer, and Undercoater (Specialty Primers)	100	282	95	25	26%	1,957,267	425,393	22%	22%
Stains, Exterior/Dual	100	204	935	101	11%	2,243,087	729,321	33%	33%
Stains, Interior	250	387	257	55	21%	36,942	6,729	18%	18%
Waterproofing Sealers	100	180	188	69	37%	1,396,337	461,498	33%	31%

Notes:
1. This table only contains sales for categories that were included in averaging programs. Bituminous Roof and Roof are categories that are eligible for averaging, but no companies reported that these types of products were averaged.
2. This table does not include products that exceeded SCAQMD VOC limits and were included in an averaging program. However, it does include products that complied with SCAQMD VOC limits and were included in an averaging program.
3. This table reflects complying marketshares based on SCAQMD's future VOC limits that take effect in 2008.