



**CALIFORNIA**  
AIR RESOURCES BOARD

**2018 Aerosol Coating and  
Aerosol Adhesive Products Survey  
Preliminary Data Summary**

**June 9, 2022**

## Preliminary Data - Do Not Cite or Quote

### Read Me

This document presents a preliminary summary of data reported to the California Air Resources Board (CARB) as part of the 2018 Aerosol Coating and Aerosol Adhesive Products Survey (2018 Survey).

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#### Preliminary 2018 Aerosol Adhesive Products Survey Results

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A description of each table is described below. The table descriptions below are the same for both Aerosol Coating Products and Aerosol Adhesive Products.

### Table 1

This is a list of responding companies.

### Table 2

Table 2 shows detailed sales and emissions data for reported products by category code. A description for each column heading is provided below:

**Category Code** is the code to list a particular category.

**Category Name** is a short description used to describe the category.

**Number of Companies** is the number of companies that reported product sales for products belonging in a particular category.

**Number of Products** is the number of products reported for each category.

**Sales** is the total product emissions from the category.

**TPD** is Tons per Day

**Total VOC** is the emissions from ingredients identified as volatile organic compounds.

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**Total ROC** is the emissions from reactive organic compounds.

**Ozone Forming Potential** is the amount of potential ozone formed from reactive organic compound emissions of a product category.

### Table 3

Table 3 shows the reactivity summary for each category. A description for each column heading is provided below:

**Category Code** is the code to list a particular category.

**Category Name** is a short description used to describe the category.

**Number of Companies** is the number of companies that reported product sales for products belonging in a particular category.

**Number of Products** is the number of products reported for each category.

**SWA-PWMIR (gO<sub>3</sub>/g product)** is the sales-weighted average Product-Weighted Maximum Incremental Reactivity as grams of ozone per gram of product.

**SWA-MIR\_ROC (gO<sub>3</sub>/g ROC)** is the sales-weighted average maximum incremental reactivity of the reactive organic compounds in a product as grams of ozone per gram of ROC.

**SWA-MIR\_VOC (gO<sub>3</sub>/g VOC)** is the sales-weighted average maximum incremental reactivity of the volatile organic compounds in a product as grams of ozone per gram of VOC.

### Table 4

Table 4 shows a list of 99.99 percent of reported reactive organic compounds ranked in descending order by mass.

### Note:

**Sell-Through of Products:** The Consumer Products Regulations allow for a three year sell-through period for products manufactured prior to the effective date of a new reactivity limit listed in the Table of Reactivity Limits or a new VOC standard listed in the Table of VOC Standards for Consumer Products. Effective January 1, 2017, new aerosol coating category limits became effective for General Coatings and Specialty Coatings (A); and new aerosol adhesive category VOC standards became effective for mist spray, web spray, and screen printing adhesives. Because the 2018 Survey captured products being sold during this allowed sell-through period, the reported data includes products that meet the previous reactivity limits and VOC standards, but not the new limits and standards that became effective in 2017.

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**2018 Aerosol Coating Products Survey Results**

**Table 1AC - List of Responding Companies**

Item #	Company Name	Parent Company
1	3M Company	
2	ABC Supply Co., Inc.	
3	ACDelco	
4	Aerove Industries	
5	AkzoNobel Coatings	
6	American Honda Motor Company	
7	Axalta Coating Systems	
8	BASF Corporation	BASF Americas Corporation
9	Behr Process Corporation	Masco Corporation
10	BMW of North America LLC	
11	Camie-Campbell Inc.	PLZ Aeroscience Corporation
12	Chartpak Inc.	GPC
13	Chase Products Co.	
14	Chem-Pak Inc.	
15	CPC	PLZ Aeroscience Corporation
16	CRC Industries Inc.	Berwind Corp
17	Custom Building Products	Quikrete Companies
18	Design Master Color Tool Inc.	The Pennock Company
19	Dominion Sure Seal Ltd.	
20	Dunn-Edwards Corporation	
21	FCA US LLC	
22	FinishMaster Inc.	Uni-Select Inc.
23	Ford Motor Company	Ford Motor Company
24	FTI Corporation	Troy Corporation
25	Gemini Industries Inc.	Gemini Industries Inc.
26	Golden Artist Colors Inc.	
27	GPM True Value Manufacturing	True Value Company
28	Griot's Garage Inc.	
29	Hempel (USA) Inc.	
30	Henkel Corporation	
31	ITW Permatex	
32	ITW Pro Brands	Illinois Tool Works Inc.
33	Kimball Midwest	
34	Kop-Coat Inc.	RPM International Inc.
35	Lawson Products Inc.	
36	Lighthouse for the Blind	
37	Mercedes Benz USA LLC	

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**Table 1AC - List of Responding Companies**

<b>Item #</b>	<b>Company Name</b>	<b>Parent Company</b>
38	Moneysworth and Best	
39	NCH Corporation	NCH Corporation
40	Niteo Products LLC	Niteo Products LLC
41	Nu-Calgon Wholesaler Inc.	
42	Polyglass USA	Mapei Corp.
43	PPG Architectural Finishes Inc.	PPG Industries Inc.
44	Pro Form Products Limited	
45	RPM Wood Finishes Group Inc.	RPM International Inc.
46	Rudd Company Inc.	
47	Rust-Oleum Corporation	RPM International Inc.
48	Saint-Gobain Abrasives Inc.	Saint-Gobain Corporation
49	San Leandro Color	
50	S.C. Johnson & Son Inc.	
51	SEM Products Inc.	PPG Industries
52	Seymour of Sycamore	
53	Slide Products Inc.	
54	Sprayway Inc.	PLZ Aeroscience Corporation
55	Spray Products Corporation	
56	Tamiya America Inc.	
57	The Sherwin-Williams Company	
58	Transtar Autobody Technologies	
59	Volkswagen Group of America, Inc.	Volkswagen Aktiengesellschaft
60	Winzer Corporation	
61	Wurth USA Inc.	Wurth Group of North America
62	Yanmar America Corporation	
63	Yenkin-Majestic Paint Corporation	
64	Zep Inc.	

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**2018 Aerosol Coating Products Survey Results**

**Table 2AC - Total Sales and Emissions by Category\***

Category Code	Description	Total # of Companies	Total # of Products	Sales* (TPD)	Total VOC (TPD)	Total ROC (TPD)	Ozone Forming Potential (TPD)
	<b>General Coatings</b>						
80101	Clear Coating	28	337	1.31	0.74	1.11	1.02
80102	Flat Coating	22	557	5.34	1.69	2.42	2.43
80103	Fluorescent Coating	9	89	0.17	0.10	0.12	0.15
80104	Metallic Coating	26	442	1.38	0.77	1.10	1.34
80105	Nonflat Coating	23	2533	9.92	5.25	7.93	9.00
80106	Primer	24	316	2.44	1.12	1.61	1.37
	<b>Specialty Coatings (A)&amp;(B)</b>						
80201	Auto Body Primer	16	111	0.71	0.35	0.55	0.63
80202	Electrical/Electronic/Conformal Coating	5	11	0.04	0.03	0.03	0.04
80203	Exact Match Finish: Automotive	12	1054	0.26	0.12	0.23	0.22
80205	Exact Match Finish: Industrial	9	507	0.16	0.08	0.13	0.15
80206	Flexible Coating	14	105	0.15	0.11	0.12	0.17
80207	Ground Traffic/Marking Coating	9	517	3.93	1.75	1.95	2.57
80208	Mold Release Coating	6	43	0.06	0.04	0.05	0.04
80210	Uniform Finish Coating	5	9	0.00	0.00	0.00	0.00
80302	Automotive Bumper and Trim Product	12	69	0.19	0.12	0.17	0.26
80307	Glass Coating	4	24	0.03	0.01	0.02	0.03
80308	High Temperature Coating	7	91	0.33	0.17	0.28	0.55
80309	Hobby/Model/Craft Coating	4	682	0.09	0.06	0.07	0.08
80314	Polyolefin Adhesion Promoter	11	16	0.02	0.02	0.02	0.04
80315	Rust Converter	6	10	0.05	0.02	0.05	0.04
80317	Slip-resistant/Non-slip Grip Coating	7	13	0.00	0.00	0.00	0.00
80319	Vinyl/Fabric/Leather /Plastic Coating	8	309	0.29	0.21	0.27	0.32

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**Table 2AC - Total Sales and Emissions by Category\***

Category Code	Description	Total # of Companies	Total # of Products	Sales* (TPD)	Total VOC (TPD)	Total ROC (TPD)	Ozone Forming Potential (TPD)
80321	Weld-Through Primer	11	20	0.01	0.00	0.00	0.01
80322	Wood Stain Coating	4	52	0.01	0.01	0.01	0.01
80323	Wood Touch-Up/Repair/Restoration Coating	5	552	0.66	0.45	0.58	0.64
	Aggregated Categories**	10	230	0.67	0.31	0.52	0.47
	<b>Totals</b>	<b>N/A</b>	<b>8699</b>	<b>28.22</b>	<b>13.54</b>	<b>19.35</b>	<b>21.54</b>

TPD =Tons per day

\* Total sales and emissions are not market adjusted

\*\*Data for individual categories with three or fewer reporting companies or three or fewer reported products were combined under Aggregated Categories

**List of Aggregated Categories**

80204	Exact Match Finish: Engine
80209	Two Component Coating
80301	Art Fixitive or Sealant
80303	Aviation or Marine Primer
80304	Aviation Propeller Coating
80305	Corrosion Resistant Brass, Bronze, or Copper Coating
80306	Floral Coating
80310	Marine Spar Varnish
80311	Photograph Coating
80312	Pleasure Craft Finish Primer/Surfacer/Undercoater
80313	Pleasure Craft Topcoat
80316	Shellac Sealer
80318	Splatter/Multicolor/Stucco Coating
80320	Webbing/Veiling Coating

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2018 Aerosol Coating Products Survey Results

Table 3AC - Reactivity Summary by Category

Category Code	Description	Total # of Companies	Total # of Products	SWA-PWMIR (gO3/g product)	SWA-MIR_ROC (gO3/g ROC)	SWA-MIR_VOC (gO3/g VOC)
	<b>General Coatings</b>					
80101	Clear Coating	28	337	0.78	0.91	1.19
80102	Flat Coating	22	557	0.46	1.00	1.28
80103	Fluorescent Coating	9	89	0.87	1.31	1.46
80104	Metallic Coating	26	442	0.97	1.22	1.57
80105	Nonflat Coating	23	2533	0.91	1.13	1.53
80106	Primer	24	316	0.56	0.85	1.04
	<b>Specialty Coatings (A)&amp;(B)</b>					
80201	Auto Body Primer	16	111	0.88	1.13	1.58
80202	Electrical/Electronic/Conformal Coating	5	11	1.07	1.24	1.40
80203	Exact Match Finish: Automotive	12	1054	0.84	0.94	1.70
80205	Exact Match Finish: Industrial	9	507	0.93	1.14	1.69
80206	Flexible Coating	14	105	1.14	1.40	1.50
80207	Ground Traffic/Marking Coating	9	517	0.65	1.32	1.40
80208	Mold Release Coating	6	43	0.71	0.77	0.98
80210	Uniform Finish Coating	5	9	1.30	1.37	1.53
80302	Automotive Bumper and Trim Product	12	69	1.35	1.53	2.01
80307	Glass Coating	4	24	1.16	1.34	1.86
80308	High Temperature Coating	7	91	1.64	1.93	3.02
80309	Hobby/Model/Craft Coating	4	682	0.92	1.08	1.15
80314	Polyolefin Adhesion Promoter	11	16	1.62	1.71	1.81
80315	Rust Converter	6	10	0.77	0.84	1.47
80317	Slip-resistant/Non-slip Grip Coating	7	13	1.77	2.19	2.95
80319	Vinyl/Fabric/Leather/Plastic Coating	8	309	1.13	1.21	1.42
80321	Weld-Through Primer	11	20	0.88	1.35	1.93
80322	Wood Stain Coating	4	52	0.73	0.97	0.98
80323	Wood Touch-Up/Repair/Restoration Coating	5	552	0.97	1.09	1.30

Note: Individual categories with three or fewer reporting companies or three or fewer reported products are not included



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2018 Aerosol Coating Products Survey Results

**Table 4AC - List of Reactive Organic Compounds Reported**

Chemical Name Description	CAS Number
Acetone	67641
Propane	74986
n-Butane	106978
Hydrocarbon Solvent, Bin #06	
n-Butyl Acetate	123864
Hydrocarbon Propellant *	68476857
Hydrocarbon Solvent, Bin #21	
Hydrocarbon Solvent, Bin #11	
Toluene	108883
Dimethyl Ether	115106
Isobutyl Acetate	110190
Hydrocarbon Solvent, Bin #02	
Dimethyl Carbonate	616386
Methyl Acetate	79209
Ethanol	64175
Methyl Ethyl Ketone	78933
1-Methoxy-2-propyl Acetate	108656
Ethyl Benzene	100414
Hydrocarbon Solvent, Bin #22	
Ethyl Acetate	141786
Isopropyl Alcohol	67630
Ethyl 3-ethoxy Propionate	763699
n-Heptane	142825
Isobutane	75285
Hydrocarbon Solvent, Bin #12	
n-Butoxy-2-propanol; Propylene Glycol n-Butyl Ether	5131668
4-Methyl-2-pentanone	108101
n-Hexane	110543
Hydrocarbon Solvent, Bin #01	
1,2,4-Trimethyl Benzene	95636
p-Trifluoromethyl-chloro-benzene	98566
Diacetone Alcohol	123422
2-Butoxy-ethanol	111762
Propylene Glycol	57556
n-Butyl Alcohol	71363
2-Heptanone	110430

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Table 4AC - List of Reactive Organic Compounds Reported

Chemical Name Description	CAS Number
n-Octane	111659
Cyclohexane	110827
Grouped ROCs that are each less than 0.1 Wt. %	99999994
Hydrocarbon Solvent, Bin #07	
Ethyl Methyl Ketone Oxime; Methyl Ethyl Ketoxime	96297
1-Methoxy-2-propanol	107982
2-Propoxy-ethanol	2807309
Isobutyl Alcohol	78831
1,1-Difluoroethane; HFC-152a	75376
Methanol	67561
Hydrocarbon Solvent, Bin #23	
Isopropyl Acetate	108214
Hydrocarbon Solvent, Bin #15	
Hydrocarbon Solvent, Bin #16	
2-Pentanone	107879
Ethylene Glycol	107211
Dipropylene Glycol Methyl Ether	34590948
sec-Butyl Alcohol	78922
n-Methyl-2-Pyrrolidone	872504
Propyl Acetate	109604
Propylene Carbonate	108327
n-Propyl Alcohol	71238
2-(2-Butoxyethoxy) Ethanol	112345
Diethylene Glycol	111466
n-Butoxy-2-propanol	15821837
tert-Butyl Acetate	540885
Iso -Alkanes, C12-14	68551199
2-Amino-2-methyl-1-propanol	124685
n-Propyl Bromide	106945
Isopropyl Benzene	98828
Isobutyl Isobutyrate	97858
Di-Isobutyl Ketone	108838
4-Heptanone	123193
Cyclohexanone	108941
Glycol Ether DPnB; Dipropylene Glycol n-Butyl Ether; 1-(2-Butoxy-1-Methylethoxy)-2-Propanol)	29911282
2-Butoxyethyl Acetate	112072
Base ROG Mixture	

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Table 4AC - List of Reactive Organic Compounds Reported

Chemical Name Description	CAS Number
2,2,4-Trimethyl-1,3-pentanediol Monoisobutyrate and Isomers (Texanol)	25265774
Isobutyl Methacrylate	97869
3-Methoxy-1-butyl Acetate	4435534
Benzyl Alcohol	100516
2,2,4-Trimethyl-1,3-pentanediol Diisobutyrate	6846500
Triethyl Amine	121448
1,3,5-Trimethyl Benzene	108678
2-Methoxy-1-propyl Acetate	70657704
5-Methyl-2-hexanone	110123
n-Nonane	111842
n-Hexyl Acetate	142927
Formic Acid	64186
Vinyltoluenes	25013154
2-(2-Ethoxyethoxy) Ethanol	111900
Morpholine	110918
Cyclohexanol	108930
Amyl Acetate	628637
Methyl Methacrylate	80626
Isoamyl Acetate	123922
Dimethyl Glutarate	1119400
Dimethylaminoethanol	108010
Butyl Methacrylate	97881
Vinyl Acetate	108054
Dibutylamine	111922
Pentyl Alcohol	71410

\* Represents aggregated compounds reported as hydrocarbon propellant mixtures.

Note: Reactive Organic Compounds (ROC) listed comprise 99.99% of the total ROCs by weight for all categories combined.

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**2018 Aerosol Adhesive Products Survey Results**

**Table 1AA - List of Responding Companies**

Item #	Company Name	Parent Company
1	3M Company	
2	ACDelco	
3	Aervoe Industries	
4	Bostik Inc.	
5	Camie-Campbell Inc.	PLZ Aeroscience Corporation
6	Chase Products Co.	
7	CPC	PLZ Aeroscience Corporation
8	CRC Industries Inc.	Berwind Corporation
9	DAP Products Inc.	RPM International Inc.
10	Design Master Color Tool Inc.	The Pennock Company
11	The Gorilla Glue Company	
12	Helmitin Inc.	ITOCHU International Inc.
13	Henkel Corporation	
14	ITW Permatex	
15	Kimball Midwest	
16	Lawson Products Inc.	
17	NCH Corporation	NCH Corporation
18	Nu-Calgon Wholesaler Inc.	
19	RPM Wood Finishes Group Inc.	RPM International Inc.
20	Saint-Gobain Abrasives Inc.	Saint-Gobain Corporation
21	Sprayway Inc.	PLZ Aeroscience Corporation
22	The Sherwin-Williams Company	
23	Transtar Autobody Technologies	
24	Winzer Corporation	
25	Wurth USA Inc.	Wurth Group of North America
26	Zep Inc.	

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**2018 Aerosol Adhesive Products Survey Results**

**Table 2AA - Total Sales and Emissions by Category\***

Category Code	Description	Total # of Companies	Total # of Products	Sales* (TPD)	Total VOC (TPD)	Total ROC (TPD)	Ozone Forming Potential (TPD)
10113	Mist Spray Adhesive	13	47	0.32	0.09	0.26	0.12
10125	Web Spray Adhesive	19	40	0.16	0.06	0.12	0.06
	Aggregated Categories**	12	23	0.16	0.09	0.13	0.10
	<b>Totals</b>	<b>26</b>	<b>110</b>	<b>0.64</b>	<b>0.24</b>	<b>0.51</b>	<b>0.28</b>

TPD =Tons per day

\* Total sales and emissions are not market adjusted

\*\*Data for individual categories with three or fewer reporting companies or three or fewer reported products were combined under Aggregated Categories

**List of Aggregated Categories**

10102	Automobile Headliner Adhesive
10103	Automotive Engine Compartment Adhesive
10109	Flexible Vinyl Adhesive
10112	Laminate Repair/Edgebanding Adhesive
10114	Mounting Adhesive
10116	Polyolefin Adhesive
10117	Polystyrene Foam Adhesive
10119	Screen Printing Adhesive

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**2018 Aerosol Adhesive Products Survey Results**

**Table 3AA - Reactivity Summary by Category**

<b>Category Code</b>	<b>Description</b>	<b>Total # of Companies</b>	<b>Total # of Products</b>	<b>SWA-PWMIR (gO3/g product)</b>	<b>SWA-MIR_ROC (gO3/g ROC)</b>	<b>SWA-MIR_VOC (gO3/g VOC)</b>
10113	Mist Spray Adhesive	13	47	0.38	0.48	0.90
10125	Web Spray Adhesive	19	40	0.38	0.49	1.05
	Aggregated Categories*	12	23	0.64	0.76	1.04

TPD =Tons per day

\*Data for individual categories with three or fewer reporting companies or three or fewer reported products were combined under Aggregated Categories

**Preliminary Data - Do Not Cite or Quote**  
**2018 Aerosol Adhesive Products Survey Results**

**Table 4AA - List of Reactive Organic Compounds Reported**

Chemical Name Description	CAS Number
Hydrocarbon Solvent, Bin #01	
Acetone	67641
1,1-Difluoroethane; HFC-152a	75376
Methyl Acetate	792090
Propane	74986
n-Butane	106978
Dimethyl Ether	115106
Hydrocarbon Solvent, Bin #06	
Hydrocarbon Solvent, Bin #02	
Hydrocarbon Propellant*	68476868
Cyclohexane	110827
p-Trifluoromethyl-chloro-benzene	98566
Hydrocarbon Solvent, Bin #11	
n-Hexane	110543
Hydrocarbon Solvent, Bin #16	
Dimethyl Glutarate	1119400
Toluene	108883
n-Butyl Acetate	123864
Dimethyl Adipate	627930
Dimethyl Succinate	106650
Isobutane	75285
Grouped VOCs that are each less than 0.1 Wt. %	99999996
Morpholine	110918

\*Represents aggregated compounds reported as hydrocarbon propellant mixtures.

Note: Reactive Organic Compounds (ROC) listed comprise 99.99% of the total ROCs by weight for all categories combined.