RULE 1113
Architectural Coatings

(A) General

(1) **Purpose:** The purpose of this rule is to limit the quantity of Volatile Organic Compounds (VOC) in Architectural Coatings.

(2) **Applicability:** Except as provided in subsection (A)(3), this Rule is applicable to any person who supplies, sells, offers for sale, manufactures, blends or repackages any Architectural Coating for use within the Mojave Desert Air Quality Management District as well as any person who applies or Solicits the application of any Architectural Coating within the District.

(3) This rule does not apply to:

(a) Any Architectural Coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.

(b) Any Aerosol Product.

(c) With the exception of Section (E), any Architectural Coating that is sold in a container with a volume of one (1) liter (1.057 quart) or less provided the following requirements are met:

(i) The Coating container is not bundled together with other containers of the same specific Coating category (listed in Table 1) to be sold as a unit that exceeds one liter (1.057 quart), excluding containers packaged together for shipping to a retail outlet; and

(ii) The label or any other product literature does not suggest combining multiple containers of the same specific category (listed in Table 1) so that the combination exceeds one liter (1.057 quart).

(d) Colorant added at the factory or at the worksite is not subject to the VOC limit in Table 2. In addition, containers of Colorant sold at the point of sale for use in the field or on a job site are also not subject to the VOC limit in Table 2.
(B) Definitions

The definitions contained in District Rule 102 – *Definition of Terms* shall apply unless a term is otherwise defined herein. Terms that are defined within this rule, have been capitalized for ease of recognition:

1. **“Aluminum Roof Coating”** - A Coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of Coating (at least 0.7 pounds per gallon). Pigment content shall be determined in accordance with method referenced in subsection (H)(5)(c).

2. **“Basement Specialty Coating”** - A clear or opaque Coating that is labeled and formulated for application to concrete and masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. Coating must meet the following criteria:
   
   (a) Coating must be capable of withstanding at least 10 psi of hydrostatic pressure, as determined in accordance with test method referenced in Subsection (H)(5)(m).
   
   (b) Coating must be resistant to mold and mildew growth and must achieve a microbial growth rating of eight (8) or more, as determined in accordance with test methods referenced in subsection (H)(5)(p).

3. **“Bituminous Roof Coating”** - A Coating which incorporates Bitumens that is labeled and formulated exclusively for roofing.

4. **“Bituminous Roof Primer”** - A primer which incorporates Bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

5. **“Bond Breaker”** - A Coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

6. **“Building Envelope”** - The ensemble of exterior and demising partitions of a building that enclose conditioned space.
“Building Envelope Coating” - The fluid applied coating applied to the Building Envelope to provide a continuous barrier to air or vapor leakage through the Building Envelope that separates conditioned from unconditioned spaces. Building Envelope Coatings are applied to diverse materials including, but not limited to, concrete masonry units (CMU), oriented strand board (OSB), gypsum board, and wood substrates and must meet the following performance criteria:

(a) Air Barriers formulated to have an air permeance not exceeding 0.004 cubic feet per minute per square foot under a pressure differential of 1.57 pounds per square foot (0.004 cfm/ft² @ 1.57 psf), [0.02 liters per square meter per second under a pressure differential of 75 Pa (0.02 L/(s m²) @ 75 Pa] when tested in accordance with ASTM E2178-13, incorporated by reference in subsection (H)(5)(d); and/or

(b) Water Resistance Barriers formulated to resist fluid water that has penetrated a cladding system from further introducing the exterior wall assembly and is classified as follows:

(i) Passes water resistance testing accordance to ASTM E331-00 (2016), incorporated by reference in subsection (H)(5)(e) and

(ii) Water vapor permeance is classified in accordance with ASTM E96/96M-16, incorporated by reference in subsection (H)(5)(f).

“Concrete Curing Compound" - A Coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water and/or harden or dustproof the surface of freshly poured concrete.

“Concrete/Masonry Sealer" - A clear or opaque Coating that is labeled and formulated primarily for application to concrete and masonry surfaces to perform one or more of the following functions:

(a) Prevent penetration of water; or
(b) Provide resistance against abrasion, alkalis, acids, mildew, staining, or ultraviolet light; or
(c) Harden or dustproof the surface of aged or cured concrete.

“Driveway Sealer” - A Coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

(a) Fill cracks; or
(b) Seal the surface to provide protection; or
(c) Restore or preserve the appearance.

(11) “Dry Fog Coating”- A Coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface Coating activity.

(12) “Faux Finishing Coating”- A Coating labeled and formulated to meet one or more of the following:

(a) A glaze or textured Coating used to create artistic effects including, but not limited to, dirt, suede, old age, smoke damage, and simulated marble and wood grain.

(b) A decorative Coating used to create a metallic, iridescent, or Pearlescent appearance that contains at least 48 grams of Pearlescent mica pigment or other iridescent pigment per liter of Coating applied (at least 0.4 pounds per gallon).

(c) A decorative Coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of Coating as applied (less than 0.4 pounds per gallon), when tested in accordance method referenced subsection (H)(5)(n).

(d) A decorative Coating used to create a metallic appearance that contains greater than 48 grams of elemental metallic pigment per liter of Coating as applied (greater than 0.4 pounds per gallon) and which requires a Clear Topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with method referenced subsection (H)(5)(n).

(e) A Clear Topcoat to seal and protect a Faux Finishing Coating that meets one or more of the requirements of subsection (a)–(d) above. These Clear Topcoats must be sold and used solely as a part of a Faux Finishing Coating system, and must be labeled in accordance with subsection (D)(1)(d).

(13) “Fire-Resistive Coating”– A Coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The category includes sprayed fire resistive materials and intumescent Fire-Resistive Coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. The Fire-Resistive Coating and the testing agency must be approved by building code officials and shall be tested in accordance with the applicable test method found in subsection (H)(5)(k).
(14) “Flat Coating”- A Coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to the applicable test method found in subsection (H)(5)(l).

(15) “Floor Coating”- An opaque Coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic.

(16) “Form-Release Compound”- A Coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

(17) “Graphic Arts Coating or Sign Paint”- A Coating labeled and formulated for hand-application by artists using brush, airbrush, or roller techniques to indoor and outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.

(18) “High-Temperature Coating”- A high performance Coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(19) “Industrial Maintenance Coating”- A high performance Architectural Coating, including Primers, Sealers, Undercoaters, intermediate coats, and topcoats, formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions listed in subsections (a) - (e) below, and labeled as specified in subsection (D)(1)(e).

   (a) Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;

   (b) Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;

   (c) Frequent exposure to temperatures above 121°C (250°F);

   (d) Frequent heavy abrasion, including mechanical wear and frequent scrubbing with industrial solvents, cleansers, or scouring agents; or

   (e) Exterior exposure of metal structures and structural components.
“Low Solids Coating”- A Coating containing 0.12 kilogram or less of solids per liter (one (1) pound or less of solids per gallon) of Coating material as recommended for application by the manufacturer. The VOC Content for Low Solids Coating shall be calculated in accordance with subsection (H)(1)(a)(ii).

“Magnesite Cement Coating”- A Coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

“Manufacturer’s Maximum Thinning Recommendation”- The maximum recommendation for thinning that is indicated on the label or lid of the Coating container.

“Mastic Texture Coating”- A Coating labeled and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

“Medium Density Fiberboard” (MDF)- A composite wood product, panel, molding, or other building material composed of cellulosic fibers (usually wood) made by dry forming and pressing of a resinated fiber mat.

“Metallic Pigmented Coating”- A Coating labeled and formulated to provide a metallic appearance. The Coating must contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of Coating as applied (at least 0.4 pounds per gallon), when tested in accordance with the applicable test method found in subsection (H)(5)(n). The Metallic Pigmented Coating category does not include coatings applied to roofs or Zinc-Rich Primers.

“Nonflat Coating”- A Coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and five (5) or greater on a 60-degree meter according to the applicable test method found in subsection (H)(5)(l).

“Nonflat - High Gloss Coating”- A Nonflat Coating that registers a gloss of 70 or above on a 60-degree meter according to applicable test method found in subsection (H)(5)(l) and labeled in accordance with subsection (D)(1)(j)(i).

“Nonindustrial Use”- Nonindustrial use means any use of Architectural Coatings except in the construction or maintenance of any of the following: facilities used in the manufacturing of goods and commodities; transportation infrastructure, including highways, bridges, airports and railroads; facilities used in mining activities, including petroleum extraction; and utilities infrastructure, including power generation and distribution, and water treatment and distribution systems.

“Pearlescent”- Exhibiting various colors depending on the angles of illumination and viewing, as observed in mother-of-pearl.
"Photovoltaic Coating" - A Coating labeled and formulated for application to solar photovoltaic modules. Photovoltaic Coatings are applied as a single layer to solar photovoltaic modules already installed. Photovoltaic Coatings do not include Coatings applied to photovoltaic modules in shop applications.

"Plywood" - A panel product consisting of layers of wood Veneers or composite core pressed together with resin. This includes panel products made by either hot or cold pressing (with resin) Veneers to a platform.

"Pre-Treatment Wash Primer" - A primer that contains a minimum of 0.5 percent acid, by weight, is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats, and is tested in accordance with the applicable test method found in subsection (H)(5)(a).

"Primer, Sealer, and Undercoater" - A Coating labeled and formulated for one or more of the following purposes:

(a) To provide a firm bond between the substrate and the subsequent Coatings; or
(b) To prevent subsequent Coatings from being absorbed by the substrate; or
(c) To prevent harm to subsequent Coatings by materials in the substrate; or
(d) To provide a smooth surface for the subsequent application of Coatings; or
(e) To provide a clear finish coat to seal the substrate; or
(f) To block materials from penetrating into or leaching out of a substrate.

"Reactive Penetrating Sealer" - A clear or pigmented Coating that is labeled and formulated for application to above-grade concrete and masonry substrates to provide protection from water and waterborne contaminants, including, but not limited to, alkalis, acids, and salts. These Sealers must penetrate into concrete and masonry substrates and chemically react to form covalent bonds with naturally occurring minerals in the substrate. They line the pores of concrete and masonry substrates with a hydrophobic Coating, but do not form a surface film. Reactive Penetrating Sealers must meet all of the following criteria:

(a) The Reactive Penetrating Sealer must improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified in accordance with applicable test methods found in subsection (H)(5)(u); and

(b) The Reactive Penetrating Sealer must provide a breathable waterproof barrier for concrete or masonry surfaces that does not prevent or substantially retard water vapor transmission. This performance must be
verified in accordance with applicable test method found in subsection (H)(5)(v); and

(c) Products labeled and formulated for vehicular traffic surface chloride screening applications must meet the performance criteria referenced in subsection (H)(5)(t).

(d) Reactive Penetrating Sealers must be labeled in accordance with subsection (D)(1)(h)(i).

(35) “Recycled Coating” - An Architectural Coating formulated such that it contains not less than 50 percent by volume post-consumer Coating, with a maximum of 50 percent by volume Secondary Industrial Materials or Virgin Materials.

(36) “Roof Coating” - A non-bituminous Coating labeled and formulated for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation.

(37) “Rust Preventative Coating” - A Coating formulated to prevent the corrosion of metal surfaces for one or more of the following applications:

(a) Direct-to-metal Coating; or

(b) Coating intended for application over rusty, previously coated surfaces

The Rust Preventative Coatings does not include the following:

(c) Coatings that are required to be applied as a topcoat over a primer; or

(d) Coatings that are intended for use on wood or any other non-metallic surface.

Rust Preventative Coatings must be labeled as specified in subsection (D)(1)(f)(i).

(38) “Secondary Industrial Materials” - Products or by-products of the paint manufacturing process that are of known composition and have economic value but can no longer be used for their intended purpose.

(39) “Semitransparent Coating” - A Coating that contains binders and colored pigments and is formulated to change the color of the surface, but not conceal the grain pattern or texture.

(40) “Shellac” - A clear or opaque Coating formulated solely with the resinous secretions of the lac beetle (Laciffer lacca), and formulated to dry by evaporation without a chemical reaction.
“Shop Application” - Application of a Coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing Coatings).

“Specialty Primer, Sealer, and Undercoater” - A Coating labeled as specified in subsection (D)(1)(g)(i) and that is formulated for application to a substrate to block water-soluble Stains resulting from: fire, smoke or water damage.

“Stone Consolidant” - A Coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms.

(a) Must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material;

(b) Must be specified and used in accordance with method referenced in subsection (H)(5)(w); and

(c) Labeled for professional use only, in accordance with the labeling requirements in subsection (D)(1)(a)(i).

“Swimming Pool Coating” - A Coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming Pool Coatings include Coatings used for swimming pool repair and maintenance.

“Tile and Stone Sealers” - A clear or pigmented sealer that is used for for sealing tile, stone, or grout to provide resistance against water, alkalis, acids, ultraviolet light, or straining and which meet one of the following subcategories:

(a) Penetrating sealers are polymer solutions that cross-link in the substrate and must meet the following criteria:

(i) A fine particle structure to penetrate dense tile such as porcelain with adsorption as low as 0.10 percent per ASTM C373-18, ASTM C97/97M-18, or ASTM C642-13, incorporated by reference in subsection (H)(5)(y);

(ii) Retain or increase static coefficient of friction per ANSI A137.1 (2012), incorporated by reference in subsection (H)(5)(z);

(iii) Not create a topical surface film on tile or stone; and

(iv) Allow vapor transmission per ASTM E96/96M-16, incorporated by subsection (H)(5)(aa).

(b) Film forming sealers which leave a protective film on the surface.
“**Tint Base**”- An Architectural Coating to which Colorant is added after packaging in sale units to produce a desired color.

“**Traffic Marking Coating**”- A Coating labeled and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.

“**Tub and Tile Refinish Coating**”- A clear or opaque Coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. The Coatings must meet all the following criteria:

(a) A scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This must be determined in accordance with test method referenced in subsection (H)(5)(dd).

(b) A weight loss of 20 milligrams or less after 1000 cycles. This must be determined in accordance with test method referenced in subsection (H)(5)(bb).

(c) Capability to withstand 1000 hours or more of exposure with few or no #8 blisters. This must be determined in accordance with test method referenced in subsection (H)(5)(ee).

(d) An adhesion rating of 4B or better after 24 hours of recovery. They must be determined on unscribed bonderite in accordance with test method referenced in subsection (H)(5)(cc).

“**Veneer**”- Thin sheets of wood peeled or sliced from logs for use in the manufacture of wood products such as Plywood, laminated Veneer lumber, or other products.

“**Virgin Materials**”- Materials that contain no Post-Consumer Coatings or Secondary Industrial Materials.

“**VOC Content**”- The weight of VOC per volume of Coating. VOC Content is VOC Regulatory, as defined in subsection (H)(1)(a)(i), for all coatings expect those in the Low Solids category. For coating in the Low Solids category, the VOC Content is VOC Actual, as defined in subsection (H)(1)(a)(ii). If the coating is a multi-component product, the VOC Content is VOC Content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.
“Waterproofing Membrane”- A clear or opaque Coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into substrate. Intended for the following applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials.

Waterproofing Membranes must meet the following criteria:
Coating must be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and Coating must meet or exceed the requirements referenced in subsection (H)(5)(ii).

The Waterproofing Membrane category does not include topcoats that are included in the Concrete/Masonry Sealer category (e.g., parking deck topcoats, pedestrian deck topcoats, etc.).

“Wood Coatings”- Coatings labeled and formulated for application to Wood Substrates only. The category includes the following: clear and Semitransparent Coatings; Lacquers; Varnishes; Sanding Sealers; penetrating oils; clear Stains; wood conditioner used as undercoats; wood Sealers used as topcoats; opaque Wood Coatings: opaque lacquers; opaque sanding Sealers; and opaque lacquer Undercoaters. The category does not include the following: clear Sealers that are labeled and formulated for use on concrete/masonry surfaces; or Coatings intended for substrates other than wood. Wood Coatings must be labeled “For Wood Substrates Only”, in accordance with subsection (D)(1)(k)(i).

“Wood Preservative”- A Coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. §§136 et seq.) and with the California Department of Pesticide Regulation.

“Wood Substrate”- A substrate made of wood, Particleboard, Plywood, Medium Density Fiberboard, rattan, wicker, bamboo, or composite products with exposed wood grain. Wood Products do not include items comprised of simulated wood.

“Zinc-Rich Primer”- A Coating that meets all of the following specifications:

(a) Coating contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids; and

(b) Coating is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of Coating; and

(c) Coating is intended for professional use only and is labeled as such, in accordance with the labeling requirements in subsection (D)(1)(l)(i).
(C) Requirements

(1) VOC Content Limits

(a) Except as provided in subsections (C)(2) and (C)(5), no person shall:

(i) Manufacture, blend, or repackage for use within the District;
(ii) Supply, sell, or offer for sale for use within the District; or
(iii) Solicit for application or apply within the District, any Architectural Coating with a VOC Content in excess of the corresponding limit specified in Table 1, after the specified effective date in Table 1. Limits are expressed as VOC Content, thinned to the Manufacture’s Maximum Thinning Recommendation, excluding any Colorant added to Tint Bases.

(b) For Photovoltaic Coatings, no Person shall:

(i) Manufacture, blend, or repackage for use within the District; or
(ii) Supply, sell, market, or offer for sale for use within the District; or
(iii) Solicit for application or apply within the District, any Photovoltaic Coating with a VOC content in excess of 600 g/L VOC limit expressed as VOC Actual, thinned to the manufacturer's maximum thinning recommendation.

Effective January 1, 2028, the Photovoltaic Coatings category sunsets and the Coatings are required to meet a limit of 120 g/L.

(2) Most Restrictive VOC Limit

(a) If anywhere on the container of any Architectural Coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer, or anyone acting on their behalf, any representation is made that indicates that the Coating meets the definition of, or is recommended for use for more than one of the Coating categories listed in Table 1, then the most restrictive (or lowest) VOC Content limit shall apply. This provision does not apply to the following Coating categories:

(i) Metallic Pigmented Coatings
(ii) Shellacs
(iii) Pre-Treatment Wash Primers
(iv) Industrial Maintenance Coatings
(v) Low Solids Coatings
(vi) Wood Preservatives
(vii) High-Temperature Coatings
(viii) Bituminous Roof Primers
(ix) Specialty Primers, Sealers, and Undercoaters
(x) Aluminum Roof Coatings
(xi) Zinc-Rich Primers
(xii) Wood Coatings

(3) Specialty Coating Categories

(a) If a Coating meets a definition in Section (B) for one or more specialty coating categories that are listed in Table 1, then that Coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat-High Gloss Coatings, but is required to meet the VOC limit for the applicable specialty Coating listed in Table 1.

(b) For any Coating that does not meet any of the definitions for the specialty Coatings categories listed in Table 1, the VOC Content limit shall be determined by classifying the Coating as a Flat Coating, Nonflat Coating, or Nonflat-High Gloss Coating based on its gloss, as defined in subsections (B)(17), (B)(30), and (B)(31) and the corresponding Flat, Nonflat, or Nonflat High Gloss VOC limit shall apply.

(4) Sell-Through of Coatings

(a) A Coating listed in Table 1 and manufactured prior to the applicable effective date may be sold, supplied, or offered for sale for up to three years after the specified effective date, so long as the Coating complied with the standards in effect at the time the Coating was manufactured. A Coating listed in Table 1 and manufactured before the effective date specified for that Coating may be applied at any time, both before and after the effective date, so long as the Coating complied with the standards in effect at the time the Coating was manufactured. This subsection does not apply to any Coating that does not display the date or date-code required by subsection (D)(1)(a).

(b) A Colorant listed in Table 2 and manufactured prior to the applicable effective date may be sold, supplied, or offered for sale for up to three years after the specified effective date, so long as the Colorant complied with the standards in effect at the time the Colorant was manufactured. A Colorant listed in Table 2 and manufactured before the effective date specified for that Colorant may be applied at any time, both before and after the effective date, so long as the Colorant complied with the standards in effect at the time the Colorant was manufactured. This subsection does not apply to any Colorant that does not display the date or date-code required by subsection (D)(1)(a).
date-code required by subsection (D)(2)(a).

(c) Sell-through for Photovoltaic Coatings is prohibited.

(5) Painting Practices

(a) All Architectural Coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These Architectural Coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers.

(b) Containers of any VOC-containing materials used for thinning and cleanup shall be closed when not in use.

(6) Thinning

(a) No person who applies or Solicits the application of any Architectural Coating shall apply a Coating that is thinned to exceed the applicable VOC limit specified in Table 1.

(7) Colorants

(a) No person within the District shall, at the point of sale of any Architectural Coating subject to Subsection (C)(1), add to such Coating any Colorant that contains VOC in excess of the corresponding applicable VOC limit specified in Table 2. The point of sale includes retail outlets that add Colorant to a Coating container to obtain a specific color.

(D) Container Labeling Requirements

(1) Each manufacturer of any Architectural Coating subject to this Rule shall display the following information on the Coating container (or label) in which the Coating is sold or distributed.

(a) Date Code

(i) The date the Coating was manufactured, or a date code representing the date the Coating was manufactured, shall be indicated on the label, lid, or bottom of the container.

(ii) If the manufacturer uses a date code for any Coating, the manufacturer shall file an explanation of each code with CARB.

(b) Thinning Recommendations

(i) A statement of the manufacturer’s recommendation regarding
thinning of the Coating shall be indicated on the label or lid of the container.

(ii) This requirement does not apply to the thinning of Architectural Coatings with water.

(iii) If thinning of the Coating prior to use is not necessary, the recommendation must specify that the Coating is to be applied without thinning.

(c) VOC Content

Each container of any Coating subject to this Rule shall display one of the following values in grams of VOC per liter of coating:

(i) Maximum VOC Content as determined from all potential product formulations; or

(ii) VOC Content as determined from actual formulation data; or

(iii) VOC Content as determined using the applicable test methods in Section (H)(2).

(iv) If the manufacturer does not recommend thinning, the container must display the VOC content, as supplied.

(v) If the manufacturer recommends thinning, the container must display the VOC content, including the maximum amount of thinning solvent recommended by the manufacturer.

(vi) If the coating is a multi-component product, the container must display the VOC content as mixed or catalyzed.

(vii) If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. VOC Content shall be determined as defined in Subsections (H)(1)(a)(i) and (H)(1)(a)(ii) of this Rule.

(d) Faux Finishing Coatings

(i) Labels of all clear topcoat Faux Finishing Coatings shall prominently display the statement “This product can only be sold or used as part of a Faux Finishing Coating system”.

(e) Industrial Maintenance Coatings

(i) The labels of all Industrial Maintenance Coating subject to this rule shall display on the label or lid of the container in which the Coating is sold or distributed one or more of the descriptions listed in subsections (a) - (c) below:

a. “For industrial use only”.
b. “For professional use only”.
c. “Not for Residential use” or “Not intended for Residential use”.

(f) Rust Preventative Coatings

(i) The labels of all Rust Preventative Coatings shall prominently display the statement “For Metal Substrates Only”.

(g) Specialty Primers, Sealers, and Undercoaters

(i) The labels of all Specialty Primers, Sealers, and Undercoaters shall prominently display the statement “Specialty Primer”, “Sealer”, “Undercoater” or one or more of the descriptions listed in subsections (a) - (c) below.

   a. “For fire-damaged substrates”.
   b. “For smoke-damaged substrates”.
   c. “For water-damaged substrates”.

(h) Reactive Penetrating Sealers

(i) The labels of all Reactive Penetrating Sealers shall prominently display the statement “Reactive Penetrating Sealer”.

(i) Stone Consolidants

(i) The labels of all Stone Consolidants shall prominently display the statement “Stone Consolidant – For Professional Use Only”.

(j) Nonflat - High Gloss Coatings

(i) The labels of all Nonflat - High Gloss Coatings shall prominently display the words “High Gloss”.

(k) Wood Coatings

(i) The labels of all Wood Coatings shall prominently display the statement “For Wood Substrates Only”.

(l) Zinc Rich Primers

(i) The labels of all Zinc Rich Primers shall prominently display the statement display one or more of the descriptions listed in subsections (a) - (c) below.
Photovoltaic Coatings

(i) Each manufacturer of any Photovoltaic Coating subject to this Rule shall display the information listed in Subsections (D)(1)(a) through (D)(1)(c) on the Coating container (or label) in which the Coating is sold or distributed. In addition, the label must include “applied as a single layer to solar Photovoltaic modules.”

Effective January 1, 2022, each manufacturer of any Colorant subject to this Rule shall display the following information on the Colorant container (or label) in which the Colorant is sold or distributed.

(a) Date Code

(i) The date the Colorant was manufactured, or a date code representing the date the Colorant was manufactured, shall be indicated on the label, lid, or bottom of the container.

(ii) If the manufacturer uses a date code for any Colorant, the manufacturer shall file an explanation of each code with CARB.

(b) VOC Content

Each container of any Colorant subject to this Rule shall display one of the following values in grams of VOC per liter of Colorant:

(i) Maximum VOC Content as determined from all potential product formulations; or

(ii) VOC Content as determined from actual formulation data; or

(iii) VOC Content as determined using the applicable test methods in Section (H)(2).

(iv) If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. VOC Content shall be determined as defined in Subsections (H)(1)(a)(i) and (H)(1)(a)(ii) of this Rule.
(E) Reporting Requirements

(1) Sales Data

(a) A responsible official from each manufacturer shall upon request of the Executive Officer of the CARB, or his or her delegate, provide data concerning the distribution and sales of Architectural Coatings. The responsible official shall within 180 days provide information, including, but not limited to:

(i) The name and mailing address of the manufacturer;
(ii) The name, address and telephone number of a contact person;
(iii) The name of the Coating product as it appears on the label and the applicable Coating category;
(iv) Whether the product is marketed for interior or exterior use or both;
(v) The number of gallons sold in California in containers greater than one (1) liter (1.057 quart) and equal to or less than one (1) liter (1.057 quart);
(vi) The VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one (1) liter have a different VOC Content than containers greater than one (1) liter, list separately. If the Coating is a multi-component product, provide the VOC Content as mixed or catalyzed;
(vii) The names and Chemical Abstracts Service (CAS) numbers of the VOC constituents in the product;
(viii) The names and CAS numbers of any compounds in the product specifically exempted from the VOC definition, as referenced in MDAQMD Rule 102 or ;
(ix) Whether the product is marketed as solventborne, waterborne, or 100 percent solids;
(x) Description of resin or binder in the product;
(xi) Whether the Coating is a single-component or multi-component product;
(xii) The density of the product in pounds per gallon;
(xiii) The percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition, as referenced in MDAQMD Rule 102; and
(xiv) The percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition, as referenced in MDAQMD Rule 102.
(b) All sales data listed in subsections (E)(1)(a)(i) through (E)(1)(a)(xiv) shall be maintained by the responsible official for a minimum of three (3) years. Sales data submitted by the responsible official to the Executive Officer of the CARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations Sections 91000-91022.

(c) Although Tertiary Butyl Acetate (TBAc) is exempt as a VOC when determining VOC content of a coating and compliance with emission limitations, it remains a VOC for purposes of all recordkeeping, emissions inventory, and dispersion modeling and must be treated as such.

(2) Annual Reports
(a) Anywhere Photovoltaic Coatings are applied to solar Photovoltaic modules, the Coating manufacturer must submit an annual report no later than March 31st to the local air District that at least includes:

(i) Source name, location, contact, and telephone,
(ii) Ownership status,
(iii) Description of business activity,
(iv) Identify the period the Coatings were applied, including the start date, completion date, and increments of progress,
(v) The actual VOC emissions from Photovoltaic Coatings during the reporting period, including the calculations used, and
(vi) The actual gallons of Photovoltaic Coatings used during the reporting period.

(F) Administrative Requirements

(1) District Rule 442 Applicability
(a) Any Coating, Coating operation, or facility which is exempt from all or a portion of the VOC limits of this rule shall comply with the provisions of District Rule 442.

(2) Severability
(a) Each provision of this Rule shall be deemed severable, and in the event that any provision of this Rule is held to be invalid, the remainder of this rule shall continue in full force and effect.

(G) Notification Requirements

(1) Prior to use of any Photovoltaic Coatings, the Coating manufacturer shall complete
and submit a notification to the local air District. The Notification shall include, but not limited to, the following information:

(a) Source name, owner name, location, contact, and telephone;

(b) Agreement with business owner to apply Photovoltaic Coatings;

(c) Description of business activity;

(d) Identification of the period the Photovoltaic Coatings will be applied, including an estimate of start date, completion date, and increments of progress;

(e) An estimate of emissions from Photovoltaic Coatings during the period, including the calculations used, and

(f) An estimate of materials used in gallons of Photovoltaic Coatings during the period.

(2) Any manufacturer or importer of a Photovoltaic Coating used in California shall notify U.S. EPA Region IX of any coating use that exceeded the applicable VOC limit identified in 40 CFR Part 59 Subpart D and shall comply with the requirements of 40 CFR Part 59 Subpart D, including, but not limited to, 40 CFR 59.403 exceedance fees, 59.407 recordkeeping requirements, and 59.408 reporting requirements.

(H) Compliance Provisions and Test Methods

(1) Calculation of VOC Content

(a) For the purpose of determining compliance with the VOC Content limits in Table 1 and Table 2, the VOC Content of a Coating or Colorant shall be determined by using the procedures described in subsection (i) or (ii) below, as appropriate. If the manufacture does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC content must be calculated, including the maximum amount of thinning solvent recommended by the manufacturer. The VOC Content of a Tint Base shall be determined without Colorant that is added after the Tint Base is manufactured. If the coating is a multi-component product, the VOC Content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC Content must include the VOCs emitted during curing.
(i) With the exception of Low Solids Coatings or Colorants, determine the VOC Content in grams of VOC per liter of Coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and Exempt Compounds. Determine the VOC Content using equation 1 as follows:

\[
\text{VOC Regulatory} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})}
\]

Where:

- \(W_s\) = weight of volatiles, in grams
- \(W_w\) = weight of water, in grams
- \(W_{ec}\) = weight of Exempt Compounds, in grams
- \(V_m\) = volume of Coating or Colorant, in liters
- \(V_w\) = volume of water, in liters
- \(V_{ec}\) = volume of Exempt Compounds, in liters

(ii) For Low Solids Coatings or Colorants, determine the VOC Content in units of grams of VOC per liter of Coating thinned to the manufacturer's maximum recommendation, including the volume of any water and Exempt Compounds. Determine the VOC Content using equation 2 as follows:

\[
\text{VOC Actual} = \frac{(W_s - W_w - W_{ec})}{(V_m)}
\]

Where:

- \(W_s\) = weight of volatiles, in grams
- \(W_w\) = weight of water, in grams
- \(W_{ec}\) = weight of Exempt Compounds, in grams
- \(V_m\) = volume of Coating or Colorant, in liters

(b) For the purpose of determining Photovoltaic Coatings compliance with the VOC limits in Subsection (C)(1)(b) of this Rule, the VOC Content of a
Photovoltaic Coating shall be determined as defined as VOC Actual in Subsection (H)(1)(a)(ii) of this Rule.

(2) VOC Content of Coatings

(a) To determine the physical properties of a Coating or Colorant in order to perform the calculations in subsection (H)(1), the reference method for VOC Content is USEPA Method 24, incorporated by reference in subsection (H)(5)(fi), except as provided in subsections (H)(3) and (H)(4).

(b) An alternative method to determine the VOC Content of Coatings or Colorants is South Coast Air Quality Management District Method 304-91 (Revised February 1996), incorporated by reference in subsection (H)(5)(b).

(c) The Exempt Compounds content shall be determined by South Coast Air Quality Management District Method 303-91 (Revised 1996), Bay Area Air Quality Management District Method 41 (Revised 2005), or Bay Area Air Quality Management District Method 43 (Revised 2005), incorporated by reference in subsections (H)(5)(q), (H)(5)(g), and (H)(5)(h), respectively.

(d) To determine the VOC Content of a Coating or Colorant, the manufacturer may use USEPA Method 24, or an alternative method as provided in subsection (H)(3), formulation data, or any other reasonable means for predicting that the Coating or Colorant has been formulated as intended (e.g., quality assurance checks, record keeping).

(i) However, if there are any inconsistencies between the results of a USEPA Method 24 test and any other means for determining VOC Content, the USEPA Method 24 test results will govern, except when an alternative method is approved as specified in subsection (H)(3). The APCO may require the manufacturer to conduct a USEPA Method 24 analysis.

(e) To determine the VOC Content of a Coating or Colorant with a VOC Content of 150 g/L or less, the manufacturer may use SCAQMD Method 313, as incorporated by reference in Subsection (H)(5)(gg) of this Rule, ASTM D6886-18, incorporated by reference in Subsection (H)(5)(hh) of this Rule, or any other reasonable means for predicting that the Coating or Colorant has been formulated as intended (e.g., quality assurance checks, record keeping).

(f) The VOC Content of Photovoltaic Coatings shall be determined as provided in Subsection (H)(2).
Alternative Test Methods

(a) Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection (H)(2), after review and approved in writing by the District, CARB, and USEPA, may also be used.

Methacrylate Traffic Marking Coatings

(a) Analysis of methacrylate multicomponent Coatings used as Traffic Marking Coatings shall be conducted according to a modification of USEPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in subsection (H)(5)(o).

(b) This method has not been approved for methacrylate multicomponent Coatings used for other purposes than as Traffic Marking Coatings or for other classes of multicomponent Coatings.

Test Methods: The following test methods are incorporated by reference herein, and shall be used to test Coatings subject to the provisions of this rule:

(a) Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D1613-17, “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products”.

(b) Alternative VOC Content of Coatings: The VOC Content of Coatings may be analyzed either by U.S. EPA Method 24 or South Coast Air Quality Management District Method 304-91 (Revised 1996), “Determination of Volatile Organic Compounds (VOC) in Various Materials,” South Coast Air Quality Management District Laboratory Methods of Analysis for Enforcement Samples.

(c) Aluminum Roof Coatings: The metallic content of the Coating shall be determined by South Coast Air Quality Management District Method 318-95, “Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction”.


(h) Exempt Compounds--Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as Exempt Compounds for compliance with Subsection (H) by Bay Area Air Quality Management District Method 43, “Determination of Volatile Methylsiloxyxanes in Solvent-Based Coatings, Inks, and Related Materials,” Bay Area Air Quality Management District Manual of Procedures, Volume III, adopted 11/6/96.

(i) Faux Finishing Coating: The metallic content of the Coating shall be determined by South Coast Air Quality Management District Method 318-95, “Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction”.


(m) Hydrostatic Pressure for Basement Specialty Coatings: ASTM D7088-17, “Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry”.

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Architectural Coatings
(n) **Metal Content of Coatings:** The metallic content of a Coating shall be determined by South Coast Air Quality Management District Method 318-95, “Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction,” *South Coast Air Quality Management District Laboratory Methods of Analysis for Enforcement Samples*.

(o) **Methacrylate Traffic Marking Coatings:** The VOC Content of methacrylate multicomponent Coatings used as Traffic Marking Coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, “Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings” (July 1, 2000).


(q) **Other Exempt Compounds:** The content of compounds exempt under U.S. EPA Method 24 shall be analyzed by South Coast Air Quality Management District Method 303-91 (Revised 1996), “Determination of Exempt Compounds,” *South Coast Air Quality Management District Laboratory Methods of Analysis for Enforcement Samples*.

(r) **Photovoltaic Coatings:** The test methods identified in Subsection (H)(5) of this Rule shall be used to test Photovoltaic Coatings subject to the provisions of this Rule.

(s) **Pre-Treatment Wash Primer:** ASTM D1613-06, “Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products”.


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**Architectural Coatings**


(ff) **VOC Content of Coatings:** The VOC Content of a Coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, “Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings”.

(gg) **VOC Content of Coatings:** South Coast AQMD Method 313, “Determination of Volatile Organic Compounds (VOC) by Gas Chromatography/Mass Spectrometry/Flame Ionization Detection (GS/MS/FID).


[SIP: See SIP Table at [https://www.mdaqmd.ca.gov/](https://www.mdaqmd.ca.gov/) ]
Table 1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed as VOC Regulatory, thinned to the manufacturer’s maximum recommendation, excluding the volume of any water, Exempt Compounds, or Colorant added to tint bases. “Manufacturer’s maximum recommendation” means the maximum recommendation for thinning that is indicated on the label or lid of the Coating container.

<table>
<thead>
<tr>
<th>Coating Category</th>
<th>Current Limit</th>
<th>Effective 01/01/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Coatings</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Nonflat Coatings</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Specialty Coatings</td>
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<td></td>
</tr>
<tr>
<td>Aluminum Roof Coatings</td>
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</tr>
<tr>
<td>Basement Specialty Coatings</td>
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</tr>
<tr>
<td>Bituminous Roof Coatings</td>
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</tr>
<tr>
<td>Bituminous Roof primers</td>
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<td></td>
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<tr>
<td>Bond Breakers</td>
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</tr>
<tr>
<td>Building Envelope Coatings</td>
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<tr>
<td>Concrete Curing Compounds</td>
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<tr>
<td>Concrete/Masonry Sealers</td>
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<tr>
<td>Driveway Sealers</td>
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<td>Dry Fog Coatings</td>
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<tr>
<td>Faux Finishing Coatings</td>
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</tr>
<tr>
<td>Fire Resistive Coatings</td>
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<td>150</td>
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<tr>
<td>Floor Coatings</td>
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<td>Form-Release Compounds</td>
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<tr>
<td>Graphic Arts Coatings (Sign Paints)</td>
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<td>High Temperature Coatings</td>
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<tr>
<td>Industrial Maintenance Coatings</td>
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<td>Low Solids Coatings&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Magnesite Cement Coatings</td>
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<td>Mastic Texture Coatings</td>
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<tr>
<td>Metallic Pigmented Coatings</td>
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<td>Multi-Color Coatings</td>
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<td>Pre-Treatment Wash Primers</td>
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<tr>
<td>Primers, Sealers, and Undercoaters</td>
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<tr>
<td>Reactive Penetrating Sealers</td>
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<td>Recycled Coatings</td>
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<td>Rust Preventative Coatings</td>
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<td>Coating Category</td>
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<tr>
<td>Shellacs:</td>
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<tr>
<td>- Clear</td>
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<tr>
<td>- Opaque</td>
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<td>Specialty Primers, Sealers, and Undercoaters</td>
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<td>Stains:</td>
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<td>Exterior/Dual</td>
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<td>Interior</td>
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<td>Stone Consolidants</td>
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<td>Swimming Pool Coatings</td>
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<td>Tire and Stone Sealers</td>
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<td>Traffic Marking Coatings</td>
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<td>Tub and Tile Refinish Coatings</td>
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<td>Waterproofing Membranes</td>
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<td>Wood Coatings</td>
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<td>Wood Preservatives</td>
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<tr>
<td>Zinc-Rich Primers</td>
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</table>

*a Limit is expressed as VOC Actual*
Limits are expressed as VOC Regulatory.

<table>
<thead>
<tr>
<th>Colorant Added To</th>
<th>Effective 01/01/2022</th>
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<tbody>
<tr>
<td>Architectural Coatings, excluding Industrial Maintenance Coatings</td>
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<tr>
<td>Solvent-Based Industrial Maintenance Coatings</td>
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<tr>
<td>Waterborne Industrial Maintenance Coatings</td>
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<tr>
<td>Wood Coatings</td>
<td>600</td>
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