

**Sec. 22a-174-41a. Architectural and industrial maintenance coatings - phase 2.**

(a) **Definitions.** For the purposes of this section, the following definitions shall apply:

(1) “Adhesive” means any chemical substance that is applied for the purpose of bonding two surfaces together by other than mechanical means.

(2) “Aerosol coating product” means a pressurized coating product containing pigments or resins that is dispensed by means of a propellant and that is packaged either in a disposable can for hand-held application or for use in specialized equipment for ground traffic marking applications.

(3) “Aluminum roof coating” means a coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating.

(4) “Appurtenance” means any accessory to a stationary structure including, but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways; fixed ladders; catwalks; fire escapes; and window screens.

(5) “Architectural coating” means a coating applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements or to curbs. “Architectural coatings” do not include any coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars or automobiles or any adhesive.

(6) “ASTM” means the American Society for Testing and Materials.

(7) “BAAQMD” means the Bay Area Air Quality Management District.

(8) “Basement specialty coating” means a clear or opaque coating that is labeled and formulated for application to basements and other below-grade surfaces constructed of concrete or masonry to provide a hydrostatic seal capable of withstanding at least 10 psi of hydrostatic pressure and that is resistant to mold and mildew growth and able to achieve a microbial growth rating of 8 or more.

(9) “Bitumen” means black or brown materials including, but not limited to, asphalt, tar, pitch and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.

(10) “Bituminous roof coating” means a coating that incorporates bitumen that is labeled and formulated exclusively for roofing for the primary purpose of preventing water penetration.

(11) “Bituminous roof primer” means a primer that incorporates bitumen that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered and aged surface or improving the adhesion of subsequent surfacing components.

(12) “Bond breaker” means 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.

(13) “Calcimine recoater” means a flat, solvent-borne coating formulated and recommended specifically for recoating calcimine-painted ceilings and other calcimine-painted substrates.

(14) “CAS” means Chemical Abstract Service.

(15) “Coating” means a material applied onto or impregnated into a substrate for protective, decorative or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers and stains.

(16) “Colorant” means a concentrated pigment dispersion in water, solvent or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

(17) “Concrete curing compound” means a coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water, harden the surface of freshly poured concrete or dustproof the surface of freshly poured concrete.

(18) “Concrete or masonry sealer” means 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;

(B) Provide resistance against abrasion, alkalis, acids, mildew, staining or ultraviolet light; or

(C) Harden or dustproof the surface of aged or cured concrete.

(19) “Concrete surface retarder” means a mixture of retarding ingredients such as extender pigments, primary pigments, resin and solvent that interact chemically with the cement to prevent hardening on the surface where the retarder is applied, allowing the retarded mix or cement and sand at the surface to be washed away to create an exposed aggregate finish.

(20) “Conjugated oil varnish” means clear or semi-transparent wood coating based on a natural occurring conjugated vegetable oil (Tung oil) and modified with other natural or synthetic resins of which a minimum of 50% of the resin solids consist of conjugated oil and that may otherwise contain small amounts of pigment to control the final gloss or sheen and, when supplied as a single component product, penetrates and seals the wood with a film formulation that is due to polymerization of the oil. “Conjugated oil varnish” does not include lacquers or shellacs. For the purposes of this definition, “lacquer” means “lacquer” as defined in section 22a-174-41(a)(35) of the Regulations of Connecticut State Agencies.

(21) “Conversion varnish” means a clear acid curing coating with an alkyd or other resin blended with amino resins and supplied as a single component or two-compound product that produces a hard, durable, clear finish designed for professional application to wood flooring due to an acid-catalyzed condensation reaction, affecting a transesterification at the reactive ethers of the amino resins.

(22) “Driveway sealer” means a coating labeled and formulated for application to worn asphalt driveway surfaces to perform one or more of the following functions:

(A) Fill cracks;

(B) Seal the surface to provide protection; or

(C) Restore or preserve the appearance.

(23) “Dry fog coating” means 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.

(24) “Exempt compound” means a compound identified in 40 CFR 51.100(s)(1), as amended from time to time, as having negligible photochemical reactivity.

(25) “Faux finishing coating” means a coating labeled and formulated to meet one or more of the following criteria:

(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 as applied;

(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;

(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 and that requires a clear topcoat to prevent the degradation of the finish under normal use conditions; or

(E) A clear topcoat to seal and protect a faux finishing coating that meets one or more of the requirements in subparagraphs (A) to (D), inclusive, of this subdivision and that is labeled, sold and used solely as part of a faux finishing coating system.

(26) “Fire-resistive coating” means a coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. “Fire-resistive coating” 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.

(27) “Flat coating” means a coating that is not defined under any other definition in this section and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter.

(28) “Floor coating” means 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 that may be subjected to foot traffic.

(29) “Form-release compound” means a coating labeled and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to a form that may consist of wood, metal or some material other than concrete.

(30) “Graphic arts coating” or “sign paint” means a coating labeled and formulated for hand-application using a brush, airbrush or roller to indoor or outdoor signs, excluding structural components, and murals including letter enamels, poster colors, copy blockers and bulletin enamels.

(31) “High temperature coating” means a high performance coating labeled and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

(32) “Impacted immersion coating” means a high performance maintenance coating formulated and recommended for application to steel structures subject to immersion in turbulent, debris-laden water and that is specifically resistant to high-energy impact damage by floating ice or debris.

(33) “Industrial maintenance coating” means a high performance architectural coating, including primer, sealer, undercoater, intermediate coat and topcoat, formulated for application to substrates, including floors, exposed to one or more of the following extreme environmental conditions:

(A) Immersion in water, wastewater or chemical solutions (aqueous and non-aqueous solutions);

(B) Chronic exposures of interior surfaces to moisture condensation;

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

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

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

(F) Exterior exposure of metal structures and structural components.

(34) “Low solids coating” means a coating containing 0.12 kilogram or less of solids per liter of coating material as recommended for application by the manufacturer.

(35) “Magnesite cement coating” means a coating labeled and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.

(36) “Manufacturer’s formulation data” means data that are supplied by the materials manufacturer based on the manufacturer’s knowledge of the ingredients used to manufacture a coating, rather than on an EPA reference test method, including, but not limited to, information on density, VOC content and coating solids content.

(37) “Manufacturer’s maximum thinning recommendation” means the maximum recommendation for thinning that is indicated on the label or lid of a coating container.

(38) “Mastic texture coating” means a coating labeled and formulated to cover holes and minor cracks and conceal surface irregularities, which is applied in a single coat of at least 10 mils dry film thickness.

(39) “Metallic pigmented coating” means a coating that is labeled and formulated to provide a metallic appearance and that contains at least 48 grams of elemental metallic pigment per liter of coating as applied. “Metallic pigmented coating” does not include coatings applied to roofs or zinc-rich primers.

(40) “Multi-color coating” means a coating that is packaged in a single container and labeled and formulated to exhibit more than one color when applied in a single coat.

(41) “Multi-component coating” means a coating requiring the addition of a separate reactive resin, such as a catalyst or hardener, before application to form an acceptable dry film.

(42) “Nonflat coating” means a coating that is not defined under any other definition in this section and registers a gloss of 15 or greater on an 85-degree meter and five or greater on a 60-degree meter.

(43) “Nonflat-high gloss coating” means a nonflat coating that registers a gloss of 70 or above on a 60-degree meter.

(44) “Nuclear coating” means a protective coating formulated and recommended to seal porous surfaces such as steel or concrete that otherwise would be subject to intrusion by radioactive materials. “Nuclear coating” is resistant to long-term (service life) cumulative radiation exposure, relatively easy to decontaminate and resistant to various chemicals to which such a coating is likely to be exposed.

(45) “NYSDEC” means the New York State Department of Environmental Conservation.

(46) “Pearlescent” means exhibiting various colors depending on the angles of

illumination and viewing, as observed in mother-of-pearl.

(47) “Post-consumer coating” means a finished coating generated by a business or consumer that has served its intended end use and is recovered from or otherwise diverted from the waste stream for the purpose of recycling.

(48) “Pre-treatment wash primer” means a primer that contains a minimum of 0.5 percent acid, by weight. “Pre-treatment wash primer” is labeled and formulated for direct application to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

(49) “Primer, sealer, and undercoater” means 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;
- (B) To prevent subsequent coatings from being absorbed by the substrate;
- (C) To prevent harm to subsequent coatings by materials in the substrate;
- (D) To provide a smooth surface for the subsequent application of coatings;
- (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.

(50) “Reactive penetrating sealer” means a clear or pigmented coating that (A) 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, (B) penetrates into concrete and masonry substrates and chemically reacts to form covalent bonds with naturally occurring minerals in the substrate, (C) lines the pores of concrete and masonry substrates with a hydrophobic coating, but does not form a surface film, and (D) improves water repellency by at least 80 percent and does not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate.

(51) “Reactive penetrating carbonate stone sealer” means a clear or pigmented coating that (A) is labeled and formulated for application to above-grade carbonate stone substrates to provide protection from water and waterborne contaminants, including but not limited to, alkalis, acids and salts, (B) penetrates into carbonate stone substrates and chemically reacts to form covalent bonds with naturally occurring minerals in the substrate, (C) lines the pores of carbonate stone substrates with a hydrophobic coating, but does not form a surface film, and (D) improves water repellency at least 80 percent and does not reduce the water vapor transmission rate by more than 10 percent after application on a carbonate stone substrate.

(52) “Recycled coating” means an architectural coating formulated such that it contains a minimum of 50 percent by volume post-consumer coating, with a maximum of 50 percent by volume secondary industrial materials or virgin materials.

(53) “Roof coating” means a non-bituminous coating labeled and formulated for application to roofs for the primary purpose of preventing water penetration, reflecting ultraviolet light or reflecting solar radiation.

(54) “Rust preventive coating” means a coating formulated to prevent the corrosion of metal surfaces. “Rust preventative coating” does not include coatings applied as a topcoat over a primer or coatings used on wood or any other nonmetallic surface.

(55) “SCAQMD” means the South Coast Air Quality Management District, a regional

regulatory authority in California.

(56) “Sealer” means a coating labeled and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.

(57) “Secondary industrial material” means a product or by-product of the paint manufacturing process that is of known composition and has economic value but can no longer be used for its intended use.

(58) “Semi-transparent coating” means 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.

(59) “Shellac” means a clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Lacifffer lacca*) and formulated to dry by evaporation without a chemical reaction.

(60) “Shop application” means the 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.

(61) “Solicit” means to require for use or to specify by written or oral contract.

(62) “Specialty primer, sealer and undercoater” means a coating that is formulated for application to a substrate to block water-soluble stains resulting from fire damage, smoke damage or water damage.

(63) “Stain” means a semi-transparent or opaque coating labeled and formulated to change the color of a surface, but not conceal the grain pattern or texture.

(64) “Stone consolidant” means 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. “Stone consolidant” penetrates into stone substrates to create bonds between particles and consolidate deteriorated material.

(65) “Swimming pool coating” means a coating labeled and formulated to coat the interior of swimming pools and resist swimming pool chemicals. “Swimming pool coating” includes coatings used for swimming pool repair and maintenance.

(66) “Thermoplastic rubber coating and mastic” means a coating or mastic formulated and recommended for application to roofing or other structural surfaces and that incorporates no less than 40 percent by weight of thermoplastic rubbers in the total resin solids and may also contain other ingredients including, but not limited to, fillers, pigments and modifying resins.

(67) “Tint base” means an architectural coating to which colorant is added, after packaging in sale units, to produce a desired color.

(68) “Traffic marking coating” means 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.

(69) “Tub and tile refinish coating” means a clear or opaque coating that is labeled and formulated exclusively for refinishing the surface of a bathtub, shower, sink, or countertop. “Tub and tile refinish coating” is formulated to have the following properties, as determined in accordance with the applicable testing methods specified in subsection (g) of this section:

(A) Adhesion rating of 4B or better after 24 hours of recovery;

- (B) Scratch hardness of 3H or harder;
- (C) Gouge hardness of 4H or harder; and
- (D) Ability to withstand 1000 hours or more of exposure with few or no #8 blisters.
- (E) A weight loss of 20 milligrams or less after 1000 cycles.

(70) “Undercoater” means a coating labeled and formulated to provide a smooth surface for subsequent coatings.

(71) “Varnish” means a clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction and that may contain small amounts of pigment to color a surface or to control the final sheen or gloss of the finish. For the purposes of this definition, “lacquer” means “lacquer” as defined in section 22a-174-41(a)(35) of the Regulations of Connecticut State Agencies.

(72) “VOC content” means the weight of VOC per volume of coating.

(73) “Waterproofing membrane” means a clear or opaque coating that is labeled and formulated to be applied in a single coat of at least 25 mils dry film thickness to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate and that is intended for any of the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters and under flooring materials. “Waterproofing membrane” does not include topcoats that are concrete or masonry sealer.

(74) “Wood coating” means a coating labeled and formulated for application to wood substrates only. “Wood coating” includes clear and semi-transparent lacquer, varnish, sanding sealer, penetrating oil, clear stain, wood conditioner used as undercoats and wood sealer used as topcoat; opaque lacquer; opaque sanding sealer and opaque lacquer undercoater. “Wood coating” does not include clear sealer that is labeled and formulated for use on concrete or masonry surfaces or coatings intended for substrates other than wood.

(75) “Wood preservative” means a coating labeled and formulated to protect exposed wood from decay or insect attack.

(76) “Zinc-rich primer” means a coating intended for professional use only that meets the following specifications:

(A) Contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids; and

(B) Is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings.

**(b) Applicability.**

Except as provided in subsection (c) of this section, this section applies to any person who, on or after May 1, 2018, sells, supplies, offers for sale or manufactures for sale in the state of Connecticut any architectural coating manufactured on or after May 1, 2018 for use in the state of Connecticut and to any person who applies or solicits the application of any architectural coating within the state of Connecticut on or after May 1, 2018.

**(c) Exemptions and exceptions.**

(1) This section shall not apply to any architectural coating manufactured in the state of Connecticut for shipment, sale and use outside of the state of Connecticut or for shipment to other manufacturers for reformulation or repackaging.

(2) This section shall not apply to an architectural coating manufactured prior to May 1,

2018.

(3) This section shall not apply to any aerosol coating product.

(4) This section shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less, including kits containing containers of different colors, types or categories of coatings and two component products. This exemption does not include (A) bundling of containers one liter or less, which are sold together as a unit, or any type of marketing which implies that multiple containers one liter or less be combined into one container, (B) packaging from which the coating cannot be applied, and (C) multiple containers of one liter or less that are packaged and shipped together with no intent or requirement to ultimately sell as one unit.

(5) As used in this section, the terms “supply” and “supplied” shall not include internal transfers or transactions involving architectural coatings to, from or within an installation operated by any branch of the U.S. military.

(d) **Standards.**

(1) Except as provided in subdivision (2) of this subsection and subsection (c) of this section, no person shall manufacture, blend or repackage for sale within the state of Connecticut, supply, sell or offer for sale within the state of Connecticut or solicit for application or apply within the state of Connecticut any architectural coating manufactured on or after May 1, 2018 that contains VOCs in excess of the applicable VOC content limits specified in Table 41a-1. The VOC content limits of Table 41a-1 apply to the grams of VOC per liter of coating and shall be determined according to subsection (g) of this section.

(2) Except as provided in subdivision (3) of this subsection, 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 any person acting on the manufacturer’s behalf, including retailers who sell under a private label, any representation is made that indicates that the coating meets the definition of or is recommended for use as more than one of the coating categories listed in Table 41a-1, then the most restrictive VOC content limit of Table 41a-1 shall apply.

(3) The most restrictive VOC content limit provision of subdivision (2) of this subsection shall not apply to the following coating categories:

- (A) Aluminum roof coatings;
- (B) Bituminous roof primers;
- (C) Calcimine recoaters;
- (D) Concrete surface retardants;
- (E) High temperature coatings;
- (F) Impacted immersion coatings;
- (G) Industrial maintenance coatings;
- (H) Low-solids coatings;
- (I) Metallic pigmented coatings;
- (J) Nuclear coatings;
- (K) Pretreatment wash primers;
- (L) Shellacs;
- (M) Specialty primers, sealers and undercoaters;
- (N) Thermoplastic rubber coatings and mastics;



- (O) Wood coatings;
- (P) Wood preservatives; or
- (Q) Zinc-rich primers.

(4) All containers of coating that are applied directly to a surface from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means shall be closed when not in use. These containers include, but are not limited to, drums, buckets, cans, pails, trays, or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall be closed when not in use.

(5) No person who applies or solicits the application of any architectural coating shall apply a coating if additional solvent has been added to thin the coating such that the addition causes the coating to exceed the applicable VOC limit specified in Table 41a-1 of this section.

(6) For any coating that is not identified in this section, the VOC content limit shall be determined by classifying the coating as a flat coating, nonflat coating or nonflat-high gloss coating, as those terms are defined in subsection (a) of this section, and the corresponding coating limit of Table 41a-1 of this section shall apply.

(e) **Container labeling.**

(1) On each container of an architectural coating, the manufacturer shall clearly display the date the coating was manufactured, or a date code representing the date of manufacture, as follows:

(A) The date or date code shall be located on the label, lid or bottom of the container so that it is readily observable without disassembling the container or package; and

(B) If the manufacturer uses a date code for any coating, an explanation of such code shall be available to the commissioner upon request. A manufacturer shall respond to such a request within 90 days of receipt.

(2) On the label or lid of the container of an architectural coating, the manufacturer shall display a statement of the manufacturer's recommendation regarding thinning of the coating. This requirement shall not apply to the thinning of coatings with water. If thinning of the coating prior to use is not necessary, the recommendation shall specify that the coating is to be applied without thinning.

(3) On the label, lid or bottom of the container of an architectural coating, the manufacturer shall display one of the following values in grams of VOC per liter of coating:

- (A) Maximum VOC content as determined from all potential product formulations;
- (B) VOC content as determined from actual formulation data; or
- (C) VOC content as determined using the test methods in subsection (g) of this section.

(4) The manufacturer of any industrial maintenance coating shall prominently display on the label at least one of the following statements:

- (A) **"For industrial use only";**
- (B) **"For professional use only";**
- (C) **"Not for residential use";** or
- (D) **"Not intended for residential use."**

(5) On the label of any rust preventive coating, the manufacturer shall prominently display the statement: **"For metal substrates only"**.

(6) On the label of any specialty primer, sealer or undercoater, the manufacturer shall

prominently display:

- (A) “**For blocking stains**”;
- (B) “**For fire-damaged substrates**”;
- (C) “**For smoke-damaged substrates**”; or
- (D) “**For water-damaged substrates**.”

(7) The manufacturer of any non-flat high-gloss coating shall display prominently on the label the words “**high gloss**.”

(8) On the label of any clear topcoat faux finishing coating, the manufacturer shall prominently display the statement: “**This product can only be sold or used as part of a faux finishing coating system**.”

(9) On the label of any reactive penetrating sealer, the manufacturer shall prominently display the statement: “**reactive penetrating sealer**.”

(10) On the label of any reactive penetrating carbonate stone sealer, the manufacturer shall prominently display the statement: “**reactive penetrating carbonate stone sealer**.”

(11) On the label of any stone consolidant, the manufacturer shall prominently display the statement: “**stone consolidant – for professional use only**.”

(12) On the label of any wood coating, the manufacturer shall prominently display the statement: “**for wood substrates only**.”

(13) On the label of any zinc rich primer, the manufacturer shall prominently display one or more of the following statements:

- (A) “**For professional use only**”;
  - (B) “**For industrial use only**”;
  - (C) “**Not for residential use**”; or
  - (D) “**Not intended for residential use**.”
- (f) **Record keeping and reporting requirements.**

(1) Each manufacturer of a product subject to a VOC content limit in Table 41a-1 of this section shall maintain records demonstrating compliance with such VOC content limit, including the following information:

- (A) The product name and, if applicable, the identifying number, as shown on the product label and in sales and technical literature;
- (B) The VOC content as determined according to subsection (g) of this section;
- (C) The name(s) and CAS number of the VOC constituents in the product;
- (D) The dates of the VOC content determinations;
- (E) The coating category; and
- (F) The applicable VOC content limit.

(2) All records made to demonstrate compliance with this section shall be maintained for five years from the date such record is created and shall be made available to the commissioner or the Administrator not later than 90 days after a request.

(3) Each manufacturer of a coating subject to this section shall, upon request of the commissioner, provide data concerning the distribution and sales of such a coating. The manufacturer shall, not later than 90 days after receiving such a request, produce information including, but not limited to:

- (A) The name and mailing address of the manufacturer;
- (B) The name, address and telephone number of a contact person;

- (C) The name of the coating as it appears on the label;
- (D) Whether the coating is marketed for interior use, exterior use or both;
- (E) The number of gallons sold in Connecticut in containers greater than one liter and equal to or less than one liter during the preceding calendar year;
- (F) The actual VOC content and VOC content limit in grams per liter. If thinning is recommended, list the actual VOC content and VOC content limit after recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;
- (G) The name and CAS number of the VOC constituents in the coating;
- (H) The name and CAS number of any exempt compounds in the coating;
- (I) Whether the coating is marketed as solvent-borne, waterborne, or 100% solids;
- (J) Description of resin or binder in the coating;
- (K) Whether the coating is single-component or multi-component;
- (L) The density of the coating in pounds per gallon;
- (M) The percent by weight of solids, all volatile materials, water, and any exempt compounds; and
- (N) The percent by volume of solids, water, and any exempt compounds in the product.

(4) If the manufacturer does not have or does not provide the information requested by the commissioner pursuant to subdivision (3) of this subsection, the commissioner may require the reporting of this information by the person that has the information, including, but not limited to, any formulator, manufacturer, supplier, parent company, retailer who sells under a private label, distributor or repackager.

(5) Any document submitted to the commissioner pursuant to this section shall include a certification signed by an individual identified in section 22a-174-2a(a)(1) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall inquire of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and each of whom shall certify in writing as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.”

**(g) Compliance procedures, registration requirements and test methods.**

(1) Any person who sells, supplies, offers for sale or manufactures an architectural coating on or after May 1, 2018 for sale in Connecticut shall possess documentation that such coating complies with the VOC content limits of Table 41a-1 of this section, where the VOC content is determined according to the requirements of subdivision (2) of this subsection.

(2) The VOC content of a coating shall be determined as follows:

(A) For all coatings that are not low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's recommendation, excluding the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content} = (W_s - W_w - W_{ec}) / (V_m - V_w - V_{ec})$$

Where:

VOC Content = the VOC content of a coating (g/L of coating)

$W_s$  = weight of volatile components (g)

$W_w$  = weight of water (g)

$W_{ec}$  = weight of exempt compounds (g)

$V_m$  = volume of coating (L)

$V_w$  = volume of water (L)

$V_{ec}$  = volume of exempt compounds (L);

(B) For low solids coatings, determine the VOC content in grams per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds, using the following equation:

$$\text{VOC Content (ls)} = (W_s - W_w - W_{ec}) / (V_m)$$

Where:

VOC Content (ls) = the VOC content of a low solids coating (g/L of coating)

$W_s$  = weight of volatile components (g)

$W_w$  = weight of water (g)

$W_{ec}$  = weight of exempt compounds (g)

$V_m$  = volume of coating (L);

(C) The weight of volatile components ( $W_s$ ) shall be determined using the manufacturer's formulation data or by measuring the physical properties of the coating using the procedures and test methods prescribed in subdivision (3) of this subsection;

(D) The VOC content of a tint base shall be determined prior to the addition of the colorant;

(E) If the manufacturer does not recommend thinning, the VOC content shall be calculated for the product as supplied;

(F) If the manufacturer recommends thinning, the VOC content shall be calculated including the maximum amount of thinning solvent recommended by the manufacturer;

(G) If the coating is a multi-component product, the VOC content shall be calculated as mixed or catalyzed; and

(H) If the coating contains a silane, siloxane, or other ingredient that generates ethanol or other VOCs during the curing process, the VOC content shall include the VOCs emitted during curing.

(3) The following procedures shall be used, as applicable, to determine the physical properties of a coating to perform the calculations required pursuant to subdivision (2) of this subsection:

(A) The VOC content shall be calculated according to one of the following:

(i) EPA Reference Method 24, 40 CFR 60, Appendix A, or

(ii) An alternative test method approved by the New York Department of Environmental Conservation and the Administrator pursuant to NYSDEC Regulations Part 205.6(c);

(B) The exempt compound content shall be determined using SCAQMD Method 303-91 (revised 1993), except as follows:

(i) Parachlorobenzotrifluoride content shall be determined using BAAQMD Method 41 (revised 1995), and

(ii) Exempt compounds that are cyclic, branched or linear methylated siloxanes shall be determined using BAAQMD Method 43 (revised 1996); and

(C) Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to 40 CFR 59, Subpart D, Appendix A.

(4) Fire-resistive coatings and fire-retardant coatings shall be fire tested and rated by a testing agency according to the appropriate methods listed in subdivision (6) of this subsection.

(5) The following materials are subject to registration as follows:

(A) Antifouling coatings shall be registered with the Administrator under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. section 136 et seq.); and

(B) Wood preservatives shall be registered under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. section 136, et. seq.).

(6) The following test methods or the most current active standard of the designated method shall be used to test coatings for the identified properties, as applicable:

(A) The acid content of a coating shall be determined by ASTM D1613-06, *Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products*;

(B) The chemical resistance to various chemicals to which nuclear coatings are likely to be exposed shall be measured by ASTM D3912-10, *Standard Test Method for Chemical Resistance of Coatings and Linings for Use in Nuclear Power Plants*;

(C) The set-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-03, *Standard Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature*;

(D) The fire-resistance rating of a fire-resistive coating shall be determined by ASTM E119-12, *Standard Test Methods for Fire Tests of Building Construction and Materials*;

(E) The flame spread index of a fire-retardant coating shall be determined by ASTM E 84-12, *Standard Test Method for Surface Burning Characteristics of Building Materials*;

(F) The gloss of a coating shall be determined by ASTM D523-08, *Standard Test Method for Specular Gloss*;

(G) Long-term (service life) cumulative radiation exposure of nuclear coatings shall be measured by ASTM D4082-10, *Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Nuclear Power Plants*;

(H) The metallic content of a coating shall be determined by SCAQMD Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," SCAQMD Laboratory Methods of Analysis for Enforcement Samples;

(I) The chalkiness of a surface shall be determined using ASTM D4214-07, *Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films*;

(J) Hydrostatic pressure for basement specialty coatings shall be determined using ASTM D7088-08, *Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry*;

(K) Tub and tile refinish coating adhesion shall be determined using ASTM D4585-07, *Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation* and ASTM D3359-09e2, *Standard Test Methods for Measuring Adhesion by Tape Test*;

(L) Tub and tile refinish coating hardness shall be determined using ASTM D3363-05(2011)e2, *Standard Test Method for Film Hardness by Pencil Test*;

(M) The abrasion resistance of a tub and tile refinish coating shall be determined using ASTM D4060-10, *Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser*;

(N) Tub and tile refinish coating water resistance shall be determined using ASTM D4585-07, *Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation* and ASTM D 714-02(2009), *Standard Test Method for Evaluating Degree of Blistering of Paints*;

(O) Microbial growth rating for basement specialty coatings shall be determined in accordance with ASTM D 3273-12, *Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber* and ASTM D3274-09e1, *Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Fungal or Algal Growth or Soil and Dirt Accumulation*;

(P) Water repellency for reactive penetrating sealers and reactive penetrating carbonate stone sealers shall be determined using ASTM C67-11, *Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile*; or ASTM C97/C97M-09, *Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone*; or ASTM C140-12, *Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units*; and

(Q) Water vapor transmission rate for reactive penetrating sealers and reactive penetrating carbonate stone sealers shall be determined using ASTM E96/E96M-10, *Standard Test Methods for Water Vapor Transmission of Materials*.

(7) The identified architectural and industrial maintenance coatings shall be formulated and used according to the following standards or the most current active standard of the designated standard:

(A) Reactive penetrating sealer products labeled and formulated for vehicular traffic surface chloride screening applications shall meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981), “Concrete Sealers for the Protection of Bridge Structures;”

(B) Stone consolidants shall be specified and used in accordance with ASTM E2167-01(2008), *Standard Guide for Selection and Use of Stone Consolidants*; and

(C) Waterproofing membrane shall meet or exceed the requirements contained in ASTM C836/C836M-12, *Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course*.

**Table 41a-1. VOC Content Limits for Architectural Coatings Manufactured on or after May 1, 2018**

Coating Category	VOC content limit (grams per liter)
<b>Flat coating</b>	50
<b>Nonflat coating</b>	100

*Regulations of Connecticut State Agencies*

<b>Coating Category</b>	<b>VOC content limit (grams per liter)</b>
Nonflat-high gloss coating	150
Specialty Coating	
Aluminum roof	450
Basement specialty coating	400
Bituminous roof coating	270
Bituminous roof primer	350
Bond breaker	350
Calcimine recoater	475
Concrete curing compound	350
Concrete or masonry sealer	100
Concrete surface retarder	780
Conjugated oil varnish	450
Conversion varnish	725
Driveway sealer	50
Dry fog coating	150
Faux finishing coating	350
Fire resistive coating	350
Floor coating	100
Form-release compound	250
Graphic arts coating (sign paint)	500
High temperature coating	420
Impacted immersion coating	780
Industrial maintenance coating	250
Low solids coating	120
Magnesite cement coating	450
Mastic texture coating	100
Metallic pigmented coating	500
Multi-color coating	250
Nuclear coating	450
Pre-treatment wash primer	420
Primer, sealer and undercoater	100
Reactive penetrating sealer	350

*Regulations of Connecticut State Agencies*

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<b>Coating Category</b>	<b>VOC content limit (grams per liter)</b>
<b>Reactive penetrating carbonate stone sealer</b>	500
<b>Recycled coating</b>	250
<b>Roof coating</b>	250
<b>Rust preventive coating</b>	250
<b>Shellac</b>	
Clear	730
Opaque	550
<b>Specialty primer, sealer and undercoater</b>	100
<b>Stain</b>	250
<b>Stone consolidant</b>	450
<b>Swimming pool coating</b>	340
<b>Thermoplastic rubber coating and mastic</b>	550
<b>Traffic marking coating</b>	100
<b>Tub and tile refinish</b>	420
<b>Waterproofing membrane</b>	250
<b>Wood coating</b>	275
<b>Wood preservative</b>	350
<b>Zinc-rich primer</b>	340

(Effective October 5, 2017)