Environmental Protection Agency

Subpart A—General

SOURCE: 71 FR 58753, Oct. 5, 2006, unless otherwise noted.

§ 59.1 Final determinations under Section 183(e)(3)(C) of the CAA.

This section identifies the consumer and commercial product categories for which EPA has determined that CTGs will be substantially as effective as regulations in reducing VOC emissions in ozone nonattainment areas:

(a) Wood furniture coatings;
(b) Aerospace coatings;
(c) Shipbuilding and repair coatings;
(d) Lithographic printing materials;
(e) Letterpress printing materials;
(f) Flexible packaging printing materials;
(g) Flat wood paneling coatings;
(h) Industrial cleaning solvents;
(i) Paper, film, and foil coatings;
(j) Metal furniture coatings;
(k) Large appliance coatings;
(l) Miscellaneous metal products coatings;
(m) Plastic parts coatings;
(n) Auto and light-duty truck assembly coatings;
(o) Fiberglass boat manufacturing materials; and
(p) Miscellaneous industrial adhesives.

Subpart B—National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings

§ 59.100 Applicability and designation of regulated entity.

(a) The provisions of this subpart apply to automobile refinish coatings and coating components manufactured on or after January 11, 1999 for sale or distribution in the United States.

(b) Regulated entities are manufacturers and importers of automobile refinish coatings or coating components that sell or distribute these coatings or coating components in the United States.

(c) The provisions of this subpart do not apply to automobile refinish coatings or coating components meeting the criteria in paragraphs (c)(1) through (c)(6) of this section.

(1) Coatings or coating components that are manufactured (in or outside the United States) exclusively for sale outside the United States.

(2) Coatings or coating components that are manufactured (in or outside the United States) before January 11, 1999.

(3) Coatings or coating components that are manufactured (in or outside the United States) for use by original equipment manufacturers.

(4) Coatings that are sold in non-refillable aerosol containers.

(5) Lacquer topcoats or their components.

(6) Touch-up coatings.

§ 59.101 Definitions.

Adhesion promoter means a coating designed to facilitate the bonding of a primer or topcoat on surfaces such as trim moldings, door locks, and door sills, where sanding is impracticable, and on plastic parts and the edges of sanded areas.

Administrator means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or an authorized representative.

Automobile means passenger cars, vans, motorcycles, trucks, and all other mobile equipment.

Automobile refinish coating component means any portion of a coating, such as a reducer or thinner, hardener, additive, etc., recommended (by its manufacturer or importer) to distributors or end-users for automobile refinishing. The raw materials used to produce the components that are mixed by the end-user to prepare a coating for application are not considered automobile refinish coating components. Any reference to automobile refinishing made by a manufacturer or importer on a container or in product literature constitutes a recommendation for automobile refinishing.

Automobile refinish coating or coating component importer, or importer, means any company, group, or individual that brings automobile refinish coatings or coating components from a location outside the United States into the United States for sale or distribution in the United States.
Automobile refinish coating or coating component manufacturer, or manufacturer, means any company, group, or individual that produces or packages automobile refinish coatings or coating components for sale or distribution in the United States, including an entity which produces or packages such coatings or coating components under a private label for another party.

Automobile refinishing means the process of coating automobiles or their parts, including partial body collision repairs, that is subsequent to the original coating applied at an automobile original equipment manufacturing plant.

Container means the individual receptacle that holds a coating or coating component for storage and distribution.

Cut-in, or jambing, clearcoat means a fast-drying, ready-to-spray clearcoat applied to surfaces such as door jambs and trunk and hood edges to allow for quick closure.

Elastomeric coating means a coating designed for application over flexible parts, such as elastomeric bumpers.

Exempt compounds means specific organic compounds that are not considered volatile organic compounds due to negligible photochemical reactivity. The exempt compounds are specified in §51.100(s) of this chapter.

Hardener means a coating component specifically designed to promote a faster cure of an enamel finish.

Impact-resistant coating means a coating designed to resist chipping caused by road debris.

Label means any written, printed, or graphic matter affixed to or appearing upon any automobile refinish coating or coating component container or package for purposes of identifying or giving information on the product, use of the product, or contents of the container or package.

Lacquer means a thermoplastic coating which dries primarily by solvent evaporation, and which is resolvable in its original solvent.

Low-gloss coating means a coating which exhibits a gloss reading less than or equal to 25 on a 60° glossmeter.

Mixing instructions means the coating or coating component manufacturer's or importer's specification of the quantities of coating components for mixing a coating.

Mobile equipment means any equipment that is physically capable of being driven or drawn upon a highway including, but not limited to, the following types of equipment: construction vehicles (such as mobile cranes, bulldozers, concrete mixers); farming equipment (wheel tractor, plow, pesticide sprayer); hauling equipment (truck trailers, utility bodies, camper shells); and miscellaneous equipment (street cleaners, golf carts).

Multi-colored topcoat means a topcoat that exhibits more than one color, is packaged in a single container, and camouflages surface defects on areas of heavy use, such as cargo beds and other surfaces of trucks and other utility vehicles.

Pretreatment wash primer means a primer that contains a minimum of 0.5 percent acid, by weight, that is applied directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent coatings.

Primer means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance and/or adhesion.

Primer-sealer means any coating applied prior to the application of a topcoat for the purpose of corrosion resistance, adhesion of the topcoat, and/or color uniformity and to promote the ability of an undercoat to resist penetration by the topcoat.

Primer-surfacer means any coating applied prior to the application of a topcoat for the purpose of filling surface imperfections in the substrate, corrosion resistance, and/or adhesion of the topcoat.

Reducer means any solvent used to thin enamels.

Underbody coating means a coating designed for protection and sound deadening that is typically applied to the wheel wells and underbody of an automobile.

Single-stage topcoat means a topcoat consisting of only one coating.

Specialty coatings means adhesion promoters, low-gloss coatings, bright metal trim repair coatings, jambing (cut-in) clearcoats, elastomeric coatings, impact resistant coatings,
underbody coatings, uniform finish blenders, and weld-through primers.

Thinner means any solvent used to reduce the viscosity or solids content of a coating.

Three-stage topcoat means a topcoat composed of a pigmented basecoat, a midcoat, and a transparent clearcoat.

Topcoat means any coating or series of coatings applied over a primer or an existing finish for the purpose of protection or beautification.

Touch-up coating means a coating applied by brush, air-brush, or nonrefillable aerosol can to cover minor surface damage.

Two-stage topcoat means a topcoat consisting of a pigmented basecoat and a transparent clearcoat.

Uniform finish blender means a coating designed to blend a repaired topcoat into an existing topcoat.

United States means the United States of America, including the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and Commonwealth of the Northern Mariana Islands.

Volatile organic compounds or VOC means any compound of carbon, other than those organic compounds that the Administrator has excluded in 40 CFR part 51, §51.100 from this definition.

VOC content means the weight of VOC per volume of coating, calculated according to the procedures in §59.104(a) of this subpart.

Water hold-out coating means a coating applied to the interior cavity areas of doors, quarter panels and rocker panels for the purpose of corrosion resistance to prolonged water exposure.

Weld-through primer means a primer that is applied to an area before welding is performed, and that provides corrosion resistance to the surface after welding has been performed.

§ 59.102 Standards.

(a) Except as provided in §59.106 of this subpart, any coating resulting from the mixing instructions of a regulated entity must meet the VOC content limit given in table 1 of this subpart.

(b) Different combinations or mixing ratios of coating components constitute different coatings. For example, coating components may be mixed one way to make a primer, and mixed another way to make a primer sealer. Each of these coatings must meet its corresponding VOC content limit in table 1 of this subpart. If the same combination and mixing ratio of coating components is recommended by a regulated entity for use in more than one category in table 1 of this subpart, then the most restrictive VOC content limit shall apply.

§ 59.103 Container labeling requirements.

Each regulated entity subject to this subpart must clearly display on each automobile refinish coating or coating component container or package, the day, month, and year on which the product was manufactured, or a code indicating such date.

§ 59.104 Compliance provisions.

(a) For the purpose of determining compliance with the VOC content limits in §59.102(a) of this subpart, each regulated entity shall determine the VOC content of a coating using the procedures described in paragraph (a)(1) or (a)(2) of this section, as appropriate.

(1) Determine the VOC content in grams of VOC per liter of coating prepared for application according to its mixing instructions, excluding the volume of any water or exempt compounds. VOC content shall be calculated using the following equation:

\[
VOC = \frac{(W_t - W_w - W_{ec})}{(V - V_w - V_{ec})}
\]

Where:

- VOC content = grams of VOC per liter of coating;
- \(W_t\) = mass of total volatiles, in grams;
- \(W_w\) = mass of water, in grams;
- \(W_{ec}\) = mass of exempt compounds, in grams;
- \(V\) = volume of coating, in liters;
- \(V_w\) = volume of water, in liters; and
- \(V_{ec}\) = volume of exempt compounds, in liters.

(2) The VOC content of a multi-stage topcoat shall be calculated using the following equation:

\[
VOC_{\text{total}} = \frac{\sum_{i=1}^{M} VOC_{\text{mix}} + 2 \times VOC_{\text{ec}}}{M + 3}
\]

Where:

- \(VOC_{\text{mix}}\) = VOC weight in the mix;
- \(VOC_{\text{ec}}\) = VOC weight in the exempt compounds.

(3) Each regulated entity may validate the VOC content of a coating by preparing and analyzing a coating sample in accordance with the procedures in paragraph (a)(1) or (a)(2) of this section, as appropriate.