RULE 1168. ADHESIVE AND SEALANT APPLICATIONS

(a) Purpose and Applicability
The purpose of this rule is to reduce emissions of volatile organic compounds (VOCs), and toxic air contaminants, and stratospheric ozone-depleting compounds to eliminate emissions of chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene—chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene—from the application of adhesives, adhesive bonding primers, adhesive primers, sealants, and sealant primers, or any other primers. This rule applies to all commercial and industrial any person who uses, sells, stores, supplies, distributes, offers for sale, or manufactures for sale any sales and applications of adhesives, adhesive bonding primers, adhesive primers, sealants, or sealant primers, or any other primers, unless otherwise specifically exempted by this rule.

(b) Definitions
For the purpose of this rule, the following definitions shall apply:

1. ACRYLIC is a thermoplastic polymer or a copolymer of acrylic acid, methacrylic acid, esters of these acids, or acrylonitrile.

2. ACRYLONITRILE-BUTADIENE-STYRENE (ABS) plastic is made by reacting monomers of acrylonitrile, butadiene, and styrene and is normally identified with an ABS marking.

3. ABS TO POLYVINYL CHLORIDE (PVC) TRANSITION CEMENT is Plastic Welding Cement used to join ABS and PVC building drains or building sewers.

4. ABS WELDING CEMENT is a Plastic Welding Cement that is used to join ABS pipe, fittings, and other system components, including, but not limited to, components for shower pan liner, drain, closet flange, and backwater valve systems.

5. ADHESIVE is any substance that is used to bond one surface to another surface by attachment. Adhesives include adhesive bonding primers, adhesive primers, adhesive primers for plastics, and any other primer.
(4) ADHESIVE BONDING PRIMER is an adhesive applied to a surface to improve the bond of subsequent adhesives and sometimes to inhibit corrosion.

(56) ADHESIVE PRIMER is a coating—film-forming material applied to a substrate, prior to the application of an adhesive or adhesive tape, to provide a bonding surface increase adhesion or film bond strength, promote wetting, or form a chemical bond with a subsequently applied adhesive.

(7) ADHESIVE TAPE is a backing material coated with an adhesive, and includes, but is not limited to, drywall tape, heat sensitive tape, pressure-sensitive adhesive tape, and water-activated tape.

(6) ADHESIVE PRIMER FOR PLASTIC is a material applied to a plastic substrate before applying an adhesive in order to obtain better adhesion.

(7) ADHESIVE PROMOTER is a coating applied to a substrate in a monomolecular thickness to promote wetting and form a chemical bond with the subsequently applied material.

(8) ADHESIVE SOLID is the nonvolatile portion of an adhesive that remains after heating a sample of the material at 110°C for one hour.

(98) AEROSOL ADHESIVE means is any adhesive packaged as an aerosol product in which the spray mechanism is permanently housed in a nonrefillable can designed for hand-held application without the need for where no ancillary hoses or spray equipment is used. Aerosol adhesives include special purpose spray adhesives, mist spray adhesives, and web spray adhesives, as defined by the California Air Resources Board consumer products regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507.

(9) AEROSOL PRODUCT is a pressurized spray system that dispenses product ingredients by means of a propellant contained in a product or a product's container, or by means of a mechanically induced force. Aerosol Products does not include Pump Spray.

(10) AEROSOL SPRAY CAN is a hand-held, pressurized, non-refillable container which expels adhesives from the container in a finely divided spray when a valve on the container is depressed.

(11) AEROSPACE COMPONENT is the fabricated part, assembly of parts, or completed unit of any aircraft or space vehicle (excluding tires), and includes models, mock-ups, prototypes, and test coupons.
(12) AIRCRAFT means any machine designed to travel through the air, without leaving the earth's atmosphere, whether heavier or lighter than air, including airplanes, balloons, dirigibles, helicopters, and missiles.

(13) AIRCRAFT TIRE REPAIR is the repair and retreading of used tires used on aircraft. This includes the repair of damage to the tire casing, removal of old tread rubber and tread reinforcing materials, and application of new tread and tread reinforcing materials.

(14) ARCHITECTURAL APPLICATION is the use of a regulated product, an adhesive, sealant, or adhesive or sealant primer on stationary structures, including mobile homes, and their appurtenances.

(15) ARCHITECTURAL APPURTENANCE is any accessory to a stationary structure, including, but not limited to, hand railings; cabinets; bathroom and kitchen fixtures; fences; rain-gutters and down-spouts; window screens; lamp-posts; heating and air conditioning equipment; other mechanical equipment; large fixed stationary tools; signs; motion picture and television production sets; and concrete forms. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.

(16) ARCHITECTURAL SEALANT OR SEALANT PRIMER is any sealant or sealant primer applied to stationary structures, including mobile homes, and their appurtenances. Appurtenances to an architectural structure include, but are not limited to: hand railings, cabinets, bathroom and kitchen fixtures, fences, rain gutters and downspouts, and windows.

(17) BIG BOX RETAILER is a physically large-chain retail outlet that is classified by the U.S. Department of Labor under North American Industry Classification System code 444110: Home Centers or identified in a list maintained by the Executive Officer.

(18) BUILDING ENVELOPE is the exterior and demising partitions of a building that enclose conditioned space.

(19) BUILDING ENVELOPE MEMBRANE ADHESIVES are used to adhere membranes applied to the building envelope to provide a barrier to air or vapor leakage through the building envelope that separates conditioned from unconditioned spaces. Building Envelope Membranes are applied to diverse materials, including, but not limited to, concrete masonry units (CMU), oriented stranded board (OSB), gypsum board, and wood substrates.
(1615) CARPET PAD ADHESIVE is an adhesive used for the installation of a carpet pad (or cushion) beneath a carpet.

(1716) CERAMIC, GLASS, PORCELAIN, AND STONE TILE ADHESIVE is an adhesive used for the installation of ceramic tile products.

(18) CERAMIC TILES are a ceramic surfacing unit made from clay or a mixture of clay and other materials.

(1917) CHLORINATED POLYVINYL CHLORIDE (CPVC) plastic is a polymer of the chlorinated polyvinyl monomer that contains 67% chlorine and is normally identified with a CPVC marking.

(178) CPVC WELDING CEMENT is a Plastic Welding Cement that is used to join CPVC pipe, fittings, and other system components, including, but not limited to, components for shower pan liner, drain, closet flange, and backwater valve systems.

(20) COATING SOLID is the nonvolatile portion of a coating that remains after heating a sample of the material at 110°C for one hour.

(19) CLEAR, PAINTABLE, AND IMMEDIATELY WATER-RESISTANT SEALANT is a compound with adhesive properties that contains no appreciable level of opaque fillers or pigments; transmits most or all visible light through itself when cured; is capable of being painted; is immediately resistant to precipitation upon application; and must meet the following criteria:

(A) Clarity of 15 turbidity units or less per ASTM D7315 - Determination of Turbidity Above 1 Turbidity Unit (TU) in Static Mode as manufactured and packaged;

(B) Color of Gardner 0 as tested by ASTM D1544 - Standard Test Method for Color of Transparent Liquids (Gardner Color Scale) or Platinum-Cobalt Color of 50 or less using ASTM D1209 - Standard Test Method for Color of Clear Liquids (Platinum-Cobalt Scale) as manufactured and packaged; and

(C) Compatible with paint per ASTM C1520 Standard Guide for Paintability of Latex Sealants.

(240) COMPUTER DISKETTE MANUFACTURING is the process where the fold-over flaps are glued to the body of a vinyl jacket.

(221) CONTACT ADHESIVE is an adhesive applied to two separate surfaces, allowed to dry before the two surfaces are placed in contact with each other, and brought together for adhesion and bonding with subsequent
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pressure forms an immediate bond after both adhesive-coated surfaces are placed in full contact with each other.

(22) CONSUMER PRODUCTS REGULATION (CPR) is the regulation implemented by the California Air Resources Board (CARB) under Title 17 of the California Code of Regulations, Section 94507, et. seq.

(23) COVE BASE ADHESIVE is an adhesive used during the installation of cove base (or wall base), which is generally made of vinyl or rubber, on a wall or vertical surface at floor level. A flooring trim unit, generally made of vinyl or rubber, having a concave radius on one edge and a convex radius on the opposite edge, that is used in forming a junction between the bottom wall course and the floor, to form an inside corner.

(24) CYANOACRYLATE ADHESIVE is a single-component reactive acrylic adhesive that contains at least 85 percent by weight ethyl, methyl, methoxymethyl or other functional groupings of cyanoacrylate.

(25) DIP COAT is a method of application to a substrate by submersion into, and removal from, a bath.

(26) DISTRIBUTION CENTER is a warehouse or other specialized building, which is stocked with products (goods), to be redistributed to retailers, wholesalers, or directly to end-users.

(27) DRY WALL ADHESIVE is an adhesive used during the installation of gypsum dry wall to studs or solid surfaces.

(28) EDGE GLUE is an adhesive applied to the edge of multi-sheet carbonless forms prior to being fanned apart after drying.

(29) ELECTROSTATIC APPLICATION is a spray method where the atomized droplets are charged and subsequently deposited on the substrate by electrostatic attraction.

(30) ENERGY CURABLE ADHESIVES and SEALANTS are single-component reactive products that cure upon exposure to visible-light, ultra-violet light, or to an electron beam. The VOC content of thin film Energy Curable Adhesives and Sealants may be determined by manufacturers using ASTM Test Method 7767 Standard Test Method to Measure Volatiles from Radiation Curable Acrylate Monomers, Oligomers, and Blends and Thin Coatings Made from Them.

(31) EXEMPT COMPOUNDS are as defined in Rule 102—Definition of Terms.

(32) FACILITY means any permit unit or grouping of permit units or other air contaminant-emitting activities which are located on one or more
contiguous properties within the District, in actual physical contact or separateness solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control). Such above-described groupings, if not contiguous, but connected only by land carrying a pipeline, shall not be considered one facility.

(2833) FIBERGLASS is fine filaments of glass.

(34) FLOW COAT is an application method that coats an object by flowing a stream of regulated product over the object and draining off any excess product.

(29) FOAM is a rigid or spongy cellular mass with gas bubbles dispersed throughout.

(35) FOAM INSULATION is an expanding foam that is sprayed into ceiling or wall cavities to provide thermal resistance or to minimize air infiltration.

(3536) FOAM SEALANT is a foam used to fill and form a durable, airtight, water-resistant seal to common building substrates, such as wood, brick, concrete, foam board, and plastic.

(30) GLUE is a hard gelatin obtained from hides, tendons, cartilage, bones, or other parts of animals.

(347) GRAMS OF VOC PER LITER OF REGULATED ADHESIVE OR SEALANT PRODUCT, LESS WATER AND LESS EXEMPT COMPOUNDS is the weight of VOC per combined volume of VOC and adhesive or sealant product solids, and can be calculated by the following equation:

\[
\text{Grams of VOC per Liter of Regulated Adhesive or Sealant Product, Less Water and Less Exempt Compounds} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}
\]

Where:
- \( W_s \) = weight of volatile compounds, in grams
- \( W_w \) = weight of water, in grams
- \( W_{es} \) = weight of exempt compounds, in grams
- \( V_m \) = volume of material, in liters
- \( V_w \) = volume of water, in liters
- \( V_{es} \) = volume of exempt compounds, in liters
For adhesives or sealants reactive products that contain reactive diluents, the VOC content of the adhesive or sealant is determined after curing. The grams of VOC per liter of any regulated adhesive or sealant product, except a low-solids adhesive or sealant product, shall be calculated by the following equation:

\[
\text{Grams of VOC per Liter of Regulated Adhesive or Sealant Product, Less Water and Less Exempt Compounds} = \frac{W_{rs} - W_{rw} - W_{res}}{V_{rm} - V_{rw} - V_{res}}
\]

Where:
- \( W_{rs} \) = weight of volatile compounds not consumed during curing, in grams
- \( W_{rw} \) = weight of water not consumed during curing, in grams
- \( W_{res} \) = weight of exempt compounds not consumed during curing, in grams
- \( V_{rm} \) = volume of material prior to reaction, in liters
- \( V_{rw} \) = volume of water not consumed during curing, in liters
- \( V_{res} \) = volume of exempt compounds not consumed during curing, in liters

(328) GRAMS OF VOC PER LITER OF MATERIAL is the weight of VOC per volume of material, to be used for a low-solids adhesive or sealant product, and can be calculated by the following equation:

\[
\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{es}}{V_m}
\]

Where:
- \( W_s \) = weight of volatile compounds, in grams
- \( W_w \) = weight of water, in grams
- \( W_{es} \) = weight of exempt compounds, in grams
- \( V_m \) = volume of material, in liters

For reactive products, the VOC content is determined after curing.

(39) GROUT is a cement-based sealant formulated to fill or seal gaps, including those associated with, but not limited to, tile installations.

(3340) HAND APPLICATION METHODS is the application of a regulated adhesive or sealant product using manually hand held equipment. Such equipment includes paint brush, hand roller, trowel, spatula, dauber, rag,
sponges, and mechanically- and/or pneumatic-driven syringes without provided there is no atomization of the materials.

(3441) HIGH-VOLUME, LOW-PRESSURE (HVLP) SPRAY is equipment used to spray apply a regulated product coating by means of a spray gun that is designed to be operated and that is operated between 0.1 and 10 pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns.

(3542) INDOOR CARPET-FLOOR COVERING ADHESIVE is an adhesive used during the installation of a carpet or indoor flooring that is in an enclosure and is not exposed to ambient weather conditions during normal use.

(36) LIGHT CURABLE ADHESIVES and SEALANTS are single-component reactive adhesives and sealants that cure upon exposure to visible light, ultra-violet light or to an electron beam.

(3743) LOW-SOLIDS ADHESIVE is any regulated adhesive product that contains which has less than one pound of solids per gallon of material (or 120 grams of solids per liter of material).

(38) LOW-SOLIDS ADHESIVE PRIMER is an adhesive primer which has less than one pound of solids per gallon of material (or 120 grams of solids per liter of material).

(44) MAINTENANCE is a routine process to keep equipment and machinery in working order or to prevent breakdowns.

(45) MANUFACTURING is the use of tools and labor to make things for sale.

(46) MARINE APPURTENANCES include, but are not limited to, a wood boardwalk, deck, dock, fender, lock gate, or other wooden structure specified for the marine environment.

(3947) MARINE DECK SEALANT is any sealant that is to be applied to wooden marine decks and their appurtenances and is specified and used exclusively for the marine environment.

(408) MARINE DECK SEALANT PRIMER is any sealant primer that is to be applied to wooden marine decks and their appurtenances and is specified and used exclusively for the marine environment.

(419) MODIFIED BITUMINOUS PRIMER consist of bituminous materials, and a high flash solvent used to prepare a surface by (1) improving the adhesion and (2) absorbing dust from the surface for adhesive, or flashing cement bitumen membrane.
(4250) MODIFIED BITUMINOUS MATERIALS are materials obtained from natural deposits of asphalt or residues from the distillation of crude oil petroleum or coal which consist mainly of hydrocarbons, and include, but are not limited to, asphalt, tar, pitch, and asphalt tile that are soluble in carbon disulfide.

(4351) MULTI-PURPOSE CONSTRUCTION ADHESIVE is any adhesive to be used for the installation or repair of various construction materials, including, but not limited to, drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.

(52) NON-STAINING PLUMBING PUTTY is a non-staining sealant formulated for use on natural surface materials that remains flexible and creates a waterproof seal when setting plumbing fixtures.

(44) NONMEMBRANE ROOF ADHESIVE is any adhesive to be used for the installation or repair of nonmembrane roofs. This category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.

(45) NONMEMBRANE ROOF SEALANT is any sealant to be used for installation or repair of nonmembrane roofs. This category includes plastic or asphalt roof cement, asphalt roof coatings, and cold application cement.

(46) ORTHOTICS AND PROSTHETICS are medical devices designed and fabricated to address human neuromuscular and structural skeletal problems in order to activate, supplement, or replace weakened, atrophied, or missing limbs.

(4753) OUTDOOR CARPET FLOOR COVERING ADHESIVE is an adhesive used during the installation of carpet or floor covering that is not in an enclosure and is exposed to ambient weather conditions during normal use.

(54) OZONE-DEPLETING COMPOUND is as defined in Rule 102.

(4855) PANEL ADHESIVE is an adhesive used for the installation of plywood, pre-decorated hardboard (or tileboard), fiberglass reinforced plastic (FRP), and similar pre-decorated or non-decorated panels to studs or solid surfaces.

(4956) PERCENT VOC BY WEIGHT is the ratio of the weight of the VOC to the weight of the material, expressed as a percentage of VOC by weight. The percent VOC by weight can be calculated as follows:

\[
\% \text{ VOC weight} = \frac{W_v}{W} \times 100
\]

Where: \( W_v \) = weight of the VOCs, in grams
W = weight of material, in grams

(5057) PERSON is any individual, firm, association, organization, partnership, business, trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof. Person also means the United States or its agencies to the extent authorized by Federal law as defined in Rule 102.

(58) PLASTIC ADHESIVE PRIMER is a material applied to CPVC and PVC plastic that to prepare joining surfaces for the application of CPVC or PVC welding cements, meets the specifications of ASTM F656 Standard Specification for Primers for Use in Solvent Cement Joints of Poly(Vinyl Chloride) (PVC) Plastic Pipe and Fittings.

(5459) PLASTIC CEMENT—WELDING CEMENT is the use of adhesives made of resins and solvents which are used to dissolve the surfaces of plastic, except ABS, CPVC, and PVC plastic, to form a bond between mating surfaces.

(5260) PLASTIC FOAM is a foam constructed of plastics.

(5361) PLASTICS are synthetic materials chemically formed by the polymerization of organic (carbon-based) substances. Plastics are usually compounded with modifiers, extenders, and/or reinforcing. They are capable of being molded, extruded, cast into various shapes and films, or drawn into filaments and are used to produce pipe, solid sheet, film, or bulk products.

(5462) POLYCARBONATE is a thermoplastic resin derived from bisphenol A and phosgene, a linear polyester of carbonic acid, dihydroxy compound and any carbonate diester, or by ester interchange.

(5563) POLYETHYLENE TEREPHTHALATE (PET, PETE) is a thermoplastic polyester formed from ethylene glycol by direct esterification or by catalyzed ester exchange between ethylene glycol and dimethyl terephthalate.

(5664) POLYETHYLENE TEREPHTHALATE GLYCOL (PETG) is a glycol modified polyethylene terephthalate.

(57) POLYURETHANE FOAMS are plastic foams, as defined in "Whittington's Dictionary of Plastics," page 329, and may be either rigid or flexible.

(5865) POLYVINYL CHLORIDE (PVC) plastic is a polymer of the chlorinated vinyl chloride monomer that contains 57 percent chlorine.
(5966) POROUS MATERIAL is a substance which has tiny openings, often microscopic, in which fluids may be absorbed or discharged. Such materials include, but are not limited to, wood, fabric, paper, corrugated paperboard, and plastic foam.

(67) POTABLE WATER ARCHITECTURAL SEALANT is a sealant used in water treatment or water distribution applications required to comply with NSF/ANSI Standard 61: Drinking Water System Components – Health Effects.

(68) PRESSURE SENSITIVE ADHESIVE is an adhesive, typically coated on backings or release liners that forms a bond when pressure is applied, without the need for solvent, water, or heat.

(69) PRIVATE LABELER is the person, company, firm, or establishment (other than the toll manufacturer) identified on the label of a regulated product.

(70) PUMP SPRAY is a packaging system in which the product ingredients within the container are not under pressure and in which the product is expelled only while a pumping action is applied to a button, trigger, or other actuator.

(60) PRIMER is a material applied to a substrate to improve adhesion of subsequently applied adhesive.

(61) PROPELLANT is a fluid under pressure which expels the contents of a container when a valve is opened.

(71) PVC WELDING CEMENT is a Plastic Welding Cement that is used to join PVC pipe, fittings, and other system components, including, but not limited to, components for shower pan liner, drain, closet flange, and backwater valve systems.

(72) QUANTITY AND EMISSIONS REPORT (QER) is the report specified in subparagraph (f)(2).

(6273) REACTIVE DILUENT PRODUCTS are regulated products composed, in part, of monomers that become integral parts of the cured product through chemical reaction is a liquid which is a VOC during application and one in which, through chemical and/or physical reactions, such as polymerization, 20 percent or more of the VOC becomes an integral part of a finished. Reactive Products include, but are not limited to, polyurethane and two-component regulated products.
(74) REGULATED PRODUCT is an adhesive, adhesive primer, sealant, or sealant primer subject to this rule.

(75) REINFORCED PLASTIC COMPOSITE is a composite material consisting of plastic reinforced with fibers.

(76) REPAIR is an operation or activity to return a damaged object or an object not operating properly, to good condition.

(6377) ROADWAY SEALANT is any sealant to be applied to public streets, highways, and other surfaces, including, but not limited to, curbs, berms, driveways, and parking lots.

(6478) ROLL COATER is a series of mechanical rollers that form a thin coating or adhesive film on the surface roller, which is applied to a substrate by moving the substrate underneath the roller.

(79) RUBBER is any natural or manmade rubber-like substrate, and including, but is not limited to, styrene-butadiene, polychloroprene (neoprene), butyl, nitrile, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

(6580) RUBBER FLOORING ADHESIVE is an adhesive that is used for the installation of flooring material in which both the back and the top surfaces are made of synthetic rubber, and which may be in sheet or tile form.

(81) RUBBER VULCANIZATION ADHESIVE is a reactive adhesive used for rubber-to-substrate bonding achieved during vulcanization of the rubber elastomer at temperatures greater than 250°F. Vulcanized rubber adhesive does not include bonding previously vulcanized rubber.

(66) RUBBER FOAM is a foam constructed of natural or synthetic rubber.

(6782) SEALANT is any material with adhesive properties that is primarily designed to fill, seal, or waterproof, or weatherproof gaps or joints between two surfaces. Sealants include sealant primers and caulks.

(6883) SEALANT PRIMER is any film-forming product applied to a substrate, prior to the application of a sealant, to enhance the bonding surface.

(6984) SHOE REPAIR, LUGGAGE AND HANDBAG ADHESIVE is an adhesive used to repair worn, torn, or otherwise damaged uppers, soles, and heels of shoes, or for making repairs to luggage and handbags.

(70) SHEET-APPLIED RUBBER LINING OPERATION is the hand application of sheet rubber lining to metal or plastic substrates in order to protect the underlying substrate from corrosion or abrasion. These operations also include laminating sheet rubber to fabric.
SINGLE-PLY ROOF MEMBRANE ADHESIVE is any adhesive sealant to be used for the installation or repair of single-ply roof membrane. Installation includes, but is not limited to, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.

SINGLE-PLY ROOF MEMBRANE SEALANT is any sealant to be used for the installation or repair of single-ply roof membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane.

SOLVENT WELDING is the softening of the surfaces of two substrates by wetting them with solvents and/or adhesives, and joining them together through a chemical and/or physical reaction(s) to form a fused union.

SPACE VEHICLE is a vehicle designed to travel beyond Earth's atmosphere.

SPECIAL PURPOSE CONTACT ADHESIVE is a contact adhesive that is used to bond all of the following substrates to any surface: melamine covered board, metal, unsupported vinyl, Teflon, ultra-high molecular weight polyethylene, rubber, and wood veneer 1/16 inch or less in thickness.

STRUCTURAL GLAZING ADHESIVE is any adhesive to be used to adhere glass, ceramic, metal, stone, or composite panels to exterior building frames.

STRUCTURAL WOOD MEMBER ADHESIVE is an adhesive used for the construction of any load bearing joints in wooden joists, trusses, or beams.

SUBFLOOR ADHESIVE is an adhesive used for the installation of subflooring material over floor joists.

THIN METAL LAMINATING ADHESIVE is an adhesive for process of bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 mil.

TIRE REPAIR is the expanding of a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

TIRE RETREAD ADHESIVE is any adhesive to be applied to the back of precured tread rubber and to the casing and cushion rubber, or to be used to
seal buffed tire casings to prevent oxidation while the tire is being prepared for a new tread.

(95) **TOLL MANUFACTURER** is a regulated product manufacturer who produces regulated product for a private labeler.

(8296) **TOP AND TRIM ADHESIVE** is an adhesive used during the installation of automotive and marine trim, including, but not limited to, headliners, vinyl tops, vinyl trim, sunroofs, dash covering, door covering, floor covering, panel covering, and upholstery.

(97) **TOXIC AIR CONTAMINANT (TAC)** is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health as listed by the Office of Environmental Health Hazard Assessment.

(8398) **TRAFFIC MARKING TAPE** is preformed reflective tape that is to be applied to public streets, highways, and other surfaces, including, but not limited to, curbs, berms, driveways, and parking lots.

(8499) **TRAFFIC MARKING TAPE ADHESIVE PRIMER** is any adhesive primer that is applied to surfaces prior to installation of traffic marking tape.

(85100) **TRANSFER EFFICIENCY** is the ratio of the weight or volume of the regulated coating product solids adhering to an object to the total weight or volume, respectively, of the regulated coating product solids used dispensed in the application process, expressed as a percentage.

(86101) **VINYL COMPOSITIONS TILE (VCT)** means vinyl composition tile and is a material made from thermoplastic resins, fillers, and pigments.

(102) **VEHICLE GLASS ADHESIVE PRIMER** is a primer applied to vehicle glass or to the frame of a vehicle prior to installation or repair of the vehicle glass using an adhesive or sealant to improve adhesion to the pinch weld. For the purposes of this definition, a vehicle is a mobile machine that transports passengers or cargo, and includes, but is not limited to, automobiles, trucks, buses, motorcycles, trains, ships, and boats.

(87) **VISCOSITY** is the internal friction of a liquid that makes it resistant to flow.

(88103) **VOLATILE ORGANIC COMPOUND (VOC)** is as defined in Rule 102—Definition of Terms.

(104) **WATERPROOF RESORCINOL GLUE** is a two-part, resorcinol-resin-based adhesive used in applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.
WOOD FLOORING ADHESIVE is an adhesive used to install a wood floor surface, which may be in the form of parquet tiles, wood planks, or strip-wood.

WOOD PARQUET FLOORING is wood flooring in tile form constructed of smaller pieces of wood which are joined together in a pattern by the maker to form the tile.

WOOD PLANK FLOORING is solid or laminated wood in plank form.

(c) Requirements

(1) Unless otherwise specified in paragraph (e)(2), a person shall not apply any adhesives, adhesive bonding primers, adhesive primers, or any other primer, which have a VOC content in excess of 250 g/L, less water and less exempt compounds.

(21) A person shall not apply, use, sell, store, supply, distribute, offer for sale, or manufacture regulated products adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primer, subject to the provisions of this rule, which have a VOC content in excess of the limits specified in Table 1 below:

VOC Limit*, Less Water and Less Exempt Compounds in Grams per Liter

<table>
<thead>
<tr>
<th>Architectural Applications</th>
<th>Current VOC Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Carpet Adhesives</td>
<td>50</td>
</tr>
<tr>
<td>Carpet Pad Adhesives</td>
<td>50</td>
</tr>
<tr>
<td>Outdoor Carpet Adhesives</td>
<td>150</td>
</tr>
<tr>
<td>Wood Flooring Adhesive</td>
<td>100</td>
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<tr>
<td>Rubber Floor Adhesives</td>
<td>60</td>
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<tr>
<td>Subfloor Adhesives</td>
<td>50</td>
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<td>Ceramic Tile Adhesives</td>
<td>65</td>
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<tr>
<td>VCT and Asphalt Tile Adhesives</td>
<td>50</td>
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<tr>
<td>Dry Wall and Panel Adhesives</td>
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<table>
<thead>
<tr>
<th>Architectural Applications</th>
<th>Current VOC Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cove Base Adhesives</td>
<td>50</td>
</tr>
</tbody>
</table>

| Multipurpose Construction Adhesives            | 70                |

| Structural Glazing Adhesives                   | 100               |
### Specialty Applications

<table>
<thead>
<tr>
<th>Specialty Applications</th>
<th>VOC Limits and Effective Dates**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current VOC Limit</td>
</tr>
<tr>
<td>PVC Welding</td>
<td>510</td>
</tr>
<tr>
<td>CPVC Welding</td>
<td>490</td>
</tr>
<tr>
<td>ABS Welding</td>
<td>400</td>
</tr>
<tr>
<td>Plastic Cement Welding</td>
<td>350</td>
</tr>
<tr>
<td>Adhesive Primer for Plastic</td>
<td>650</td>
</tr>
<tr>
<td>Computer Diskette</td>
<td>350</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>Contact Adhesive</td>
<td>80</td>
</tr>
<tr>
<td>Special Purpose Contact Adhesive</td>
<td>250</td>
</tr>
<tr>
<td>Tire Retread</td>
<td>100</td>
</tr>
<tr>
<td>Adhesive Primer for Traffic Marking-Tape</td>
<td>150</td>
</tr>
<tr>
<td>Structural—Wood—Member Adhesive</td>
<td>140</td>
</tr>
<tr>
<td>Sheet Applied Rubber Lining Operations</td>
<td>850</td>
</tr>
<tr>
<td>Top and Trim Adhesive</td>
<td>540</td>
</tr>
</tbody>
</table>

**The specified limits remain in effect unless revised limits are listed in subsequent columns.

For adhesives, adhesive bonding primers, or any other primer not regulated by the above two tables and applied to the following substrates, the following limits shall apply:

### Substrate Specific Applications

<table>
<thead>
<tr>
<th>Substrate Specific Applications</th>
<th>Current VOC Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal to Metal</td>
<td>30</td>
</tr>
<tr>
<td>Plastic Foams</td>
<td>50</td>
</tr>
<tr>
<td>Porous Material (except wood)</td>
<td>50</td>
</tr>
<tr>
<td>Wood</td>
<td>30</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>80</td>
</tr>
</tbody>
</table>

If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.

### Sealants

<table>
<thead>
<tr>
<th>Sealants</th>
<th>Current VOC Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural</td>
<td>250</td>
</tr>
</tbody>
</table>
### Table 1 – Regulated Product Categories and VOC Limits

<table>
<thead>
<tr>
<th>Category</th>
<th>VOC Limits (g/L)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Current</th>
<th>Upon Adoption</th>
<th>1/1/2019</th>
<th>1/1/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adhesives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Envelope Membrane Adhesive</td>
<td>250</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpet Pad Adhesive</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramic Glass, Porcelain, &amp; Stone Tile Adhesive</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cove Base Adhesive</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry Wall and Panel Adhesive</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Purpose Construction Adhesives</td>
<td>70</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Ply Roof Membrane Adhesive</td>
<td>250</td>
<td>250</td>
<td></td>
<td>200&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>All Other Roof Adhesives</td>
<td>250</td>
<td>250</td>
<td></td>
<td>200&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Rubber Floor Adhesive</td>
<td>60</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Glazing Adhesive</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Wood Member Adhesive</td>
<td>140</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subfloor Adhesive</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For low-solids adhesives or sealants, the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(32); for all other adhesives and sealants, VOC limits are expressed as grams of VOC per liter of adhesive or sealant less water and less exempt compounds as determined in paragraph (b)(31).
## Category

<table>
<thead>
<tr>
<th>Category</th>
<th>VOC Limits (g/L)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current</td>
</tr>
<tr>
<td>VCT and Asphalt Tile Adhesive</td>
<td>50</td>
</tr>
<tr>
<td>Wood Flooring Adhesive</td>
<td>100</td>
</tr>
<tr>
<td>All Other Indoor Floor Covering Adhesives</td>
<td>50</td>
</tr>
<tr>
<td>All Other Outdoor Floor Covering Adhesives</td>
<td>150</td>
</tr>
<tr>
<td>Computer Diskette Manufacturing Adhesive</td>
<td>350</td>
</tr>
<tr>
<td>Contact Adhesive</td>
<td>80</td>
</tr>
<tr>
<td>Edge Glue Adhesive</td>
<td>250</td>
</tr>
<tr>
<td>Plastic Welding Cement</td>
<td></td>
</tr>
<tr>
<td>ABS Welding Cement</td>
<td>325</td>
</tr>
<tr>
<td>ABS to PVC Transition Cement</td>
<td>510</td>
</tr>
<tr>
<td>CPVC Welding Cement</td>
<td>490</td>
</tr>
<tr>
<td>PVC Welding Cement</td>
<td>510</td>
</tr>
<tr>
<td>All Other Plastic Welding Cements</td>
<td>250</td>
</tr>
<tr>
<td>Rubber Vulcanization Adhesive</td>
<td>250</td>
</tr>
<tr>
<td>Special Purpose Contact Adhesive</td>
<td>250</td>
</tr>
<tr>
<td>Thin Metal Laminating Adhesive</td>
<td>780</td>
</tr>
<tr>
<td>Tire Tread Adhesive</td>
<td>100</td>
</tr>
<tr>
<td>Top and Trim Adhesive</td>
<td>250</td>
</tr>
<tr>
<td>Waterproof Resorcinol Glue</td>
<td>250</td>
</tr>
<tr>
<td>All Other Adhesives</td>
<td>250</td>
</tr>
<tr>
<td><strong>Substrate Specific Adhesives</strong></td>
<td></td>
</tr>
<tr>
<td>Metal</td>
<td>30</td>
</tr>
<tr>
<td>Plastic Foams</td>
<td>50</td>
</tr>
<tr>
<td>Porous Material (except wood)</td>
<td>50</td>
</tr>
<tr>
<td>Wood</td>
<td>30</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>80</td>
</tr>
<tr>
<td>Reinforced Plastic Composite</td>
<td>250</td>
</tr>
<tr>
<td><strong>Sealants</strong></td>
<td></td>
</tr>
<tr>
<td>Architectural Applications</td>
<td></td>
</tr>
<tr>
<td>Clear, Paintable, and Immediately Water-Resistant Sealant</td>
<td>250</td>
</tr>
<tr>
<td>Foam Insulation</td>
<td>250</td>
</tr>
<tr>
<td>Foam Sealant</td>
<td>250</td>
</tr>
<tr>
<td>Grout</td>
<td>250</td>
</tr>
</tbody>
</table>
### Category

<table>
<thead>
<tr>
<th>Category</th>
<th>VOC Limits (g/L)¹</th>
<th>Current</th>
<th>Upon Adoption</th>
<th>1/1/2019</th>
<th>1/1/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulating Foam Sealant</td>
<td>250</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway Sealant</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Staining Plumbing Putty</td>
<td>250</td>
<td>150</td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Potable Water Sealant</td>
<td>250</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Ply Roof Membrane Sealant</td>
<td>450</td>
<td></td>
<td></td>
<td>250²</td>
<td></td>
</tr>
<tr>
<td>All Other Roof Sealants</td>
<td>300</td>
<td></td>
<td></td>
<td>250²</td>
<td></td>
</tr>
<tr>
<td>All Other Architectural Sealants</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>Marine Deck Sealant</td>
<td>760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other Sealants</td>
<td>420</td>
<td></td>
<td></td>
<td></td>
<td>250</td>
</tr>
</tbody>
</table>

### Adhesive Primers

<table>
<thead>
<tr>
<th>Substrate Specific</th>
<th>VOC Limits (g/L)</th>
<th>Current</th>
<th>Upon Adoption</th>
<th>1/1/2019</th>
<th>1/1/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic</td>
<td>550</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure Sensitive</td>
<td>250</td>
<td></td>
<td></td>
<td>785</td>
<td></td>
</tr>
<tr>
<td>Traffic Marking Tape</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Glass</td>
<td>250</td>
<td></td>
<td></td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>All Other Adhesive Primers</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sealant Primers

<table>
<thead>
<tr>
<th>Substrate Specific</th>
<th>VOC Limits (g/L)</th>
<th>Current</th>
<th>Upon Adoption</th>
<th>1/1/2019</th>
<th>1/1/2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Porous</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porous</td>
<td>775</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Deck</td>
<td>760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified Bituminous</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other Sealant Primers</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. For low-solids adhesives or sealants the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(32); for all other adhesives and sealants, VOC limits are expressed as grams of VOC per liter of adhesive or sealant regulated product, less water and less exempt compounds, as determined defined in paragraph (b)(37) except for low-solids regulated products where the VOC limit is expressed in grams per liter of material as defined in paragraph (b)(38).

2. Technology assessment will be conducted in 2022 and the Executive Officer shall report on the results of the technology assessment to the Stationary Source Committee prior to the implementation date.

3. Technology assessment will be conducted in 2020 and the Executive Officer shall report on the results of the technology assessment to the Stationary Source Committee prior to the implementation date.

(2) Regulated Product Categorization

(A) Adhesives not regulated by a specific adhesive category, shall be limited to the VOC limits listed under the Substrate Specific...
Adhesive category in Table 1, if anywhere on the regulated product container, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the regulated product may be used, or is suitable for use, on that substrate. If the adhesive is used to bond dissimilar substrates together, the higher Substrate Specific Adhesive VOC limit shall apply.

(B) If anywhere on the regulated product container, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the regulated product may be used, or is suitable for use, as a regulated product for which a VOC standard in a specific category is specified in Table 1, then the lowest VOC standard shall apply. This provision does not apply to Substrate Specific Adhesives.

(3) Sell-Through and Use-Through Provision

Any regulated product that is manufactured prior to the effective date of the applicable limit specified in Table 1 and that has a VOC content above that limit (but not above the limit in effect on the date of manufacture), may be sold, supplied, or offered for sale for up to three years after the specified effective date and used up to four years after the specified effective date.

(34) Containers used to dispose of VOC-laden cloth or paper used in stripping cured adhesives or sealants shall be in closed containers except when depositing or removing the contents of VOC-laden cloth or paper from the container. All regulated product containers shall be closed when not in use.

Any VOC-laden application tools, such as a brush, pad, rag, cloth, or paper, used in the regulated product application, shall be stored and disposed of in closed containers when not in use.

(4) Solvent Cleaning Operations; storage and disposal of VOC-containing materials shall be conducted in accordance with the provisions of Rule 1171 - Solvent Cleaning Operations.

(5) Solvent cleaning of application equipment, parts, products, tools, machinery, equipment, general work areas, and the storage and disposal of VOC-containing materials, used in cleaning operations shall be carried out conducted pursuant to Rule 1171 - Solvent Cleaning Operations.

(65) Transfer Efficiency

A person shall not apply VOC-containing regulated adhesives or sealants product unless the adhesive or sealant regulated product is applied with
properly operating equipment in accordance with operating procedures specified by either the equipment manufacturer or the Executive Officer. Application of adhesives or sealants shall be accomplished only by the use of one of the following methods:

(A) Electrostatic application; or
(B) Flow coat; or
(C) Dip coat; or
(D) Roll coater; or
(E) High-Volume, Low-Pressure (HVLP) spray; or
(F) Hand application methods; or
(G) Such other adhesive or sealant application methods as are demonstrated to the Executive Officer to be capable of achieving at least 65 percent transfer efficiency—transfer efficiency equivalent to or better than the method listed in subparagraph (c)(6)(E) and for which prior written approval of the Executive Officer has been obtained; or

(H) For adhesives and sealants with a viscosity of 200 centipoise or greater, as applied, airless spray, air assisted airless, and air-atomized spray may also be used.

(76) Control Devices
A person may comply with the provisions of paragraphs (c)(1), (c)(2), or (c)(56), or all three, by using approved air pollution control equipment to apply a regulated product, provided that the VOC emissions from such operations and/or materials are reduced by at least 80 percent overall, by weight.

(A) The control device reduces VOC emissions from an emission collection system by at least 95 percent by weight or the output of the air pollution control device is no more than 50 ppm VOC by volume calculated as carbon with no dilution; and

(B) The owner/operator demonstrates that the emission collection system collects at least 90 percent by weight of the VOC emissions generated by the sources of VOC emissions.

(87) A person may comply with the provisions of paragraph (c)(1) and paragraph (c)(2) by means of an Alternative Emission Control Plan to apply a regulated product pursuant to Rule 108.
(8) If anywhere on the container of any adhesive or sealant, on any sticker or label affixed thereto, or in any sales or advertising literature, any representation is made that the adhesive or sealant may be used for any other source-specific rule application, for which there is a lower VOC standard, then the lowest VOC standard shall apply.

(9) The VOC content of regulated adhesives and sealants products that are applied with the use of refillable pressurized containers spray system are subject to the VOC limits of this rule.

(10) Except as provided in subdivision (i) and paragraphs (c)(3), (c)(7), and (c)(8), a person shall not store regulated products which contain VOC in excess of the limits specified in paragraph (c)(1).

(11) Containers used for mixing VOC-containing regulated products shall be kept closed at all times except when in use or when product is being added or removed.

(d) Recordkeeping Requirements
Notwithstanding provisions of subdivision (i), records of regulated product usage shall be maintained pursuant to Rule 109.

(e) Methods of Analysis Test Methods

(1) The VOC content of cleaning materials and regulated adhesives or sealants products shall be determined by the South Coast Air Quality Management District (SCAQMD) using the applicable test methods below. When a test method specifies it is inapplicable to a product category, it shall not be used for that inapplicable category. The Executive Officer will develop a Guidance Document to determine which test method will be used when two or more applicable test methods can be used to demonstrate compliance with the rule. The selected test method will be used based on product type, chemistry, and VOC content.

(A) VOC content may be determined by USEPA Reference Method 24 (Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating, Code of Federal Regulations Title 40, Appendix A, utilizing Procedure B of ASTM Method D2369), or the

(B) SCAQMD VOC content may be determined by Method 304 (Determination of Volatile Organic Compounds (VOC) in Various
Rule 1168 (Cont.)

Materials) in the SCAQMD's "Laboratory Methods of Analysis for Enforcement Samples" manual.

(C) Exempt compound content shall be determined by Method 303 in the SCAQMD’s "Laboratory Methods of Analysis for Enforcement Samples" or ASTM Method D4457.

(D) VOC content may be determined by Method 313 (Determination of Volatile Organic Compounds VOC by Gas Chromatography-Mass Spectrometry) in the SCAQMD’s “Laboratory Methods of Analysis for Enforcement Samples” manual.

(E) VOC content may be determined by ASTM Test Method 6886 (Standard Test Method for Determination of the Weight Percent Individual Volatile Organic Compounds in Waterborne Air-Dry Coatings by Gas Chromatography).

(F) The VOC content of PVC, CPVC, ABS, ABS to PVC Transition Welding Cements, and plastic adhesive primers shall be determined by Method 316A in the SCAQMD’s "Laboratory Methods of Analysis for Enforcement Samples."

(G) The VOC content of cyanoacrylate adhesives shall be determined by Method 316B in the SCAQMD’s "Laboratory Methods of Analysis for Enforcement Samples."

(H) The VOC content of reactive adhesives may be determined by Appendix A to Subpart PPPP of 40 CFR Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives.

(2) The exempt compound's content shall be determined by Methods 302 and 303 in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples" or ASTM Method D4457-85.

(3) The VOC content of PVC, CPVC, and ABS pipe cements, adhesive primer for plastic shall be determined by Method 316A in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples."(4) The VOC content of cyanoacrylate adhesives shall be determined by Method 316B in the South Coast Air Quality Management District's (SCAQMD) "Laboratory Methods of Analysis for Enforcement Samples."

(f) Test Methods
(42) The efficiency of the control device and the VOC content measured and calculated as carbon in the control device exhaust gases shall be determined by USEPA'S Test Method 18, or Air Resources Board (CARB) Method 422 for the determination of emissions of Exempt Compounds and USEPA's Test Methods 25, 25A, SCAQMD's Method 25.1, or SCAQMD Test Method 25.3. (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) for the determination of total organic compound emissions. Emissions determined to exceed any limits established by this rule through the use of any of the above-referenced test methods shall constitute a violation of the rule.

(23) Viscosity will shall be determined by ASTM D 1084-88 Standard Test Methods for Viscosity of Adhesives.

(34) The following classes of compounds: cyclic, branched, or linear, completely fluorinated alkanes; cyclic, branched, or linear, completely fluorinated ethers with no unsaturations; cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine, will be analyzed as exempt compounds for compliance with subdivision (c), only at such time as manufacturers specify which individual compounds are used in the coating-regulated product formulations and identify the test methods, which, prior to such analysis, have been approved by the USEPA and the SCAQMD, that can be used to quantify the amounts of each exempt compound.

(5) Equivalent Test Methods
Other test methods determined to be equivalent after review by the Executive Officer, CARB, and the U.S. USEPA, and approved in writing by the District Executive Officer, may also be used.

(6) All test methods referenced in this subdivision shall be the version most recently approved by the appropriate governmental entities.

(g) Prohibition of Specifications
(1) A person shall not solicit or require any other person to use, in the District, any adhesives or sealants or combination of adhesives or sealants in violation of the requirements of this rule.

(2) The requirements of this paragraph shall apply to all written or oral agreements executed or entered into after July 1, 1989.
(f) Administrative Requirements

(1) Regulated products manufactured after January 1, 2019, shall display the following:

(A) Each container shall display the VOC content of the regulated product, as recommended for application. VOC content shall be displayed as grams of VOC per liter of regulated product, excluding water and exempt compounds, or grams of VOC per liter of material for low-solids products. The VOC content shall be determined by calculation based on product formulation or laboratory analysis using the applicable test method in subdivision (e).

(i) Regulated products subject to both the provisions of this rule and the CARB Consumer Products Regulation may display the VOC content as percent VOC provided the regulated product has supplemental product documentation published from the manufacturer that displays the VOC content in grams of VOC per liter of regulated product.

(B) Each container or an associated product data sheet shall display a statement of the manufacturer’s recommendations regarding thinning, reducing, or mixing with any other VOC containing material, if applicable. Mixing recommendations shall specify a ratio which results in a compliant, as applied, product.

(C) Each container shall display the date of manufacture of the contents or a date code indicating the date of manufacture. A manufacturer utilizing a date code shall file an explanation of each date code with the District Executive Officer.

(D) Each container of all Top and Trim Adhesives shall include the statement “For Top and Trim Uses Only” prominently displayed.

(E) Each container of all Rubber Vulcanization Adhesives shall include the statement “For Rubber Vulcanization Adhesive Uses Only” prominently displayed.

(F) Each container of all Pressure Sensitive Adhesive Primers shall include the statement “For Pressure Sensitive Adhesive Primer Uses Only” prominently displayed.

(G) Each container of all ABS to PVC Transition Cements shall include the statement “For ABS to PVC Transition Uses Only” prominently displayed.
(2) Reporting Requirements
   (A) Reporting Timeline

   A Quantity and Emission Report (QER) shall be submitted according to the reporting timeline identified in Table 2 below:
   (i) Every three years, from the years 2019 to 2025.
   (ii) Every five years, thereafter, until and including 2040.

   Table 2: Reporting Timeline

<table>
<thead>
<tr>
<th>Reporting Deadlines</th>
<th>Manufacturers &amp; Private Labelers</th>
<th>Big Box Retailers &amp; Distribution Centers</th>
<th>Reported Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 1, 2019</td>
<td>May 1, 2019</td>
<td>2017, 2018</td>
<td></td>
</tr>
<tr>
<td>September 1, 2022</td>
<td>May 1, 2022</td>
<td>2020, 2021</td>
<td></td>
</tr>
<tr>
<td>September 1, 2025</td>
<td>May 1, 2025</td>
<td>2023, 2024</td>
<td></td>
</tr>
<tr>
<td>September 1, 2030</td>
<td>May 1, 2030</td>
<td>2028, 2029</td>
<td></td>
</tr>
<tr>
<td>September 1, 2035</td>
<td>May 1, 2035</td>
<td>2033, 2034</td>
<td></td>
</tr>
<tr>
<td>September 1, 2040</td>
<td>May 1, 2040</td>
<td>2038, 2039</td>
<td></td>
</tr>
</tbody>
</table>

   (B) General QER

   A manufacturer or private labeler of regulated products shall submit to the District a QER of regulated product sales into or within the District according to the schedule in Table 2. The report shall include the following information:
   (i) Product manufacturer (as listed on the label);
   (ii) Product name and code;
   (iii) Applicable Rule 1168 category;
   (iv) The grams of VOC per liter of regulated product (less water and exempt solvents);
   (v) The grams of VOC per liter of material;
   (vi) Whether the product is waterborne or solvent-based;
   (vii) Total annual volume sold into or within the District, including products sold through distribution centers located within or outside the District, reported in gallons for all container sizes;
(viii) For any regulated product with VOC content higher than the applicable limit in Rule 1168, an indication whether the product has been sold under any of the following provision of this rule:
(A) Sell-through provision;
(B) Low-Solids product;
(C) Exempted under subdivision (i);
(D) Complying with subparagraph (c)(7) – Control Device; or
(E) Complying with subparagraph (c)(8) - Alternative Emission Control.

(C) Aerosol QER

The manufacturer or private labeler of aerosol adhesives and aerosol adhesive primers shall submit to the District a QER of aerosol adhesive and aerosol adhesive primer sales into or within the District according to the schedule in Table 2. The report shall include the following information:
(i) Product manufacturer (as listed on the label);
(ii) Product name and code;
(iii) Percent VOC by weight;
(iv) Total weight sold, including products sold through distribution centers located within or outside the District; and
(v) Container size of product.

(D) A corporate officer of the manufacturer or private labeler of regulated products, who previously reported under (f)(2)(B) and (f)(2)(C), that had no distribution or sales into or within the District for the specified reporting years in Table 2, must certify that fact in a letter and on company letterhead by the reporting deadline specified in Table 2.
(i) A manufacturer or private labeler of regulated products that has no intention to sell regulated products into or within the District in future years, must indicate that fact to be removed from future outreach efforts.
(ii) A manufacturer or private labeler of regulated products who resumes sales of regulated product into or within the District,
must adhere to the reporting requirements specified in (f)(2)(B) and (f)(2)(C).

(E) Big Box Retailer or Distribution Center QER

A big box retailer or distribution center shall submit a QER to the regulated product manufacturer or private labeler, according to the schedule in Table 2. The QER must be electronically submitted, in a spreadsheet format and certified that all information reported is true and correct. The QER must contain the following information:

(i) The manufacturer or private labeler’s product name and code; and

(ii) The quantity of each regulated product, aerosol adhesive, and aerosol adhesive primer distributed into the District.

(F) Facilities Using the 55 Gallon Exemption

For each calendar year (January 1 through December 31) beginning in 2017, the facility using or purchasing regulated products under the provisions of paragraph (i)(5)(C) shall submit to the District by September 1 of the following calendar year, an annual report of regulated product used under the provisions of paragraph (i)(5)(C) within the District. The report shall include the following information:

(i) Product manufacturer (as listed on the label);

(ii) Product name and code;

(iii) The grams of VOC per liter of regulated product (less water and exempt solvents);

(iv) The grams of VOC per liter of material;

(v) Unit size of product;

(vi) Total volume purchased, in gallons;

(vii) The name and address of the company or retailer where the products were purchased.

(3) Manufacturers, private labelers, or suppliers of regulated products shall maintain records to verify data used to determine VOC content in preparing their QER. The records shall be maintained for three (3) years and made available upon request by the Executive Officer. Such records shall include:

(A) Laboratory reports; or

(B) Formulation data used for VOC content calculations.

(4) Confidentiality of Information
Subject to the provisions of the California Public Records Act (Gov Code §§ 6250-6276.48) information submitted to the Executive Officer may be designated as confidential. The designation must be clearly indicated on the reporting form, identifying exactly which information is deemed confidential. District guidelines require a detailed and complete basis for such claim in the event of a public records request.

(hg) Prohibition of Sales and Use

(1) On and after September 1, 2001, except as provided in subdivision (j), paragraphs (c)(6) and (c)(7) no person shall use, supply, sell, or offer for sale an adhesive, sealant, or adhesive or sealant primer for use in the District that at the time of sale exceeds the applicable VOC limits specified in paragraphs (c)(1) and (c)(2).

(21) On and after January 1, 2004 Except as provided in subdivision (i), no person shall use, supply, sell, or offer for sale an adhesive, sealant, or adhesive or sealant primer for use a regulated product in the District that contains chloroform, ethylene dichloride, methylene chloride, perchloroethylene, and trichloroethylene.

(32) The prohibition of sales and use as specified in paragraphs (h)(1) and (h)(2) shall not apply to the following: On and after January 1, 2019, except as provided in subdivision (i), no person shall use, supply, sell, or offer for sale a regulated product in the District that contains Group II exempt compounds listed in Rule 102 in quantities greater than 0.1 percent by weight. This provision does not apply to cyclic, branched, or linear, completely methylated siloxanes.

(A) Adhesives and sealants shipped, supplied or sold to persons for use outside the District;

(B) Any manufacturer of adhesives or sealants, provided that the manufacturer has complied with the labeling requirements of Rule 443.1—Labeling of Materials Containing Organic Solvents, and the product is not sold directly to a user located in the District, or the product was sold to an independent distributor or a sales outlet located in the District that is not a subsidiary of, or under the control of, the manufacturer, and was informed in writing by the manufacturer about the compliance status of the product with Rule 1168;
(C) Adhesives and Sealants that contain less than one percent by weight of methylene chloride; or

(D) Solvent-welding formulations containing methylene chloride used to bond hard acrylic, polycarbonate, and polyethylene terephthalate glycol plastic fabrications, provided:

(i) The concentration of methylene chloride in any solvent welding formulation does not exceed 60 percent by weight; and

(ii) The purchase of all solvents welding products does not exceed 20 gallons per calendar year at a single facility, as demonstrated by purchase records and invoices of methylene chloride-containing solvent welding formulations. Such records shall be made available to the Executive Officer or his representative upon request.

(iii) Rule 442 Applicability

Any regulated adhesive, sealant, adhesive or sealant operation, or person/product which is exempt from all or a portion of this rule shall comply with the provisions of Rule 442.

(ji) Exemptions

1. The provisions of paragraph (c)(1) and paragraph (c)(2) shall not apply to the following: The provisions of this rule shall not apply to:

   (A) Adhesives used in tire repair; or Adhesives, adhesive primers, sealants, or sealant primers, and associated application processes that are subject to Rule 1124;

   (B) Adhesives and/or adhesive application processes in compliance with Rules 1104, 1106, 1128, 1130 and 1130.1.; Adhesive tape;

   (C) Regulated products shipped, supplied, or sold to persons for use outside the District; or

   (D) Distribution centers that do not ship regulated products into or within the District.

2. The provisions of this rule shall not apply to aerospace components that are subject to Rule 1124. The provisions of this rule, except paragraphs (f)(2)(C), shall not apply to aerosol adhesives and primers dispensed from non-refillable aerosol spray systems.
(3) The provisions of paragraph (c)(5) and subdivision (d) shall not be applied to the application of adhesives or sealants that contain less than 20 g/L of VOC per liter of adhesives, less water and less exempt compounds. The provisions of this rule, except paragraphs (g)(21) and (g)(32), shall not apply to:

(A) Regulated products sold in quantities of one fluid ounce or less;
(B) Adhesives used to glue flowers to parade floats;
(C) Adhesives used to fabricate orthotics and prosthetics under a medical doctor’s prescription; or
(D) Shoe repair, luggage, and handbag adhesives.

(4) The provisions of this rule shall not apply to any facility that uses less than one pint of total adhesives and sealants in any one day so long as the products were purchased prior to September 15, 2000. The provisions of subdivision (c) shall not apply to:

(A) Research and development programs and quality assurance labs. Records shall be maintained in accordance with the provisions of subdivision (d) of this rule; or
(B) Solvent welding operations used in the manufacturing of medical devices.

(5) The provisions of subdivision (c) shall not apply to research and development programs and quality assurance labs, provided that:

(A) A record is kept of:

- The date when the adhesives and sealants are used, and the type of application(s); and
- The amount of adhesives and sealants used and the VOC content of such adhesives and sealants; and
- The amount of solvents used and VOC content of such solvents; and
- The manufacturer/suppliers identification and type of material; and

(B) Such records shall be retained in accordance with the provisions of subdivision (e) of this rule. Adhesives and/or adhesive application processes in compliance with Rules 1104, 1106, 1128, 1130, and 1130.1;
(C) A facility that demonstrates that the total volume of non-compliant products is less than 55 gallons per facility per calendar year. A facility may not use this paragraph to exclude non-compliant adhesives used in architectural applications, contact adhesives, special purpose contact adhesives, and adhesives used on porous substrates. Effective January 1, 2019, a facility may not use this paragraph to exclude non-compliant rubber vulcanization adhesives and top and trim adhesives; or

(D) Regulated products used in the field installation and repair of potable water linings and covers at water treatment, storage, or water distribution facilities.

(6) The provisions of paragraph (c)(1) and paragraph (c)(2) shall not apply to a facility that demonstrates that the total volume of non-compliant adhesives, adhesive primers, adhesive bonding primers, sealants, and sealant primers is less than 55 gallons per facility per rolling 12-month period. On and after September 1, 2001, a facility may not use this paragraph to exclude non-compliant adhesives used in architectural applications, contact adhesives, special purpose contact adhesives, and adhesives used on porous substrates. The provisions of paragraph (c)(6) shall not apply to regulated products with a viscosity of 200 centipoise or greater.

(7) The provisions of this rule, except paragraph (h)(2), shall not apply to adhesives used to glue flowers to parade floats. The provisions of subdivision (f) shall not apply to thermoplastic hot melt adhesives or to regulated products offered for sale as a dry mix, containing no polymer, which are ready for use or only mixed with water prior to use, and include, but are not limited to, grouts, cements, and mortars.

(8) The provisions of subdivision (c) shall not apply to solvent welding operations used in the manufacturing of medical devices. The provisions of subdivisions (c) and (d), shall not apply to regulated products with a VOC content no more than 20 grams per liter, less water and less exempt compounds, or no more than 20 grams per liter material for low-solids regulated products.

(9) The provisions of this rule shall not apply to aerosol adhesives and primers dispensed from aerosol spray cans. Until January 1, 2021, the provision of paragraph (g)(1) and (g)(2) shall not apply to solvent welding formulations.
containing methylene chloride used to bond hard acrylic, polycarbonate, and polyethylene terephthalate glycol plastic fabrications, provided:

(A) The concentration of methylene chloride in any solvent welding formulation does not exceed 60 percent by weight; and

(B) The purchase of all solvent welding products does not exceed 20 gallons per calendar year at a single facility, as demonstrated by purchase records and invoices of methylene chloride containing solvent welding formulations. Such records shall be made available to the Executive Officer upon request.

(10) The provisions of paragraph (c)(1) and paragraph (c)(2) shall not apply to any adhesive used exclusively for thin metal laminating operations, provided that the adhesive contains less than 780 grams of VOC per liter of adhesive, less water and less exempt compounds, as applied, and the facility uses a total of three gallons per day or less of these adhesives.

(11) The provisions of this rule, except paragraph (h)(2) and subdivision (d), shall not apply to light curable adhesives and sealants with a VOC content no more than 50 grams per liter, less water and less exempt compounds.

(12) The provisions of this rule, except paragraph (h)(2), shall not apply to the use of cyanoacrylate adhesives.

(13) The provisions of this rule shall not apply to adhesives and sealants regulated products, which weigh one pound or less, or consist of 16 fluid ounces or less and subject have VOC content limits in Section 94509(a) of the California Air Resources Board Consumer Products Products regulation Regulation found in Title 17 of the California Code of Regulations, beginning at Section 94507, unless they are:

(A) Incorporated into or used exclusively in the manufacture or construction of the goods or commodities, and not exempted in paragraph (i)(2); or

(B) Used in pollution-generating activities that take place at stationary sources, excluding maintenance and repair, and not exempted in paragraph (i)(2).

(14) Until October 1, 2003, the provisions of paragraph (e)(1) and paragraph (e)(2) shall not apply to solvent welding of flexible ductwork, at which time the VOC limit shall be 250 grams per liter, less water and less exempt compounds. As of January 1, 2018, the provisions of subdivision (c)(1) and (g) shall not apply to any manufacturer or supplier of regulated products.
provided the product was sold to an independent distributor that was informed in writing, including electronic formats, by the manufacturer or supplier, that the regulated product is not to be used in the South Coast Air Quality Management District. Manufacturers utilizing this provision shall maintain notification letters for three (3) years, which shall be made available to the Executive Officer or designee upon request.

(15) A person may sell or apply a non-complying VOC-containing or methylene chloride-containing product for one year after the applicable effective date in paragraph (c)(2) for VOC-containing adhesives and sealants, and for one year after the applicable effective date of paragraph (h)(2) or subparagraph (h)(3)(D) for methylene chloride-containing adhesives and sealants, provided:

(A) The product complies with the previous applicable VOC limit,
(B) The product was manufactured prior to the effective date, and
(C) The date of manufacture or a code indicating that date is clearly displayed on the product.

(16) The provisions of this rule, except paragraph (h)(2), shall not apply to adhesives used to fabricate orthotics and prosthetics under a medical doctor’s prescription.

(17) The provisions of this rule, except paragraph (h)(2), shall not apply to shoe repair, luggage and handbag adhesives.