2014 Architectural Coatings Survey
Reporting Tool Instructions

Completion and Submittal of the Survey is Mandatory Pursuant to California State Law

Due Date: May, 1, 2015

These instructions are provided to aid survey respondents in completing the survey. The survey must be completed electronically using the Architectural Coatings Reporting Tool (ACRT) available at http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm

Send Survey Questions to: Archcoatsurvey@arb.ca.gov

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SURVEY OVERVIEW

PURPOSE OF THE SURVEY

The purpose of the 2014 Architectural Coatings Survey (2014 Survey) is to gather current information on the volatile organic compound (VOC) content of architectural coatings. Architectural coatings are defined as coatings applied on-site to stationary structures and their attached appurtenances, and do not include coatings applied in a factory or shop.

The 2014 Survey is primarily intended for paint manufacturers who sell architectural coatings in California. The reporting year is 2013. If your company is not a paint manufacturer, but your company name is listed as “manufactured for” or “distributed by” on the product label, you are responsible for completing the requested information in this survey. You are encouraged to coordinate your response with the appropriate manufacturer of your product to avoid double reporting of sales data. Holding companies or subsidiaries may also need to report for this survey.

WHAT IS NEW IN THE 2014 SURVEY

The 2014 Survey is very similar to the 2005 Architectural Coatings survey with a few exceptions. The electronic submittal format is new, and will allow you to import most of the required data, and perform data checks with supplied quality control features. The 2014 Survey also differs from the 2005 Survey in that:

- Product labels for all product categories, except Flat Coatings, will need to be submitted
- Information on colorants is required to be submitted
- The polymer and paraffin content for the floor coating, concrete/masonry sealers, and waterproof concrete/masonry sealer categories is required
- Additional product categories have been added to gather data on coatings currently for sale in California

WHO MUST COMPLETE THE SURVEY

If your company manufactures architectural coatings in any of the categories listed on Page 33, and sold or distributed any of these products in California in the year 2013, you are required to complete the survey. Pursuant to California state law, completion and submittal of this survey is mandatory.

In addition, if you sold an architectural coating in California that you do not believe can be classified as one of the coating categories on Page 33, you are required to complete the survey and identify your coating as “Other.” Please specify what the coating is in the comment section. If your company is not a paint manufacturer, but your company name is listed as “manufactured for” or “distributed by” on the product label, you are responsible for either completing the survey, or ensuring that the manufacturer of your products includes your

products in their survey submission. Parent companies and holding companies may need to either complete the survey, or oversee reporting by their subsidiaries. Please refer to the list below for the types of products that do not need to be reported.

Types of Products to Report (see Supplemental Information for Definitions (page 21) and Category Codes (page 33)

Report coatings that are field applied to:

- Stationary structures or their appurtenances, portable buildings, pavements, and curbs

  Appurtenance - Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: catwalks elevators, cabinets and kitchen fixtures, concrete forms, doors, fences, hand railings, lampposts, bathroom, heating equipment, air conditioning equipment, fixed mechanical equipment or stationary tools, pipes and piping systems, rain gutters and downspouts, stairways, fixed ladders, fire escapes, window screens, partitions

Report colorants used in architectural coatings.

- If you don't manufacture the colorant used in your architectural coatings, please coordinate with the colorant supplier(s)/manufacturer(s) to complete the colorant portion of the survey.

What Not to Report

- Aerosol coatings
- Adhesives & Sealants
- Automotive coatings
- Pleasure craft coatings
- Consumer products
- Caulk or Caulking Compounds
- Furniture & appliance coatings
- Marine coatings
- Shop applied coatings
- Original Equipment Manufacturer coatings
- Aerospace coatings
- Paving asphalt, emulsified asphalt, or cutback asphalt used in building or repairing: streets, highways, roads, parking lots, runways, airfields, sanitary landfills, extruded curbs impounded liners

If you do not meet any of the criteria for completing the survey as described above, you need only complete the **"Reasons for not completing the 2014 Architectural Coatings Survey"** by going to **the ARB webpage and completing the form here:** http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm

The survey reporting period is calendar year 2013. The survey is being conducted electronically. ARB is providing the Architectural Coatings Reporting Tool (ACRT) to facilitate the completion and submittal of the 2014 Survey. The ACRT is available for download at: http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm

There are four parts to this survey:

- Company Information: Each company/respondent to this survey will complete this information once;

- Product Information: Provide the requested information for each product or group of products;

- Ingredient Information: Provide the ingredients for each product or group of products reported; and

- Colorant Information: If you manufacture your own colorants or purchase colorants that are used in your coatings, provide the requested information for each colorant sold in 2013.

Note: For each reported product or group of products reported on the Product Information Form, there must be a corresponding Ingredient Information Form. For each product or group of products, please provide a representative label for all product categories other than Flat Coatings.

USING THE ARCHITECTURAL COATINGS REPORTING (ACRT) TO COMPLETE THE SURVEY

OBTAINING A COPY OF ACRT

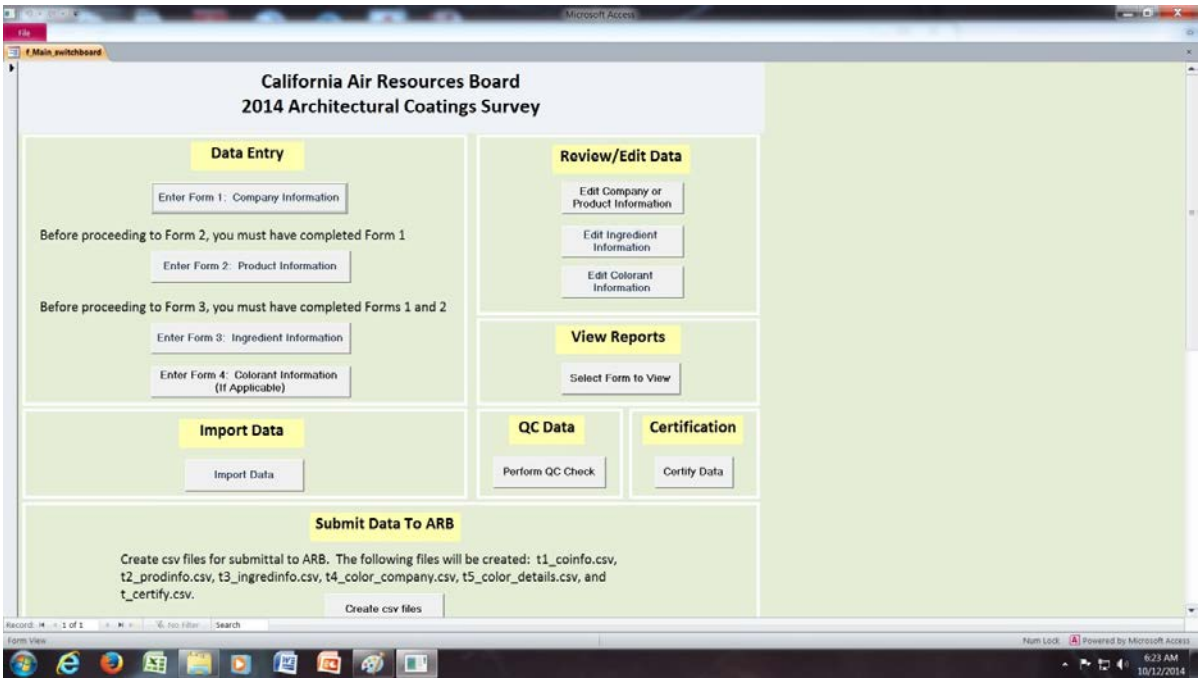
If you do not have Microsoft Access or do not have the 2010 or 2013 version of Microsoft Access, please see "Instructions for Downloading Microsoft Access Runtime" that will guide you through the steps needed to download a free version of Microsoft Runtime that will allow you to use the ACRT.

Before downloading the ACRT, please review the "Instructions for Downloading Microsoft Access Runtime" to determine if you need the 32- or 64-bit version. The 32- or 64-bit version refers to the Office program version your computer runs. The document has step by step directions for determining whether your Office program is a 32 or 64 bit version.

To download the ACRT go to http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm right click on the link: "Architectural Coatings Reporting Tool" and save onto your desktop *(choose either 32 bit or 64 bit version)*.

GENERAL DESCRIPTION OF THE ACRT

The ACRT will enable you to enter your survey information and generate files that you can submit to ARB. All requested information can be interactively entered into the ACRT and some can be imported into the ACRT from company specific databases.

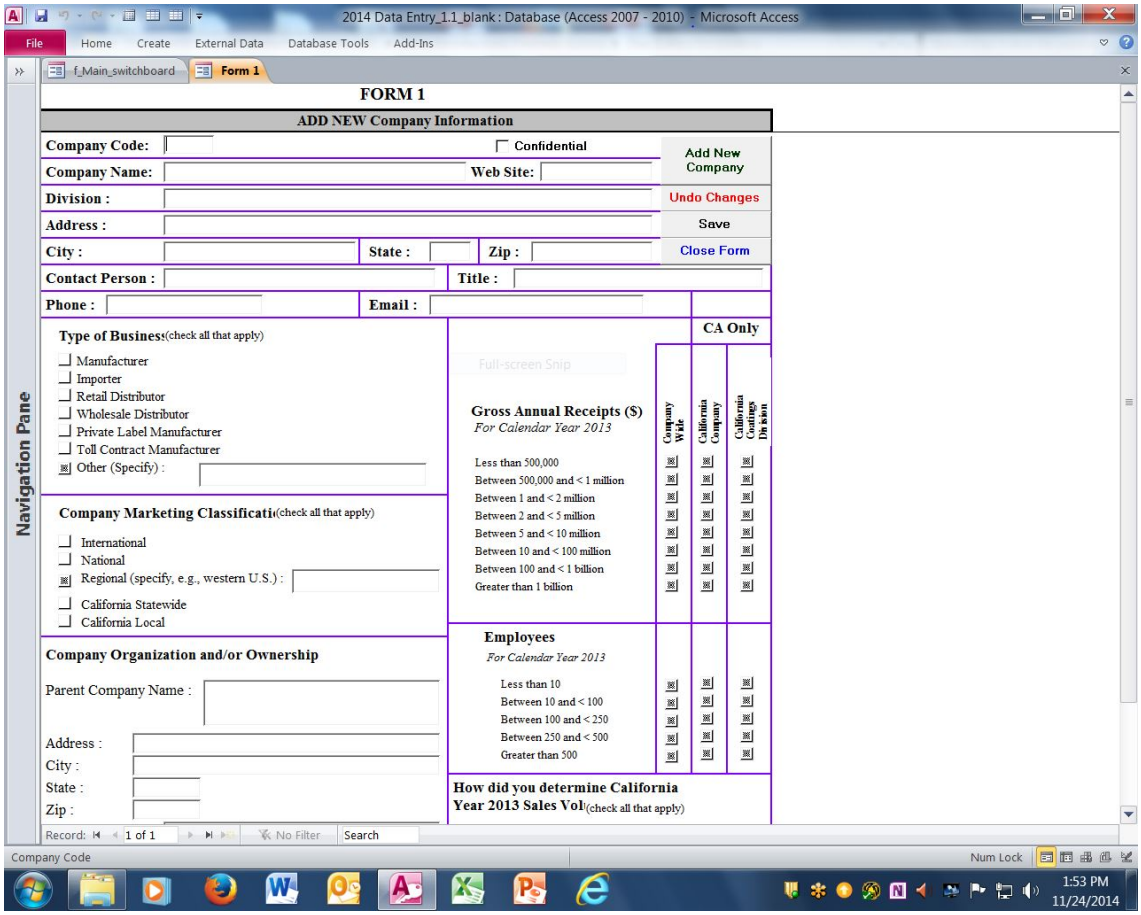


An excel template of the data fields required for the product information and the ingredient information is available here:
http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm
This template can be used to populate the product information and the ingredient information. The template can be used to save the files in CSV format, which can then be imported to the ACRT.

The ACRT allows you to review your data, backup your data, and certify that your data is complete and accurate. Once you complete the certification step, CSV files are generated for submission to ARB.

INSTRUCTIONS FOR COMPLETING COMPANY INFORMATION

The first step in completing your survey is to enter your company information. All information on the Company Information screen must be manually entered. This information cannot be imported. Company Information must be completed before entering product and ingredient information.



- The “Add New Company” button on the upper right portion of the form will allow you to complete another Company Information Form, and a new Company Code must be entered.
- The “Undo Changes” button will clear the form of all previously input information.
- The “Save” button will save all previously input information, and the form will remain open.
- The “Close Form” button will save all previously input information, and close the form.

Note: If you need to edit information, do so through the “Review/Edit Data” screens

The requested Company Information will assist ARB in characterizing the types of businesses that are included in the survey.

Company Code: Enter a company code. The code can be any four alphanumeric characters. *If you are completing surveys for multiple companies, please complete a separate file for each company by using the ACRT.*

Designating information as confidential: If you wish to designate any information contained in your survey data as **CONFIDENTIAL INFORMATION**, indicate as such in the ACRT interactive screens or complete the confidential field in the excel template.

Company Name: Enter the name of your company.

Web Site: Enter your company web site address, for example, “www.paintcompany.com.”

Address: Enter mailing address of company.

Contact Person: Name of person to be contacted if there are questions about the survey responses.

Title: Business title of the contact person.

Phone: Telephone number of contact person.

Email: Email of contact person.

Type of Business: Check the box that describes the type of business conducted by your company. (Check all that apply.)

Manufacturer – A company/person that produces, packages, or repackages architectural coatings for sale or distribution in the State of California.
Importer – A company/person that brings architectural coatings into the United States for sale or distribution within the State of California.
Retail Distributor – A company/person who sells or supplies architectural coatings directly at the retail level.

Wholesale Distributor – A company/person who sells or supplies architectural coatings for the purposes of resale or distribution in commerce at the wholesale level.
Private Label Manufacturer – A company/person that manufactures architectural coatings for sale under another company's name.
Toll Manufacturer – A company/person that manufactures architectural coatings based on the formula of another company and places the other company's name on the product label.

Company Marketing Classification: Check the box that describes your company's primary marketing classification. (Check all that apply.)

International – Two or more nations. For example, United States, Canada, and Mexico.
National – The United States.
Regional – A portion of the United States. For example, western U.S., consisting of California, Oregon, Washington, and Arizona.
California Statewide – The State of California.
California Local – A portion of the State of California. For example, Southern California or the San Francisco Bay Area.

Company Organization and/or Ownership: If your company is a "division of," or "subsidiary of," or has a "Parent Company," please specify. Holding companies or subsidiaries may also need to respond to this survey.

Gross Annual Receipts: Check the box that identifies the gross annual receipts generated by your company. This means the total income of the company before expenses are deducted. If available, check the box which identifies the gross annual receipts generated by your company in California and/or your California coatings division. This means the portion of total income derived from California sales or your California coatings division sales. Include secondary products related to coatings sales.

Employees: Check the box that indicates the total number of employees (including part-time and temporary staff) of the company. If available, check the box which identifies the number of employees in California and/or your California coatings division (including part-time and temporary staff).

How did you determine Calendar Year 2013 California Sales Volume?: Identify the method used to determine California sales volume.

INSTRUCTIONS FOR ENTERING PRODUCT AND INGREDIENT INFORMATION

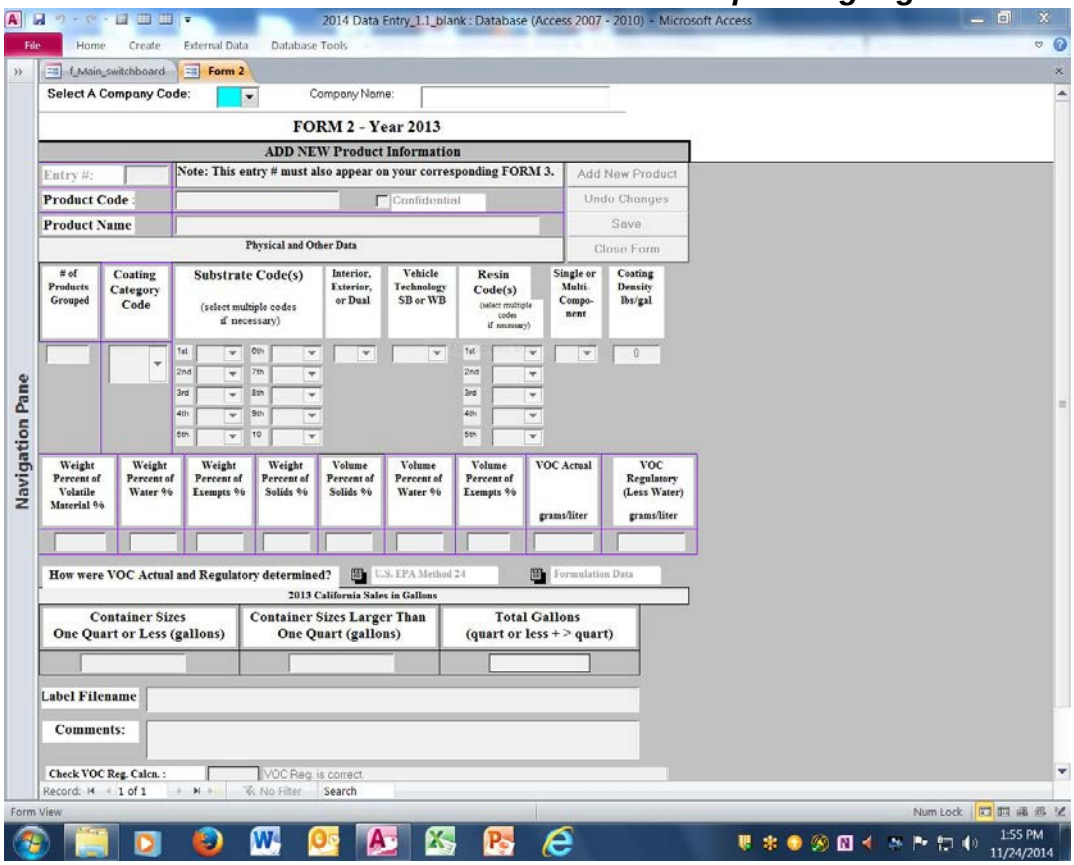
Product information and ingredient information can be entered into the ACRT two ways. You may enter it using the interactive screens or you may import your data directly into the reporting tool using the excel template provided here: http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm

If you use the excel template, please save the file as a CSV and use the import function in the ACRT to upload your data. Save each worksheet as a CSV file (i.e., productinfo.csv and ingredientinfo.csv). These files may be saved to a location of your choice.

To upload your product data into the ACRT, please use the “Import Product Information” button and follow the instructions. To upload the ingredient data, please use the “Import Ingredient Information” button and follow the instructions.

Product Information and Ingredient Information may also be entered manually. Instructions for manually entering Product Information follows and instructions for manually entering Ingredient Information may be found on page 13 of these instructions.

Note: All Product Information must have corresponding Ingredient Information.



INSTRUCTIONS FOR MANUALLY ENTERING PRODUCT INFORMATION

Entry #: Each product reported must be numbered sequentially, beginning with number "1." This entry number must also appear on corresponding Ingredient Information.

Product Code: Enter product code. If you are grouping products, enter the product code for the sales leader of the group.

Product Name: Enter the product/label name for the product code above.

Number of Products Grouped: In reporting products for this survey, products can be reported either individually or as a group. Enter "1" if you are reporting one product individually. You may group products only if all of the following conditions are met:

(1) The products belong to the same category (e.g., flats); and
(2) The products have the same vehicle technology (i.e., solvent-borne or water-borne), resin type, substrate, interior or exterior use recommendation, and single – or multi-component form; and
(3) VOC Regulatory range cannot exceed 25 grams/liter. That is, the highest VOC Regulatory minus lowest VOC Regulatory of the group cannot exceed 25 grams/liter.

Coating Category Code: Select a coating category code from the drop down menu. See Supplemental Information for Coating Category Codes.

Substrate Code(s): Select a substrate code (more than one is allowed if applicable). A substrate code must be entered for all products. If no code is entered, a response of "All Substrates" will be assumed. See Supplemental Information for Substrate Codes.

Interior/Exterior/Dual: Enter recommended exposure - interior or exterior. Enter "Dual" for dual purpose interior/exterior products.

Vehicle Technology: Identify the vehicle technology of the coating - Solvent-borne (SB) or Water-borne (WB).

Solvent-borne: A coating that contains less than 50 percent water by weight in its volatile fraction. It is generally cleaned up with solvent.
Water-borne: A coating that contains 50 percent or more water by weight in its volatile fraction. It is generally cleaned up with water.

Resin/Binder Code(s): Select a resin/binder type from the drop down menu. You can enter multiple resin codes. See Supplemental Information for Resin/Binder Codes.

Single or Multi-Component: Identify whether coating is single or multi-component. VOC content for multi-component coatings are as mixed, applied or fully reacted.

Note: Use "Sales Weighted Average" (SWA) for the following data fields if you have chosen to group coatings. See Supplemental Information for an example of how to calculate the sales weighted average.

Coating Density: Enter the density of the coating in pounds per gallon (lbs/gal).

Weight Percent of Volatile Material: Weight of volatile material (VOC+water+exempts) as percent of total coating weight. See Supplemental Information for definitions of VOC (volatile organic compound) and VOC content.

Weight Percent of Water: Weight of water as percent of total coating weight.

Weight Percent of Exempts: Weight of exempt compounds as percent of total coating weight.

Weight Percent of Solids: Enter the solids content of the coating as percent of total coating weight.

Volume Percent of Solids: Enter the solids content of the coating as percent of total coating volume.

Volume Percent of Water: Volume of water as percent of total coating volume.

Volume Percent of Exempts: Volume of exempt compounds as percent of total coating volume.

VOC Actual: Also known as Material VOC. Enter the VOC content of the coating(s), as supplied, in grams of VOC per liter of coating. This is the weight of all volatile materials less the weight of water and less the weight of exempt compounds per the entire volume of the coating. This is NOT the same as VOC Regulatory. See Supplemental Information for an example of how to calculate VOC Actual.

VOC Regulatory (Less Water): Also known as Coating VOC. Enter the VOC content of the coating(s), as supplied, in grams of VOC per liter of coating, less water, less exempt compounds, and less any colorant added to the tint bases. This may be determined from the formulation data or previously determined by EPA Method 24, 40 CFR Part 60, as amended in Federal Register Vol. 57, No. 133, July 10, 1992, or ASTM D 3960-92. See Supplemental Information for an example of how to calculate VOC Regulatory.

Note: VOC content for multi-component coatings are as mixed, applied or fully reacted.

How were VOC Actual and Regulatory Determined? Check U.S. EPA Method 24 or Formulation Data.

Estimating California Sales: If California specific sales data are not available, sales may be estimated using national or regional sales figures that are apportioned appropriately. If you

use population as a basis for determining sales, please use the U.S. Resident Population estimates provided in the Supplemental Information portion of these instructions.

Container Sizes One Quart or Less (gallons): Enter California sales volume in gallons.

Container Sizes Larger than One Quart (gallons): Enter California sales volume in gallons.

Total Gallons: This field is completed automatically from the entries for the two types of container size.

Note: For multi-component coatings, report the as mixed or applied volume.

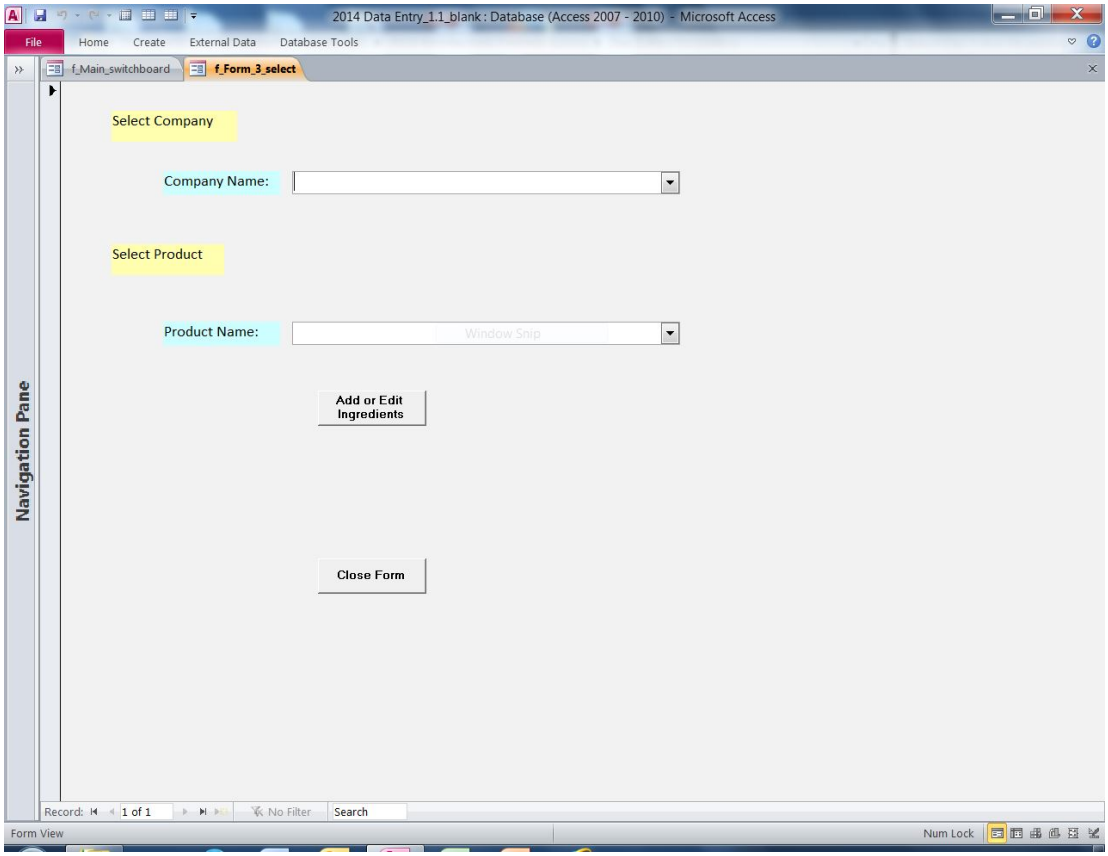
INSTRUCTIONS FOR MANUALLY ENTERING INGREDIENT INFORMATION

Note: All Ingredient Information must have corresponding Product Information.

- *Enter the percent by weight to the nearest 0.1% for each ingredient in the final product*
- *BIN numbers are only to be reported for hydrocarbon solvents (e.g., mineral spirits, Stoddard Solvent, VM&P Naphtha).*
- *List VOCs and Exempt Compounds that individually amount to 0.1% or greater by weight of the final product.*

Provide requested Ingredient Information for single or grouped products. If you are grouping products, provide Ingredient Information that will represent your sales leader or best representative product of the group. Provide all volatile ingredients which are part of the product formulation. Complete one Ingredient Information Form for each product or group of products reported.

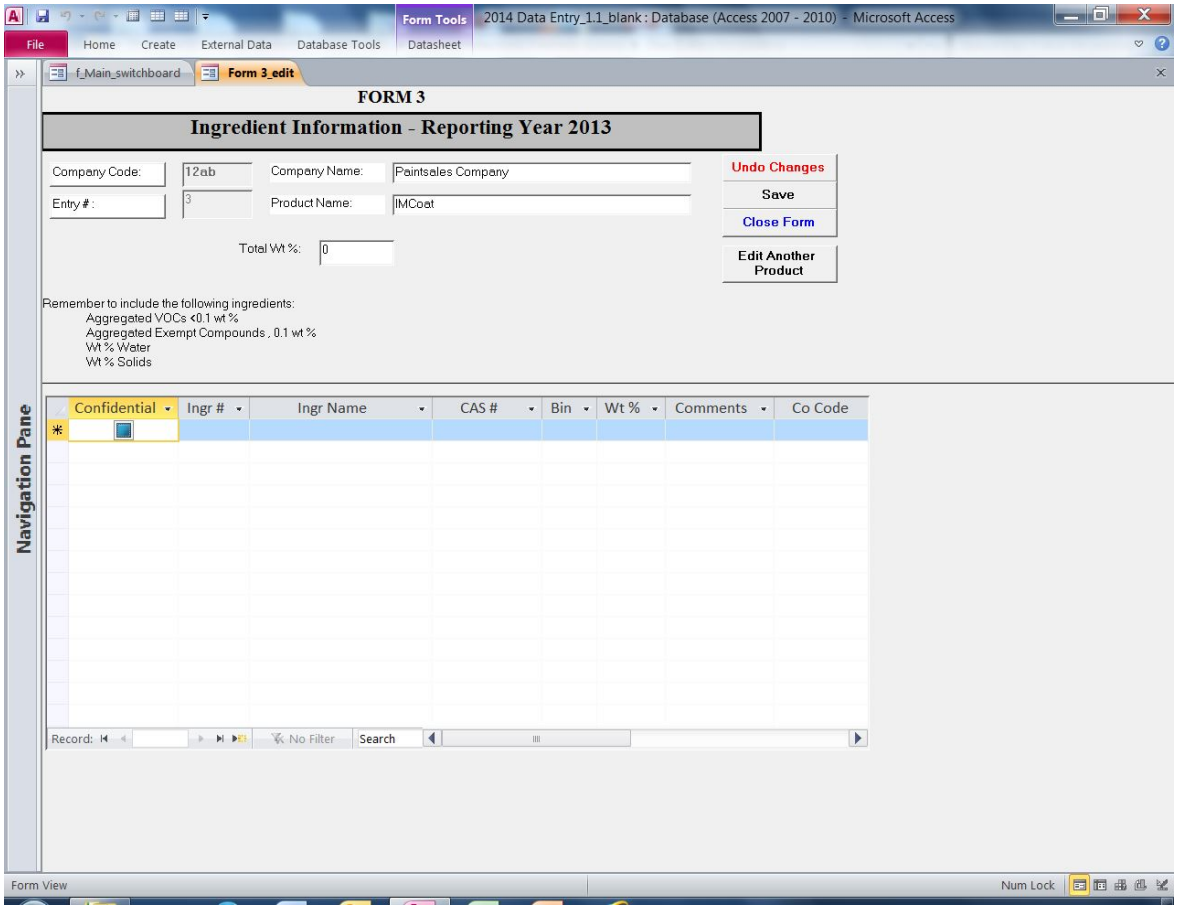
Note: For grouped products, report the ingredients of the sales leader or best representative product in the group.



Company Name: Use the pull-down menu to select the company name entered on the Company Information and Product Information forms.

Product Name: Use the pull-down menu to select the product name entered on the corresponding Product Information form.

Click on the "Add or Edit Ingredients" button to go to the next Ingredient Information screen.



Note: The top portion of this form (Company Code, Company Name, Entry # and Product Name) will auto-populate based previously input data.

- The “Undo Changes” button will clear the form of all previously input information.
- The “Save” button will save all previously input information, and the form will remain open.
- The “Close Form” button will save all previously input information, and close the form.
- The “Edit Another Product” button will allow you to make changes to the ingredient information for a previously input product.

Confidential: If you wish to designate the information on this Ingredient Information Form as confidential, please check this box.

Ingredient #: Number each ingredient sequentially.

Ingredient Name: Enter the chemical name of the ingredient. Chemical names must be distinguished from trade names. For example, the chemical name of SD 40 Alcohol is ethanol. Enter the trade name of the ingredient if the chemical name is unknown. If the ingredient is proprietary or a mixture (e.g., hydrocarbon solvents) identify the trade name and manufacturer/primary supplier.

Note: The volatile portions of resin solutions, colorants or additives must be included. For example, do not include the volatile portion of a resin solution as a solid.

CAS#: Please enter the Chemical Abstract Service (CAS) number for the ingredient.

BIN #: If available, provide the reactivity bin number for hydrocarbon solvents (e.g., mineral spirits, Stoddard Solvent, VM&P naphtha). Do not group different CAS numbers under one BIN number. See Supplemental Information for hydrocarbon solvent information and BIN numbers and for reactivity BIN numbers for aliphatic and aromatic hydrocarbon solvents.

Weight Percent (of total material): Enter the percent by weight to the nearest 0.1% for each ingredient in the final product. If the volatile portion is a mixture of known components, list the components separately with their individual weight percentages in the final product. If the components of a mixture cannot be determined, list the ingredient as a single entity. For example, you may not know the individual ingredients of petroleum distillates or biocides down to 0.1 weight percent. In this case identify the trade name, manufacturer, and weight percent of mixture.

Reporting Level - List volatiles that individually amount to 0.1 weight percent or greater by weight of the final product.

Aggregated VOCs < 0.1 Weight Percent: Aggregate each of the remaining VOCs that individually account for less than 0.1 weight percent of the final product and enter the sum.

Aggregated Exempt Compounds < 0.1 Weight Percent: Aggregate each of the remaining volatiles that are exempt VOCs that individually account for less than 0.1 weight percent of the final product and enter the sum.

Water: Enter the weight percent water.

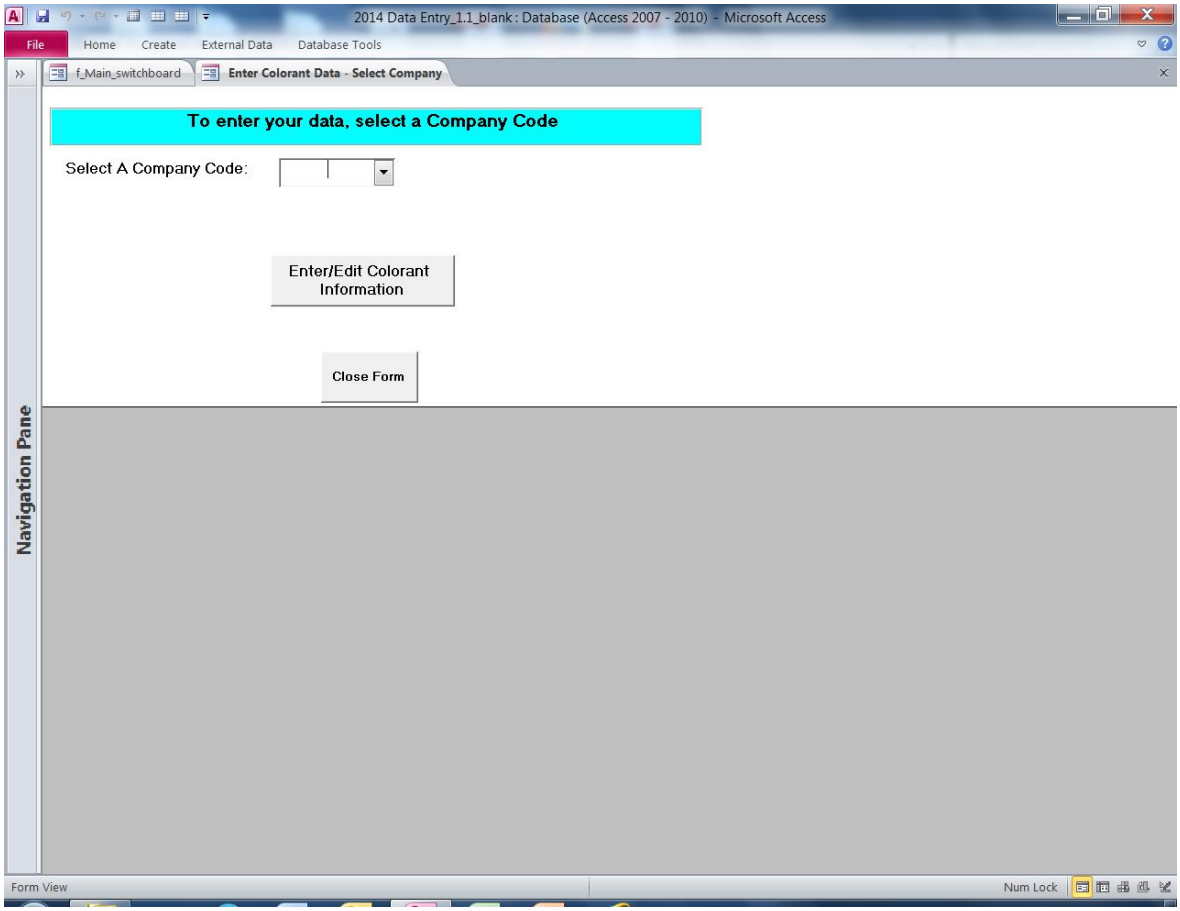
Solids: Enter the weight percent solids.

Total of All Ingredients: this field is completed automatically from the individual ingredient entries. The sum of all volatiles and solids in the table must equal 100 percent by weight. If this value does not sum to 100, please check the component percentages. The weight percent should match those on the Product Information sheet.

Comments: Enter any information that will help clarify entries made for the Ingredient Information.

INSTRUCTIONS FOR COLORANT INFORMATION

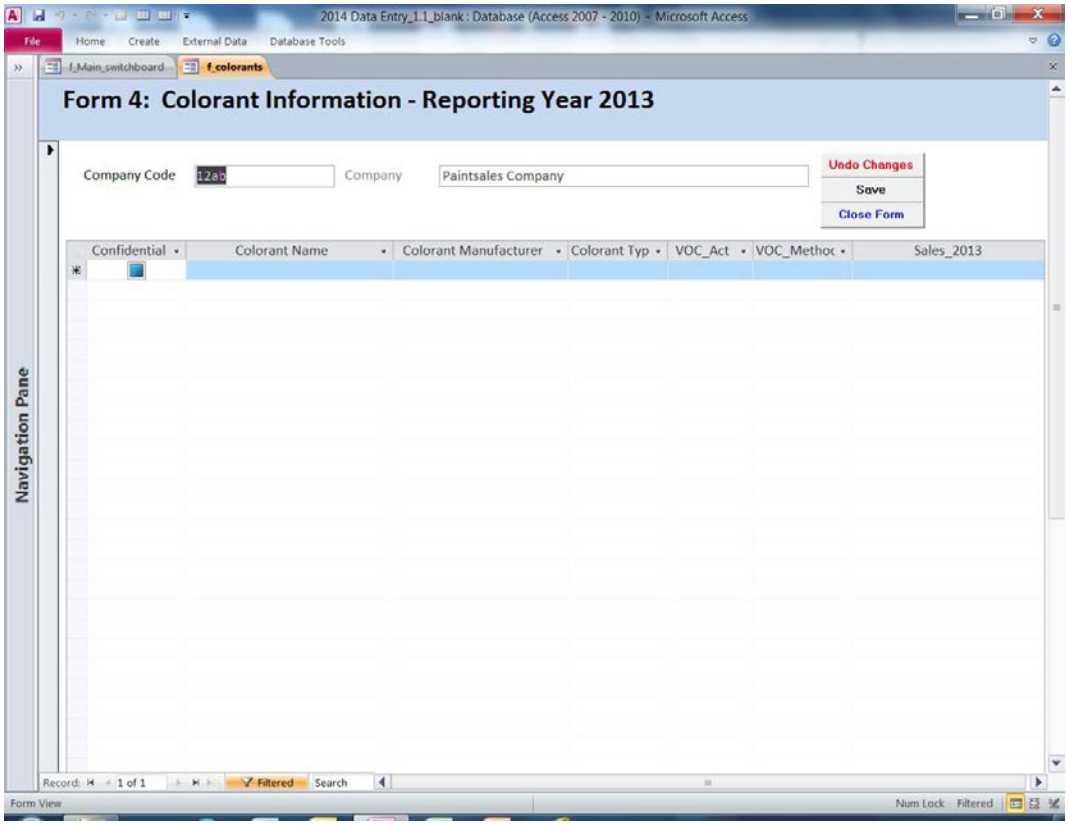
Select the Enter Colorant Information button if you manufacture colorants or provide colorants manufactured by others to those who tint your coatings**. Note: Ingredient information and labels are not required for colorants.**



Provide the requested information described below.

Company Code: Enter the same company code as entered on the Company Information Form.

Click on the "Enter/Edit Colorant Information" button to go to the next Colorant Information screen.



Confidential: If you wish to designate the information on this Colorant Information Form as confidential, please check this box.

Colorant Name: Specify the colorant name.

Manufacturer: Indicate the name of the manufacturer producing the colorant.

Colorant Type: Indicate if the colorant you are reporting is a universal colorant, colorant used only in solvent borne coatings, or a colorant used only in waterborne coatings.

VOC Actual: Also known as Material VOC. Enter the VOC content of the coating(s), as supplied, in grams of VOC per liter of coating. This is the weight of all volatile materials less the weight of water and less the weight of exempt compounds per the entire volume of the coating. This is NOT the same as VOC Regulatory. See Supplemental Information for an example of how to calculate VOC Actual.

VOC Method: Please indicate the method you used to determine VOC Actual- either U.S. EPA Method 24 or Formulation Data.

Sales 2013 (Gallons): Enter the California sales of the colorant, in gallons, for reporting year 2013.

Sales Method: Sales can be determined from one or more of the following:

Direct California retail sales
Direct California wholesale distribution
Prorated from national retail sales
Prorated from national wholesale distribution
Other (explain in next field)

Other Sales Method Explanation: Explain method for determining sales if not using one of the sales methods described above. If California specific sales data are not available, sales may be estimated using national or regional sales figures that are apportioned appropriately. If you use population as a basis for determining sales, please use the U.S. Resident Population estimates provided in the Supplemental Information portion of these instructions.

Comments: Enter any information that will help clarify entries made on the Colorant Information Form.

INSTRUCTIONS FOR BACKING UP DATA

Backup Data

To save entered data to your computer at any time during data entry, click “Backup Survey” button on the main screen, then click on “Backup Data” “Backup Menu” screen in ACRT. Then, the first popup window will prompt you to select where you want the files to be saved and the second popup window will prompt you to confirm the backup by clicking “Ok.” Backed up files can later be uploaded back into the ACRT if needed.

Note: Files backed up using the “Backup Data” button are not checked by ACRT for completeness or other errors and should not be used to submit data to ARB.

When complete, click “Back to Main Menu” to return to the main screen.

Restore Data

A user can restore data by uploading files saved (backed up) on the computer earlier. To do this, click “Restore Data” button and select correct files when prompted by the popup window. Click “Ok” in the next popup window to confirm the upload.

When complete, click “Back to Main Menu” to return to the main screen.

Reset Database

The user can delete all entered product and ingredient information by clicking on “Reset Database” button. Upon clicking on the button, the popup window will be displayed, notifying the user that all information will be deleted. Click “OK” to confirm the deletion.

Warning: "Reset Database" will delete all information in the database. Once the data is deleted it will not be possible to restore it unless the user backed up the data earlier on the computer.

CERTIFICATION OF COMPLETED SURVEY

Once all your data is complete please go to the certification screen by clicking on “Certify Data” from the main screen.

Certification: Please have an authorized company officer or corporate counsel certify that the Company Information, Product Information, Ingredient Information, and Colorant Information are complete and accurate.

PREPARE YOUR FILES FOR SUBMITTAL TO ARB

Select create CSV files. This will generate the following files: t1_coinfo.csv, t2_prodinfo.csv, t3_ingredinfo.csv, t4_color_details.csv, and t_certify.csv, which, you will submit to ARB.

Before the files are generated the ACRT will check the data for completeness. If data is missing, a series of error reports will be created to aid you in identifying and correcting the errors.

If errors are found, please go back to the review/edit data screens and make any necessary corrections. Then repeat the process.

Once the data passes the QC checks the files will be generated.

Upload your csv data files and label files to ARB using the Upload Portal that will be available beginning January 1, 2015. Please visit the architectural coatings survey webpage http://www.arb.ca.gov/coatings/arch/survey/2014/2014survey.htm for instruction on the upload process

SUPPLEMENTAL INFORMATION

DEFINITIONS

Adhesive: Any product that is used to bond one surface to another by attachment. ****DO NOT REPORT****

Aerosol Coating Product: A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable aerosol container for hand-held application, or for use in specialized equipment for ground traffic/marking applications. ****DO NOT REPORT****

Air and Water Resistive Barrier Coatings: A coating labeled and formulated to Provide air barrier materials which have an air permeance not to exceed 0.004 cubic feet per minute per square foot under a pressure differential of 1.57 pounds per square foot (0.004 cfm/ft^2 @ 1.57 psf), [0.02 liters per square meter per second under a pressure differential of 75 Pa (0.02 L/(s·m^2) @ 75 Pa)] when tested in accordance with ASTM E2178; and/or a coating labeled and formulated to resist liquid water that has penetrated a cladding system. Water resistance shall be tested in accordance with ASTM E331. Water vapor permeance shall be tested in accordance with ASTM E96/E96M-10.

Aluminum Roof Coating: A coating labeled and formulated exclusively for application to roofs and containing at least 84 grams of elemental aluminum pigment per liter of coating (at least 0.7 pounds per gallon). Pigment content shall be determined in accordance with SCAQMD Method 318-95.

Antenna Coating: A coating labeled and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

Antifouling Coating: A coating labeled and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. Environmental Protection Agency (U.S. EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq*.) and with the California Department of Pesticide Regulation.

Appurtenance: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, 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, and fire escapes; and window screens.

Architectural Coating: A coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings.

Basement Specialty Coating: A clear or opaque coating that is labeled and formulated for application to concrete or masonry surfaces to provide a hydrostatic seal for basements and other below-grade surfaces. Basement Specialty Coatings must meet the following criteria:

- Coating must be capable of withstanding at least 10 psi of hydrostatic pressure, as determined in accordance with ASTM D7088-04, and
- Coating must be resistant to mold and mildew growth and must achieve a microbial growth rating of 8 or more, as determined in accordance with ASTM D3273-00 and ASTM D3274-95.

Bitumens: 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.

Bituminous Roof Coating: A coating which incorporates bitumens that is labeled and formulated exclusively for roofing.

Bituminous Roof Primer: A primer which incorporates bitumens that is labeled and formulated exclusively for roofing and intended for the purpose of preparing a weathered or aged surface or improving the adhesion of subsequent surfacing components.

Bond Breaker: A coating labeled and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.

Caulk or Caulking Compound: Used to fill voids with plastic or semiplastic materials to provide a seal against moisture or solvent intrusion. Commonly used for sealing joints in buildings and other structures where structural movement may occur. It is usually available in two consistencies: “gun grade” for use with a caulking gun, and “knife grade” for application with a putty knife; extruded preformed shapes are also available. ****DO NOT REPORT***

Clear Brushing Lacquers: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush.

Coating: 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.

Colorant: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.

Concrete Curing Compound: A coating labeled and formulated for application to freshly poured concrete to perform one or more of the following functions:

- Retard the evaporation of water, or
- Harden or dustproof the surface of freshly poured concrete.

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

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

Note: Polymer and paraffin content for this product category must be reported on the Ingredient Information Form.

Consumer Products: "Consumer Product" means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; metal polishes; floor polish or wax; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; multi-purpose solvents, aerosol paints; and automotive specialty products*;* but does not include other paint products, furniture coatings, or architectural coatings. As used in this article, the term "consumer product" shall also refer to aerosol adhesives, including aerosol adhesives used for consumer, industrial, and commercial uses. ****DO NOT REPORT****

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

- Fill cracks; or
- Seal the surface to provide protection; or
- Restore or preserve the appearance.

Dry Fog Coating: A coating labeled and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.

Exempt Compound: A compound identified as exempt under the definition of Volatile Organic Compound (VOC). Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised August 1996).

Faux Finishing Coating: A coating labeled and formulated as a stain or glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble

and wood grain. A coating labeled and formulated to meet one or more of the following criteria:

- 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; or
- 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 (at least 0.4 pounds per gallon); or
- A decorative coating used to create a metallic appearance that contains less than 48 grams of elemental metallic pigment per liter of coating as applied (less than 0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95 or
- A decorative coating used to create a metallic appearance that contains greater than 48 grams of elemental metallic pigment per liter of coating as applied (greater than 0.4 pounds per gallon) and which requires a clear topcoat to prevent the degradation of the finish under normal use conditions. The metallic pigment content shall be determined in accordance with SCAQMD Method 318-95 or
- A clear topcoat to seal and protect a Faux Finishing coating. These clear topcoats must be sold and used solely as part of a Faux Finishing coating system, and must be labeled “This product can only be sold or used as part of a Faux Finishing coating system”.

Fire-Resistive Coating: A coating labeled and formulated to protect structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials. The Fire Resistive category includes sprayed fire resistive materials and intumescent fire resistive coatings that are used to bring structural materials into compliance with federal, state, and local building code requirements. Fire Resistive coatings shall be tested in accordance with ASTM Designation E 119-07. Fire Resistive coatings and testing agencies must be approved by building code officials.

Fire-Retardant Coating: A coating labeled and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state, and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99.

Flat Coating: A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999).

Floor Coating: An opaque coating that is labeled and formulated for application to flooring, including, but not limited to, decks, porches, steps, garage floors, and other horizontal surfaces which may be subject to foot traffic. ***Note: Polymer and paraffin content for this product category must be reported on the Ingredient Information Form.***

Floor Polish or Wax: A wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. "Floor Polish or Wax" does not include "spray buff products", products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations. ***DO NOT REPORT***

Flow Coating: A coating labeled and formulated exclusively for use by electric power companies or their subcontractors to maintain the protective coating systems present on utility transformer units.

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

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

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

Industrial Maintenance Coating: A high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed below, and labeled "For industrial use only" or "For professional use only":

- Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- Frequent exposure to temperatures above 121°C (250°F);
- Frequent heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
- Exterior exposure of metal structures and structural components.

Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film.

Low Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material as recommended for application by the manufacturer.

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

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

Metallic Pigmented Coating: A coating that is labeled and formulated to provide a metallic appearance. Metallic Pigmented coatings must contain at least 48 grams of elemental metallic pigment (excluding zinc) per liter of coating as applied (at least 0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95. The Metallic Pigmented Coating category does not include coatings applied to roofs or Zinc-Rich Primers.

Multi-Color Coating: A coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.

Multi-purpose Solvent: For products manufactured on or after January 1, 2008, and before January 1, 2015: any liquid product designed or labeled to be used for dispersing, dissolving, or removing contaminants or other organic materials. “Multi-purpose Solvent” also includes:

- Products that do not display specific use instructions on the product container or packaging;
- Products that do not specify an end-use function or application on the product container or packaging;
- Solvents used in institutional facilities, except for laboratory reagents used in analytical, educational, research, scientific or other laboratories;
- “Paint clean-up” products; and
- Products labeled to prepare surfaces for painting.

For the purposes of this definition only, “Paint clean-up” means any liquid product labeled for cleaning oil-based or water-based paint, lacquer, varnish, or related coatings from, but not limited to, painting equipment or tools, plastics, or metals. “Multi-purpose Solvent” does not include:

- Solvents used in cold cleaners, vapor degreasers, conveyorized degreasers or film cleaning machines;
- Solvents labeled exclusively for the clean-up of application equipment used for polyaspartic and polyurea coatings;
- Solvents that are incorporated into, or used exclusively in the manufacture or construction of, the goods or commodities at the site of the establishment;
- Products that are labeled exclusively to clean a specific contaminant, on a single substrate, in specific situations.

DO NOT REPORT

Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999).

Nonflat – High Gloss Coating: A nonflat coating that registers a gloss of 70 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999). The labels of all Nonflat – High Gloss coatings shall prominently display the words “High Gloss.”

Nonflat – Low Gloss Coating: A nonflat coating that registers a gloss of 5 or above, but less than 20 on a 60-degree meter according to ASTM Designation D 523-89 (Reapproved 1999).

Nonflat – Medium Gloss Coating: A nonflat coating that registers a gloss of 20 or above, but less than 70 on a 60-degree meter according to ASTM Designation D 523-89 (Reapproved 1999).

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

OEM coatings: Original equipment manufacturer coatings, which include automotive, marine, furniture, and appliance, as well as many other miscellaneous industrial or job shop applications. ****DO NOT REPORT***

Post-Consumer Coating: Finished coatings generated by a business or consumer that have served their intended end uses, and are recovered from or otherwise diverted from the waste stream for the purpose of recycling.

Pre-Treatment Wash Primer: A primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM Designation D 1613-96, that is labeled and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.

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

- To provide a firm bond between the substrate and the subsequent coatings; or
- To prevent subsequent coatings from being absorbed by the substrate; or
- To prevent harm to subsequent coatings by materials in the substrate; or
- To provide a smooth surface for the subsequent application of coatings; or
- To provide a clear finish coat to seal the substrate; or
- To block materials from penetrating into or leaching out of a substrate.

Quick-Dry Enamel: A nonflat coating that is labeled as “Quick Dry” and that is formulated to have the following characteristics:

- Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16 and 27°C (60 and 80°F);

- When tested in accordance with ASTM Designation D 1640-95, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical test method; and
- Has a dried film gloss of 70 or above on a 60-degree meter.

Quick-Dry Primer, Sealer, and Undercoater: A primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ASTM Designation D 1640- 95.

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

- The Reactive Penetrating Sealer must improve water repellency at least 80 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with one or more of the following standards: ASTM C67-07, or ASTM C97-02, or ASTM C140-06; and
- The Reactive Penetrating Sealer must not reduce the water vapor transmission rate by more than 2 percent after application on a concrete or masonry substrate. This performance must be verified on standardized test specimens, in accordance with ASTM E96/E96M-05; and
- Products labeled and formulated for vehicular traffic surface chloride screening applications must meet the performance criteria listed in the National Cooperative Highway Research Report 244 (1981).

Reactive Penetrating Sealers must be labeled “Reactive Penetrating Sealer”.

Recycled Coating: 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.

Residential: Areas where people reside or lodge, including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.

Roof Coating: 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.

Rust Preventative Coating: A coating formulated to prevent the corrosion of metal surfaces for one or more of the following applications:

- Direct-to-metal coating; or

- Coating intended for application over rusty, previously coated surfaces.

The Rust Preventative category does not include the following:

- Coatings that are required to be applied as a topcoat over a primer; or
- Coatings that are intended for use on wood or any other nonmetallic surface.

Rust Preventative coatings are for metal substrates only and shall prominently display the statement “For Metal Substrates Only”.

Sanding Sealer: A clear or semi-transparent wood coating labeled and formulated for application to bare wood to seal the wood and to provide a coat that can be abraded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.

Sealant: Any material with adhesive properties that is formulated primarily to fill, seal, or waterproof gaps or joints between two surfaces. ***DO NOT REPORT***

Shellac: A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laciffer lacca*), and formulated to dry by evaporation without a chemical reaction.

Shop Application: Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).

Specialty Primer, Sealer, and Undercoater: A coating that is formulated for application to a substrate to block water-soluble stains resulting from: fire damage; smoke damage; or water damage.

Stain: A clear, semitransparent, or opaque coating labeled and formulated to change the color of a surface but not conceal the grain pattern or texture.

Stone Consolidant: A coating that is labeled and formulated for application to stone substrates to repair historical structures that have been damaged by weathering or other decay mechanisms. Stone Consolidants must penetrate into stone substrates to create bonds between particles and consolidate deteriorated material. Stone Consolidants must be specified and used in accordance with ASTM E2167-01. Stone Consolidants are for professional use only and must be labeled “Stone Consolidant - For Professional Use Only”.

Swimming Pool Coating: A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals. Swimming pool coatings include coatings used for swimming pool repair and maintenance.

Swimming Pool Repair and Maintenance Coating: A rubber based coating labeled and formulated to be used over existing rubber based coatings for the repair and maintenance of swimming pools.

Temperature-Indicator Safety Coating: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

Tint Base: An architectural coating to which colorant is added after packaging in sale units to produce a desired color.

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

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

- The coating must have a scratch hardness of 3H or harder and a gouge hardness of 4H or harder. This must be determined on bonderite 1000, in accordance with ASTM D3363-05; and
- The coating must have a weight loss of 20 milligrams or less after 1000 cycles. This must be determined with CS-17 wheels on bonderite 1000, in accordance with ASTM D4060-07; and
- The coating must withstand 1000 hours or more of exposure with few or no #8 blisters. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99, and ASTM D714-02e; and
- The coating must have an adhesion rating of 4B or better after 24 hours of recovery. This must be determined on unscribed bonderite, in accordance with ASTM D4585-99 and ASTM D3359-02.

Varnish: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.

Volatile Organic Compound (VOC): Any volatile compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:

- methane;
- methylene chloride (dichloromethane);
- 1,1,1-trichloroethane (methyl chloroform);
- trichlorofluoromethane (CFC-11);
- dichlorodifluoromethane (CFC-12);
- 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
- 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);
- chloropentafluoroethane (CFC-115);
- chlorodifluoromethane (HCFC-22);
- 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);

- 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
- 1,1-dichloro-1-fluoroethane (HCFC-141b);
- 1-chloro-1,1-difluoroethane (HCFC-142b);
- trifluoromethane (HFC-23);
- pentafluoroethane (HFC-125);
- 1,1,2,2-tetrafluoroethane (HFC-134);
- 1,1,1,2-tetrafluoroethane (HFC-134a);
- 1,1,1-trifluoroethane (HFC-143a);
- 1,1-difluoroethane (HFC-152a);
- ethoxy-nonafluorobutane (HFE 7200);
- trans-1,3,3,3-tetrafluoropropene (HFO-1234ze);
- cyclic, branched, or linear completely methylated siloxanes;
- the following classes of perfluorocarbons:
  (A) cyclic, branched, or linear, completely fluorinated alkanes;
  (B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
  (C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
  (D) sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds only to carbon and fluorine; and
- the following low-reactive organic compounds which have been exempted by the U.S. EPA:
  acetone;
  ethane;
  parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene);
  perchloroethylene; and
  methyl acetate.

VOC Content: The weight of VOC per volume of coating, calculated according to the procedures specified in “VOC Calculations and Conversions.” See “VOC Calculations” in Supplemental Information.

Waterproofing Membrane: A clear or opaque coating that is labeled and formulated for application to concrete and masonry surfaces to provide a seamless waterproofing membrane that prevents any penetration of liquid water into the substrate. Waterproofing Membranes are intended for the following waterproofing applications: below-grade surfaces, between concrete slabs, inside tunnels, inside concrete planters, and under flooring materials. Waterproofing Membranes must meet the following criteria:

- Coating must be applied in a single coat of at least 25 mils (at least 0.025 inch) dry film thickness; and
- Coatings must meet or exceed the requirements contained in ASTM C836-06.

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

Waterproofing Concrete / Masonry Sealer: A clear or pigmented film-forming coating that is labeled and formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining. ***Note: Polymer and paraffin content for this product category must be reported on the Ingredient Information Form.***

Waterproofing Sealer: A coating labeled and formulated for application to a porous substrate for the primary purpose of preventing the penetration of water.

Wood Preservative: A coating labeled and formulated to protect exposed wood from decay or insect attack, that is registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

Zinc-Rich Primer: A coating that meets all of the following specifications:

- Coating contains at least 65 percent metallic zinc powder or zinc dust by weight of total solids; and
- Coating is formulated for application to metal substrates to provide a firm bond between the substrate and subsequent applications of coatings; and
- Coating is intended for professional use only and is labeled “For Professional Use Only”.

COATING CATEGORY CODES

Category	Code	Category	Code
Antenna Coatings	1	Quick Dry Enamel	31
Antifouling Coatings	2	Quick Dry Primers, Sealers. Undercoaters	32
Bituminous Roof Coatings	3	Recycled Coatings	33
Bituminous Roof Primers	4	Roof Coatings	34
Bond Breaker Coatings	5	Rust Preventative Coatings	35
Clear Brushing Lacquers	6	Sanding Sealers (other than lacquer sanding sealers)	36
Concrete Curing Compounds	7	Shellacs – Clear	37
Dry Fog Coatings	8	Shellacs – Opaque	38
Faux Finishing Coatings	9	Specialty Primers, Sealers, and Undercoaters	39
Fire Resistive Coatings	10	Stains – Clear/Semitransparent	40
Fire Retardant Coatings - Clear	11	Stains - Opaque	41
Fire Retardant Coatings - Opaque	12	Swimming Pool Coatings	42
Flat Coatings	13	Swimming Pool Maintenance & Repair Coatings	43
Floor Coatings	14	Temperature Indicator Safety Coatings	44
Flow Coatings	15	Traffic Marking Coatings	45
Form Release Compounds	16	Varnishes - Clear	46
Graphic Arts Coatings (Sign Paints)	17	Varnishes – Semitransparent	47
High Temperature Coatings	18	Waterproofing Sealers	48
Industrial Maintenance Coatings	19	Waterproofing Concrete/Masonry Sealers	49
Lacquers (including lacquer sanding sealers)	20	Wood Preservatives	50
Low Solids Coatings	21	Other (specify on Product Information form)	51
Magnesite Cement Coatings	22	Driveway Sealers	52
Mastic Texture Coatings	23	Aluminum Roof Coatings	53
Metallic Pigmented Coatings	24	Basement Specialty Coatings	54
Multi-Color Coatings	25	Concrete/Masonry Sealers	55
Nonflat Coatings - Low Gloss	26	Reactive Penetrating Sealers	56
Nonflat Coatings – Medium Gloss	27	Stone Consolidants	57
Nonflat Coatings - High Gloss	28	Tub and Tile Refinish Coatings	58
Pre-Treatment Wash Primers	29	Waterproofing Membranes	59
Primers, Sealers, and Undercoaters	30	Zinc-Rich Primers	60
		Air and Water Resistive Barrier Coatings	61

Possible Reporting Categories For Other National Rule (1) Categories	
National Rule Category	**Possible Reporting Category**
Anti-Graffiti	Industrial Maintenance or Flat/Nonflat
Bituminous and Mastic	Roof, Bituminous Roof or Primer, Primer ,Sealer. Undercoater, Concrete / Masonry Sealers, Industrial Maintenance
Calcimine Recoater	Flat or Specialty Primer / Sealer / Undercoater

Chalkboard Resurfacers	Industrial Maintenance
Concrete Curing and Sealing	Concrete Curing Compounds or Concrete / Masonry Sealers
Concrete Protective	Concrete / Masonry Sealers
Concrete Surface Retarder	Other
Conversion Varnish	Wood Coatings
Extreme High Durability	Industrial Maintenance
Heat Reactive	Industrial Maintenance (generally an OEM coating)
Impacted Immersion	Industrial Maintenance
Nonferrous Ornamental Metal Lacquers and Surface Protectants	Wood Coatings or Rust Preventative
Nuclear	Industrial Maintenance
Repair and Maintenance Thermoplastic	Industrial Maintenance
Stain Controllers	Low Solid or Primer, Sealer, Undercoater
Thermoplastic Rubber and Mastics	Roof
Zone Marking	Traffic

1. National Volatile Organic Compound Emission Standards for Architectural Coatings (40 CFR Part 59, Subpart D)

Note: This reference table is provided as general guidance only and is not intended to be used as a definitive determination by the California Air Resources Board.

SUBSTRATE CODES

Substrate Codes	
Substrate	**Code**
All Substrates	0
Acoustical Materials: Ceiling Texture, Acoustic Tile, etc.	1
Asphalt	2
Concrete, Stone, Masonry, etc. (Includes codes 4 through 8)	3
Brick	4
Cinder Block, Concrete Block	5
Stone	6
Stucco	7
Tilt up and poured in place concrete	8
Drywall / Plaster: Textured and Untextured	9
Metal: (Includes codes 11 and 12)	10
Ferrous: Iron, Steel	11
Nonferrous: Galvanized, Aluminum, Alloys, etc.	12
Wood: (Includes codes 14 through 17)	13
Not painted, smooth	14
Not painted, rough sawn	15
Previously painted or stained	16
Plywood, Synthetic Wood, Hardboard, T-111 Siding, Masonite, Chipboard, Compressed Wood (wood chip or wood fiber based building materials)	17
Other: Specify	18

RESIN/BINDER CODES

Resin/Binder Codes					
Resin/Binder	**Code**	**Resin/Binder**	**Code**	**Resin/Binder**	**Code**
Acrylic	1	Oleoresin	8	Urethane, Polyurethane	15
Acrylic Copolymer	2	Phenolic	9	Polyvinyl Chloride (PVC)	16
Alkyd	3	Polyester (Not Alkyd)	10	Vinyl Toluene	17
Amines, Amides	4	Polyvinyl Acetate (PVA)	11	Vinyl Acrylic Copolymer	18
Cellulosic	5	Shellac	12	Other: Specify	19
Chlorinated Rubber	6	Silicone, Silane, Siloxane	13	Asphaltic \ Bituminous	20
Epoxy	7	Styrene-butadiene	14	Oil (e.g., linseed, tung)	21

VOC CALCULATIONS AND CONVERSION FACTORS

VOC Content

The following equations can be used to calculate entries contained in the product information and colorant information forms of this survey.

$$\text{VOC}_{\text{Actual}} = \frac{W_{vm} - W_w - W_e}{V_c}$$

(*Also known as Material VOC*)

$$\text{VOC}_{\text{Regulatory}} = \frac{W_{vm} - W_w - W_e}{V_c - V_w - V_e}$$

(*Also known as Coating VOC*)

$$\text{VOC}_{\text{Regulatory (Low Solids)}} = \frac{W_{vm} - W_w - W_e}{V_c}$$

Where:

- W_{vm} = Total weight of volatile materials (VOC+water+exempt compounds) in the coating, in grams
- W_w = Weight of water in the coating, in grams
- W_e = Weight of exempt compounds in the coating, in grams
- V_c = Total volume of the coating, in liters
- V_w = Volume of water in the coating, in liters
- V_e = Volume of exempt compounds in the coating, in liters

Note: If you are using BatchMaster, Material VOC and Coating VOC can be found in MSDS / Compliance (Section III – Physical / Chemical Characteristics).

VOC REGULATORY AFTER RECOMMENDED THINNING

The following equation can be used to calculate VOC Regulatory after the coatings are thinned with VOC containing solvents.

$$\text{VOC}_{\text{Regulatory (After Recommended Thinning)}} = \frac{\text{Volume}_{\text{Coating}} \times \text{VOC}_{\text{Regulatory}} + \text{Volume}_{\text{Thinner}} \times \text{VOC}_{\text{Thinner}}}{\text{Volume}_{\text{Coating}} + \text{Volume}_{\text{Thinner}}}$$

PERCENT BY VOLUME SOLIDS OF COATING

The following are two equations that can be used to calculate the percent volume solids of coating. The choice of equation depends on the type of information that is known about the coating.

1) If the weight and density of all of the solid (nonvolatile) materials are known, then the following equation may be used:

$$\text{\% by Volume Solids of Coating} = \frac{\text{Weight of Solids}}{\text{Density of Solids} \times \text{Volume of Coating Material}} \times 100$$

2) If instead, only the volatile components of a coating (VOC, water and exempt compound) are known, the percent volume of solids may be estimated by the following equation.

$$\text{\% by Volume of Solids of Coating} = \left(1 - \frac{W_w}{D_w \times V_c} - \frac{W_{voc}}{D_{voc} \times V_c} - \frac{W_e}{D_e \times V_c}\right) \times 100$$

Where:

W_w	=	Weight of water in the coating, in grams	D_w	=	Density of water, in grams per liter
W_{voc}	=	Weight of VOC in the coating, in grams	D_{voc}	=	Density of VOC, in grams per liter
W_e	=	Weight of exempt compounds in the coating, in grams	D_e	=	Density of exempt compounds, in grams per liter
V_c	=	Total volume of coating in liters			

SALES WEIGHTED AVERAGE

The Sales Weighted Average (SWA) is an average value for grouped coatings, calculated by weighting the individual values by their sales. For grouped coatings in this survey, the SWA should be used to report the following entries on the Product Information Form: coating density, weight percent of solids, weight percent of volatile material, weight percent of water, weight percent of exempts, volume percent of solids, volume percent of water, and volume percent of exempts. The following equation can be used to calculate Sales Weighted Average.

$$\text{SWA} = \frac{\left((\text{Value}_1 \times \text{Sales}_1) + (\text{Value}_2 \times \text{Sales}_2) + (\text{Value}_n \times \text{Sales}_n)\right)}{(\text{Sales}_1 + \text{Sales}_2 + \text{Sales}_n)}$$

Where:

$Value_{(1,2,...n)}$	=	Coating characteristic values (e.g., coating density, VOC Actual, VOC Regulatory, etc.) for products 1,2,...n
$Sales_{(1,2,...n)}$	=	Sales for products 1,2,...n

CONVERSION FACTORS

VOC content:
To convert pounds/gallon to grams/liter multiply by 119.83

Density:
1 pound/gallon = 0.11983 kilograms/liter or 119.83 grams/liter

Specific Gravity :
To convert specific gravity to pounds/gallon multiply by 8.345
To convert specific gravity to grams/liter multiply by 1000

Units of Volume:
1 fl oz = 0.029574 liters
1 liquid pint = 0.47318 liters
1 liquid quart = 2 liquid pints = 0.94635 liters
1 gallon = 4 liquid quarts = 3.7854 liters

Units of Mass:

Unit	ounce(oz)	pound(lb)	gram(g)	kilogram(kg)
1 oz =	1	0.0625	28.3495	0.02834
1 lb =	16	1	453.592	0.45359

U.S RESIDENT POPULATION FOR 2013

United States Total = 316,128,839

STATE	POPULATION	%	RANK
Alabama	4,833,722	1.5	23
Alaska	735,132	0.2	47
Arizona	6,626,624	2.1	15
Arkansas	2,959,373	0.9	33
California	**38,332,521**	**12.1**	**1**
Colorado	5,268,367	1.7	22
Connecticut	3,596,080	1.1	29
Delaware	925,749	0.3	45
District of Columbia	646,449	0.2	(X)
Florida	19,552,860	6.2	4
Georgia	9,992,167	3.2	8
Hawaii	1,404,054	0.4	40
Idaho	1,612,136	0.5	39
Illinois	12,882,135	4.1	5
Indiana	6,570,902	2.1	16
Iowa	3,090,416	1.0	30
Kansas	2,893,957	0.9	34
Kentucky	4,395,295	1.4	26
Louisiana	4,625,470	1.5	25
Maine	1,328,302	0.4	41
Maryland	5,928,814	1.9	19
Massachusetts	6,692,824	2.1	14
Michigan	9,895,622	3.1	9
Minnesota	5,420,380	1.7	21
Mississippi	2,991,207	0.9	31
Missouri	6,044,171	1.9	18

STATE	POPULATION	%	RANK
Montana	1,015,165	0.3	44
Nebraska	1,868,516	0.6	37
Nevada	2,790,136	0.9	35
New Hampshire	1,323,459	0.4	42
New Jersey	8,899,339	2.8	11
New Mexico	2,085,287	0.7	36
New York	19,651,127	6.2	3
North Carolina	9,848,060	3.1	10
North Dakota	723,393	0.2	48
Ohio	11,570,808	3.7	7
Oklahoma	3,850,568	1.2	28
Oregon	3,930,065	1.2	27
Pennsylvania	12,773,801	4.0	6
Rhode Island	1,051,511	0.3	43
South Carolina	4,774,839	1.5	24
South Dakota	844,877	0.3	46
Tennessee	6,495,978	2.1	17
Texas	26,448,193	8.4	2
Utah	2,900,872	0.9	33
Vermont	626,630	0.2	49
Virginia	8,260,405	2.6	12
Washington	6,971,406	2.2	13
West Virginia	1,854,304	0.6	38
Wisconsin	5,742,713	1.8	20
Wyoming	582,658	0.2	50

X = Not Applicable

Source: Population Division, U.S. Census Bureau
Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2013
Release Date: December 2013

HYDROCARBON SOLVENT INFORMATION AND BIN NUMBERS

A BIN number is a classification scheme that represents the overall photochemical reactivity of a group of solvents with similar characteristics. Although most of the large chemical suppliers are aware of BIN numbers, you may encounter some that are unfamiliar with the term. Many suppliers include the BIN number on their product literature. Depending on the level of detail of the literature that accompanies shipments of the solvent, you may be able to determine the BIN number without further consulting your supplier. For your convenience, we have compiled a list of some common hydrocarbon solvents and their BIN numbers below. You can also use the list of BIN numbers for aliphatic and aromatic hydrocarbon solvents found immediately below this table, if your supplier can not provide a BIN number and your hydrocarbon solvent is not listed below. Please note that BIN numbers are required only for hydrocarbon solvents, not for VOCs such as alcohols, glycol ethers, ketones or acetates.

Manufacturer		
	Trade Name	BIN #
American Refining Group		
	Kensol 30	15
Ashland, Incorporated		
	142 Solvent 66	11
	Hi Sol® 10	22
	Hi Sol® 15	23
	Kwik-Dri®	6
	Lacolene®	6
	Low Odor Base Solvent®	16
	Mineral Spirits 66 (1% Aromatic)	11
	Mineral Spirits 66 (7.5% Aromatic)	14
	Mineral Spirits NE	15
	Odorless Mineral Spirits	12
	VM&P Naphtha	6
	Xylenes	21
Calumet Lubricants		
	142 Flash	11
	Calprint 35	16
	Calprint 38	16
	Calprint 600 Solvent	20
	Hexane	1
	Iso-Hexane	2
	LVP 100	11
	LVP 200	16
	LVP 300	16
	LVP 400	20
	Mineral Spirits	15
	Mineral Spirits (<1%)	11
	VM&P (<1%)	6
Chemcentral		
	Aromatic 100	22
	Aromatic 150	23
	Aromatic 200	24
	Xylenes	21

Manufacturer		
	Trade Name	BIN #
Chemcentral (continued)		
	140 Solvent	11
	Heptane	1
	Hexane	1
	Mineral Spirits	15
	Odorless Mineral Spirits	11
	VM&P Naphtha	6
Chevron Phillips Chemical Company		
	Soltrol® 10 Fluid	7
	Soltrol® 100 Fluid	7
	Soltrol® 130 Fluid	12
	Soltrol® 170 Fluid	11
	Soltrol® 220 Fluid	16
CITGO		
	142 Solvent 66/3	11
	170 Solvent	11
	Camping Fuel	4
	Citgo Mineral Seal Oil	19
	Heptane	2
	Hexane	1
	Lactol Spirits	10
	Mineral Spirits 150	11
	Mineral Spirits 66/3	11
	Mineral Spirits 75	9
	Naphthol Spirits 66/3	6
	Regular Mineral Spirits	15
	Roto Solv	9
	Rubber Solvent	4
	Solv G	23
	Special Lactolite	6
	Special Naphtholite 66/3	6
	Super Hi Flash Naphtha	22
	Textile Spirits	1
	Xylenes	21
Conoco Phillips		
	Pentanes	1
	Hexanes	1
	Iso-hexanes	2
	Heptanes	1
Crompton Witco Refined Products		
	PD-23	17
	PD-26	17
	PD-28	17
Exxonmobil Chemical Company		
	1520 Naphtha	1
	2024 Naphtha	9
	Aromatic 100 Fluid	22
	Aromatic 150 Fluid	23
	Aromatic 200 Fluid	24

Manufacturer		
	Trade Name	BIN #
Exxonmobil Chemical Company (continued)		
	Exxsol® D110 Fluid	16
	Exxsol® D130 Fluid	16
	Exxsol® D3135 Naphtha	6
	Exxsol® D40 Fluid	11
	Exxsol® D80 Fluid	11
	Exxsol® D95 Fluid	N/A*
	Exxsol® DSP 75/100 Naphtha	1
	Exxsol® DSP 115/145 Naphtha	6
	Exxsol® Hexane Fluid	2
	Exxsol® Heptane Fluid	2
	Exxsol® Methylpentane Naphtha	2
	Isopar® C Fluid	7
	Isopar® E Fluid	7
	Isopar® G Fluid	7
	Isopar® H Fluid	12
	Isopar® K Fluid	12
	Isopar® K Naphtha	12
	Isopar® L Fluid	11
	Isopar® M Fluid	16
	Isopar® V Fluid	16
	Norpar® 12 Fluid	12
	Norpar® 13 Fluid	12
	Norpar® 14 Fuid	17
	Norpar® 15 Fluid	17
	OMS	12
	RS Naphtha	5
	Varsol® 1 Fluid	15
	Varsol® 1 Naphtha	15
	Varsol® 110 Fluid	20
	Varsol® 140 Naphtha	15
	Varsol® 18 Fluid	14
	Varsol® 18 Naphtha	9
	Varsol® 3135 Naphtha	10
	Varsol® DX 140 Naphtha	14
	Xylenes	21
Flint Hills Resources		
	Sure-Sol® 100	22
	Sure-Sol® 150	23
	Sure-Sol® 150ND	23
	Xylenes	21
Gary-Williams Energy Corporation		
	100W	15
Marathon Ashland Petroleum LLC		
	90 Solvent	6
	142 Solvent	11
	Kwik-Dri®	6
	Lacolene®	6
	Low Odor Base Solvent®	16

Manufacturer		
	Trade Name	BIN #
Marathon Ashland Petroleum LLC (continued)		
	Mineral Spirits Rule 66	11
	Non-Exempt Mineral Spirits	15
	VM&P Naphtha	6
Penreco		
	Conosol® 215	16
	Conosol® 260	16
	Conosol® 340	16
	Conosol® 38V	16
	Conosol® 46V	16
	Conosol® 50V	16
	Conosol® 90	11
	Conosol® C-145	13
	Conosol® C-170	13
	Conosol® C-200	18
	Conosol® HDW	16
	Drakesol® 165	11
	Drakesol® 205	16
	Drakesol® 220	16
	Drakesol® 260	16
	Drakesol® 305	16
	Magiesol® 38LX	13
	Magiesol® 40	11
	Magiesol® 44	16
	Magiesol® 47	16
	Magiesol® 47LX	18
	Magiesol® 52	16
	Magiesol® 55LX	16
	Magiesol® 60	16
	Magiesol® 65LX	16
	Penreco® 144ES	14
	Penreco® 150-B	15
	Penreco® 170ES	14
	Penreco® LVT200	18
Sasol North America, Incorporated		
	C1316 Paraffin	17
	LINPAR® 1416-V Paraffin	17
	LPA® Solvent	11
	LPA®-142 Solvent	11
	LPA®-150 Solvent	11
	LPA®-170 Solvent	11
	LPA®-210 Solvent	16
	LPA®-210 Solvent	16
	MR Solvent	15
	ODC® Solvent	11
	ODC®-15 Solvent	15
	Sasol® 47 Solvent	16
Shell Chemicals		
	Heptane - Cotton Valley	1

Manufacturer		
	Trade Name	BIN #
Shell Chemicals (continued)		
	Heptane – Lemont	2
	SHELLSOL® 15	15
	SHELLSOL® 16	15
	SHELLSOL® 7EC	14
	SHELLSOL® 9	15
	SHELLSOL® A100	22
	SHELLSOL® A150	23
	SHELLSOL® B HT	1
	SHELLSOL® D38	6
	SHELLSOL® D40	11
	SHELLSOL® D43	11
	SHELLSOL® D60	11
	SHELLSOL® D80	11
	SHELLSOL® OMS	12
	SHELLSOL® TC	7
	SHELLSOL® W HT	6
	VM&P Naphtha	6
Whitaker Oil Company		
	142 Flash Solvent (D-60)	11
	Aromatic 100	22
	Aromatic 150	23
	Heptane	2
	Hexane	1
	LPA® 142 Solvent	11
	LPA® 170 Solvent	11
	LPA® 210 Solvent	16
	LPA® Solvent	11
	Mineral Spirits (D-38)	6
	Mineral Spirits, Odorless	12
	Mineral Spirits, Rule 66 (D-40)	11
	Rubber Solvent	4
	VM&P Naphtha HT	6
	Xylenes	21

*No Bin number needed; report only Trade Name and Manufacturer.

REACTIVITY BIN NUMBERS FOR ALIPHATIC AND AROMATIC HYDROCARBON SOLVENTS

If hydrocarbon solvents (e.g., mineral spirits, Stoddard Solvent, VM&P naphtha) are ingredients in your product, your solvent supplier should be able to tell you what the BIN number is for the solvent. The BIN numbers are defined as follows:

Aliphatic Hydrocarbon Solvents

Bin	Average Boiling Point*** (degrees F)	Criteria	MIR Value
1	80-205	Alkanes (< 2% Aromatics)	1.42
2	80-205	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.31
3	80-205	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.63
4	80-205	Alkanes (2 to < 8% Aromatics)	1.47
5	80-205	Alkanes (8 to 22% Aromatics)	1.56
6	>205-340	Alkanes (< 2% Aromatics)	1.17
7	>205-340	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.03
8	>205-340	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.44
9	>205-340	Alkanes (2 to < 8% Aromatics)	1.44
10	>205-340	Alkanes (8 to 22% Aromatics)	1.98
11	>340-460	Alkanes (< 2% Aromatics)	0.70
12	>340-460	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.62
13	>340-460	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	0.86
14	>340-460	Alkanes (2 to < 8% Aromatics)	0.99
15	>340-460	Alkanes (8 to 22% Aromatics)	1.57
16	>460-580	Alkanes (< 2% Aromatics)	0.52
17	>460-580	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.48
18	>460-580	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	0.60
19	>460-580	Alkanes (2 to < 8% Aromatics)	0.66
20	>460-580	Alkanes (8 to 22% Aromatics)	0.95

***Average Boiling Point = (Initial Boiling Point + Dry Point) / 2

Aromatic Hydrocarbon Solvents

Bin	Boiling Range (degrees F)	Criteria	MIR Value
21	280-290	Aromatic Content (≥98%)	7.64
22	320-350	Aromatic Content (≥98%)	7.60
23	355-420	Aromatic Content (≥98%)	6.85
24	450-535	Aromatic Content (≥98%)	3.82