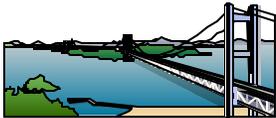
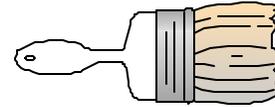
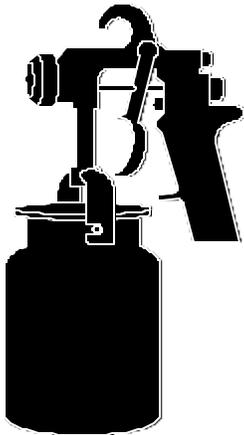


2001 Architectural Coatings Survey



California Environmental Protection Agency

Air Resources Board

TABLE OF CONTENTS

2001 ARCHITECTURAL COATINGS SURVEY

SECTION AND TITLE	PAGE
I. PART A – SURVEY FORMS AND INSTRUCTIONS	iii
• Reasons For Not Completing Survey Form	iv
• Confidential Information Submittal Form	v
• Survey Forms – Brief Description	vi
• Submitting Survey Forms or Data	vii
• Survey Forms and Instructions	1 - 8
II. PART B – SUPPLEMENTAL INFORMATION	9
• Coating Category Definitions	10 - 15
• Bituminous and Concrete Coatings Information	16
• VOC Calculations and Conversion Factors	17 - 18
• Reactivity Bin Numbers for Aliphatic and Aromatic Hydrocarbon Solvents	19
• U.S. Resident Population	20
III. PART C – EXAMPLE OF COMPLETED SURVEY	21 - 34

SUBMITTAL OF FORMS

Please return the completed survey to the following address:

Regular Mail

California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
ATTN: SSD / Measures Assessment Branch
Architectural Coatings Survey

Overnight

California EPA Headquarters Building
Air Resources Board (6th Floor)
1001 I Street
Sacramento, CA 95814
ATTN: SSD / Measures Assessment Branch
Architectural Coatings Survey

ELECTRONIC SUBMITTAL OPTIONS

Electronic submittal options are available. Details can be obtained by contacting the ARB or by visiting our web site at “www.arb.ca.gov/coatings/arch/survey/2001/survey.htm.” Additional survey packages can also be downloaded from this site.

QUESTIONS

If you have any questions or other requests please contact any of the following staff:

Name	Phone	Email
Jim Nyarady, Manager	916-322-8273	jnyarady@arb.ca.gov
Mike Jaczola, Survey Lead	916-324-8178	mjaczola@arb.ca.gov
Cheryl Young	916-324-8018	cyoung@arb.ca.gov
Christian Hurley	916-324-8181	churley@arb.ca.gov
Monique Davis	916-324-8182	mdavis@arb.ca.gov

2001 ARCHITECTURAL COATINGS SURVEY

PART A
SURVEY FORMS
AND
INSTRUCTIONS

DUE DATE: October 31, 2001

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

REASONS FOR NOT COMPLETING THE SURVEY FORM

(Please submit this form if you are not completing the survey.)

Company Name:		Web Site:	
Division:			
Address:			
City:	State:	Zip:	
Contact Person:		Title:	
Phone:	FAX:	Email:	

We are not completing the ARB's 2001 Architectural Coating survey because (check one):

- We are not a paint manufacturer/importer/distributor.

- We are a paint distributor and the manufacturer of products "manufactured for" us or "distributed by" us is completing the survey. That manufacturer is _____

- We are a parent/holding company of a paint manufacturer/importer/distributor and that subsidiary manufacturer/importer/distributor is completing the survey. That subsidiary manufacturer/importer/distributor is _____

- We are a paint manufacturer/importer/distributor, but our parent/holding company is completing the survey for us. That parent/holding company is _____

- We are a paint manufacturer/importer/distributor, but we did not have sales of architectural coatings in California in 2000.

- Other (Please explain):

Signature:	Date:
------------	-------

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

CONFIDENTIAL INFORMATION SUBMITTAL FORM

If you wish to designate any information contained in your survey data as **CONFIDENTIAL INFORMATION**, please provide the data requested below and return it with your completed survey forms.

In accordance with Title 17, California Code of Regulations (CCR), sections 91000 to 91022, and the California Public Records Act (Government Code Section 6250 et seq.), the information that a company provides to the Air Resources Board (ARB) may be released (1) to the public upon request, except trade secrets which are not emissions data or other information which is exempt from disclosure or the disclosure of which is prohibited by law; and (2) to the Federal Environmental Protection Agency (EPA), which protects trade secrets as provided in Section 114(c) of the Clean Air Act and amendments thereto (42 USC 7401 et seq.) and in federal regulation; and (3) to other public agencies provided that those agencies preserve the protections afforded information which is identified as a trade secret, or otherwise exempt from disclosure by law (Section 39660(e)).

Trade secrets as defined in Government Code Section 6254.7 are not public records and therefore will not be released to the public. However, the California Public Records Act provides that air pollution emission data are always public records, even if the data comes within the definition of trade secrets. On the other hand, the information used to calculate information is a trade secret.

If any company believes that any of the information it may provide is a trade secret or otherwise exempt from disclosure under any other provision of law, **it must identify the confidential information as such at the time of submission to the ARB and must provide the name, address, and telephone number of the individual to be consulted**, if the ARB receives a request for disclosure or seeks to disclose the data claimed to be confidential. The ARB may ask the company to provide documentation of its claim of trade secret or exemption at a later date. Data identified as confidential will not be disclosed unless the ARB determines, in accordance with the above referenced regulations, that the data do not qualify for a legal exemption from disclosure. The regulations establish substantial safeguards before any such disclosure.

In accordance with the provisions of Title 17, California Code of Regulations, sections 91000 to 91022, and the California Public Records Act (Government Code Sections 6250 et seq.),

Company Name : _____ declares that only those portions specifically identified and submitted in response to the California Air Resources Board's information request on the survey are confidential "**trade secret**" information, and requests that it be protected as such from public disclosure. All inquiries pertaining to the confidentiality of this information should be directed to the following person:

Name (please print): _____

Signature: _____

Title: _____

Telephone #: _____

Company Address: _____

SURVEY FORMS – Brief Description Reporting Year 2000

FORM 1 – Company Information

Page 1

Page 2 – Instructions
for FORM 1

There are three key forms to this survey. They consist of FORM 1 (Page 1), FORM 2 (Page 3), and FORM 3 (Page 7). The remaining pages are abbreviated instructions for each form. Additional instructions and supplemental information can be found in the survey booklet.

- FORM 1 and instructions consist of pages 1 and 2. Each company/respondent to this survey will complete one FORM 1.
- FORM 2 and instructions consist of pages 3 through 6. Complete one FORM 2 for each product or group of products.

FORM 2 – Product Information

Page 3

Page 4 – Instructions for
FORM 2

Page 5 – Instructions for
FORM 2, continued
(Coating Category Codes)

Page 6 – Instructions for
FORM 2, continued
(Substrate / Resin Codes /
Sales Volume)

FORM 3 – Ingredient Information

Page 7

Page 8 – Instructions
for FORM 3

- FORM 3 and instructions consist of pages 7 and 8. Complete one FORM 3 for each product or group of products.
- **NOTE:** For each FORM 2 there must be a corresponding FORM 3. For each FORM 3 there must be a corresponding FORM 2.

Submitting Survey FORMS or Data

Option 1: Along with your single FORM 1, assemble all FORM 2's and corresponding FORM 3's sequentially by entry #'s (see FORMS page 4 instructions) as separate stacks.

FORM 1

FORM 2

FORM 3

Option 2: Along with your single FORM 1, assemble each FORM 2 and corresponding FORM 3 sequentially by entry #'s (see FORMS page 4 instructions) as a single stack.

FORM 1

Option 3: Submitting Data Electronically.

Survey data may be submitted electronically to the Air Resources Board. The file formats allowed are as follows:

1. ASCII delimited file
2. Microsoft Excel
3. Microsoft Access

To obtain additional information on file formats visit
["www.arb.ca.gov/coatings/arch/survey/2001/survey.htm"](http://www.arb.ca.gov/coatings/arch/survey/2001/survey.htm)

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 1
Company Information – Reporting Year 2000
(Instructions for completing FORM 1: See back side)

Company Name:		Web Site:	
Division:			
Address:			
City:		State:	
		Zip:	
Contact Person:		Title:	
Phone:		FAX:	
		Email:	
Type of Business (check all that apply) <input type="checkbox"/> Manufacturer <input type="checkbox"/> Importer <input type="checkbox"/> Retail Distributor <input type="checkbox"/> Wholesale Distributor <input type="checkbox"/> Private Label Manufacturer <input type="checkbox"/> Toll Manufacturer <input type="checkbox"/> Other (Specify):		Company – Gross Annual Receipts (\$) <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 500,000 <input type="checkbox"/> Between 500,000 and < 1 million <input type="checkbox"/> Between 1 and < 2 million <input type="checkbox"/> Between 2 and < 5 million <input type="checkbox"/> Between 5 and < 10 million <input type="checkbox"/> Between 10 and < 100 million <input type="checkbox"/> Between 100 million and < 1 billion <input type="checkbox"/> Greater than or equal to 1 billion	
Company Marketing Classification (check all that apply) <input type="checkbox"/> International <input type="checkbox"/> National <input type="checkbox"/> Regional (e.g., western U.S.): <input type="checkbox"/> California Statewide <input type="checkbox"/> California Local		Company – California Only Gross Annual Receipts (\$) <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 500,000 <input type="checkbox"/> Between 500,000 and < 1 million <input type="checkbox"/> Between 1 and < 2 million <input type="checkbox"/> Between 2 and < 5 million <input type="checkbox"/> Between 5 and < 10 million <input type="checkbox"/> Between 10 and < 100 million <input type="checkbox"/> Between 100 million and < 1 billion <input type="checkbox"/> Greater than or equal to 1 billion	
Company Organization and/or Ownership Parent Company Name:		Employees <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 10 <input type="checkbox"/> Between 10 and < 100 <input type="checkbox"/> Between 100 and < 250 <input type="checkbox"/> Between 250 and < 500 <input type="checkbox"/> Greater than or equal to 500	
Address:			
City:			
State:			
Zip:			
Contact Person:		Employees – California Only <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 10 <input type="checkbox"/> Between 10 and < 100 <input type="checkbox"/> Between 100 and < 250 <input type="checkbox"/> Between 250 and < 500 <input type="checkbox"/> Greater than or equal to 500	
Phone #:			
How did you determine California Year 2000 Sales Volume? (check all that apply)			
<input type="checkbox"/> Direct California retail sales <input type="checkbox"/> Direct California wholesale distribution <input type="checkbox"/> Prorated from national retail sales <input type="checkbox"/> Prorated from national wholesale distribution <input type="checkbox"/> Other (explain):			

CERTIFICATION

I hereby certify that, to the best of my knowledge and belief, all information entered on the Company Information Form (Form 1), Product Information Form (Form 2), and Ingredient Information Form (Form 3) is complete and accurate.

Name:	Title:
Signature:	Date:

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 1 Instructions Company Information – Reporting Year 2000

The information requested on FORM 1 will assist the California Air Resources Board in characterizing the types of businesses that are included in the survey as required by State law.

This survey is primarily intended for paint manufacturers who distribute architectural coatings in California. The reporting year is 2000. 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.

Company Name: Enter the name of your company. If you are completing this survey for more than one company, please specify.

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

Address: Enter mail address of company name.

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.

Fax: Fax 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.

How did you determine California Year 2000 Sales Volume?: Identify the method used to determine California sales volume.

Gross Annual Receipts: Check the box which identifies the gross annual receipts generated by your company. This means the total income of the company before expenses are deducted.

Gross Annual Receipts - California: If available, check the box which identifies the gross annual receipts generated by your company in California. This means the portion of total income derived from California sales.

Employees: Check the box which indicates the total number of employees (including part-time and temporary staff) of the company.

Employees - California: If appropriate, check the box which identifies the number of employees in California (including part-time and temporary staff).

Certification: Please have an authorized company officer or corporate counsel certify that the Company Information (FORM 1), Product Information (FORM 2), and Ingredient Information (FORM 3) is complete and accurate.

FORM 2
Product Information – Reporting Year 2000
(Instructions for completing FORM 2: See FORMS pages 4 through 6)

Entry # :		Note: This entry # must also appear on your corresponding FORM 3.
Product Code:		
Product Name:		

Physical & Other Data							
# of Products Grouped	Coating Category Code	Substrate Code(s)	Interior, Exterior, or Dual	Vehicle Technology	Resin Code	Single or Multi-Component	Coating Density*
	1-51	0-18	I, E, D	SB or WB	1-19	S or M	lbs/gal
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*	Volume Percent of Exempts*	
%	%	%	%	%	%	%	

		How were VOC Actual and Regulatory determined?	Report Only If Grouping Products			
			Minimum		Maximum	
VOC Actual*	VOC Regulatory* (Less Water)	<input type="checkbox"/> U.S. EPA Method 24 <input type="checkbox"/> Formulation Data	VOC Actual	VOC Regulatory (Less Water)	VOC Actual	VOC Regulatory (Less Water)
grams/liter	grams/liter		grams/liter	grams/liter	grams/liter	grams/liter

2000 California Sales in Gallons		
Container Sizes One Quart or Less (gallons)	Container Sizes Larger Than One Quart (gallons)	Total Gallons (quart or less + > quart)

* SWA – Report “Sales Weighted Average” if grouping products.

Comments:

Page _____ of _____ Enter the current page # out of the total pages submitted.
NOTE: Each FORM 2 must have a corresponding FORM 3.

Photocopy this page as necessary

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 2 Instructions Product Information – Reporting Year 2000

Entry # : Each FORM 2 completed must be numbered sequentially, beginning with number “1.” This entry # must also appear on your corresponding FORM 3.

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

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

Physical & Other Data

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);
- (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: See FORMS page 5. Category definitions are on pages 10 through 15 of the survey booklet.

Substrate Code(s): See FORMS page 6. If your product is for a specific substrate or substrates enter code(s). A substrate code must be entered for all products in the coating categories marked with an asterisk (*) on FORMS page 5. If no code is entered, a response of “All Substrates” will be assumed.

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

Resin Code: See FORMS page 6.

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. Is generally cleaned up with solvent.

Water-borne: A coating that contains 50 percent or more water by weight in its volatile fraction. Is generally cleaned up with water.

Note: The definitions above are for general guidance only.

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 page 18 of the survey booklet for sample calculation of SWA.

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

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

Weight Percent of Volatile Material: Weight of volatile material (VOC+water+exempts) as percent of total coating weight. See page 15 of the survey booklet for definition 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. See page 11 and 15 of the survey booklet for definition.

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 “VOC Calculations” page 17.

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

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 “VOC Calculations” page 17.

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

Report Only If Grouping products: Provide the minimum and maximum VOC Actual and VOC Regulatory for the products grouped.

2000 California Sales in Gallons: See FORMS page 6.

FORM 2 Instructions, Continued

Product Information – Coating Category Codes

Category	Code	Category	Code
Antenna	1	Nonflat – Low Gloss	26
Antifouling	2	Nonflat – Medium gloss	27
Bituminous Roof	3	Nonflat – High Gloss	28
Bituminous Roof Primer	4	Pre-Treatment Wash Primer	29
Bond Breakers	5	Primer / Sealer / Undercoater *	30
Clear Brushing Lacquer	6	Quick Dry Enamel	31
Concrete Curing Compounds	7	Quick Dry Primer / Sealer / Undercoater *	32
Dry Fog	8	Recycled	33
Faux Finishing	9	Roof	34
Fire Resistive	10	Rust Preventative	35
Fire Retardant – Clear	11	Sanding Sealers (other than lacquer sanding sealers)	36
Fire Retardant – Opaque	12	Shellacs – Clear	37
Flat	13	Shellacs – Opaque	38
Floor *	14	Specialty Primer / Sealer / Undercoater *	39
Flow	15	Stains – Clear / Semitransparent *	40
Form Release Compounds	16	Stains – Opaque *	41
Graphic Arts (Sign Paints)	17	Swimming Pool	42
High Temperature	18	Swimming Pool Repair & Maintenance	43
Industrial Maintenance *	19	Temperature Indicator Safety	44
Lacquers (including lacquer sanding sealers)	20	Traffic Marking	45
Low Solids	21	Varnishes – Clear	46
Magnesite Cement	22	Varnishes – Semitransparent	47
Mastic Texture	23	Waterproofing Sealers *	48
Metallic Pigmented	24	Waterproofing Concrete / Masonry Sealers	49
Multi-Color	25	Wood Preservatives	50
* - Substrate Type Required (See FORMS page 6). For remaining categories: If your product is for a specific substrate enter code. If left blank “All Substrates” will be assumed.		Other (specify in comment area of FORM 2)	51
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 (2)	Roof, Bituminous Roof or Primer, Primer / Sealer / Undercoater, Waterproofing Sealer, Waterproofing Concrete / Masonry Sealers		
Calcimine Recoater	2. See page 16 of the survey booklet for additional guidance regarding these national rule categories.	Flat or Specialty Primer / Sealer / Undercoater	
Chalkboard Resurfacers		Industrial Maintenance	
Concrete Curing and Sealing (2)		Concrete Curing Compounds or Waterproofing Concrete / Masonry Sealers	
Concrete Protective (2)		Waterproofing Concrete / Masonry Sealers	
Concrete Surface Retarder (2)	Other		
Conversion Varnish	Varnishes		
Extreme High Durability	Industrial Maintenance		
Heat Reactive	Industrial Maintenance (generally an OEM coating)		
Impacted Immersion	Industrial Maintenance		
Nonferrous Ornamental Metal Lacquers and Surface Protectants	Lacquers 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.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 2 Instructions, Continued
Product Information – Substrate / Resin Codes / 2000 Sales Volume

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 Codes					
Resin	Code	Resin	Code	Resin	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		
Epoxy	7	Styrene-butadiene	14		

2000 California Sales in Gallons

Enter the California sales of the coating, in gallons, for reporting year 2000. Sales can be determined from one or more of the following:

1. Direct California retail sales
2. Direct California wholesale distribution
3. Prorated from national retail sales
4. Prorated from national wholesale distribution
5. Other (explain):

Report sales volume for two classes of container sizes:

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

Container Sizes Larger Than One Quart: Enter California sales volume in gallons.

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

Total Gallons: Enter total California sales in gallons. Combine quart or less volume with larger than quart volume.

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 on page 20 of the survey booklet.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 3 Instructions Ingredient Information – Reporting Year 2000

FORM 3 requests ingredient information about single or grouped products. If you are grouping products, FORM 3 will represent your sales leader or best representative product of the group. In this table provide all volatile ingredients which are part of the product formulation. Complete one FORM 3 for each FORM 2 completed.

For grouped products, report the ingredients of the sales leader in the group.

Entry # From FORM 2: Enter the Entry # from corresponding FORM 2.

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., petroleum distillates) identify the trade name and manufacturer / primary supplier. If available, provide the reactivity bin number for distillates. See survey booklet page 19 for more information.

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.

Weight % (of total material): Enter the percent by weight to the nearest 0.1% for each ingredient in the final product. If the volatile 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, resins, or biocides down to 0.1 weight %. In this case identify the trade name, manufacturer, and weight percent of mixture.

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.*

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

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

Water: Enter the weight percent water.

Solids: Enter the weight percent solids.

Total of All Ingredients: 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.

Comments: Enter any information that will help clarify entries made for FORM 3.

2001 ARCHITECTURAL COATINGS SURVEY

PART B

SUPPLEMENTAL INFORMATION

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

COATING CATEGORY DEFINITIONS

Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

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 can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.

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. 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.

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.

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.

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.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

Concrete Curing Compound: A coating labeled and formulated for application to freshly poured concrete to retard the evaporation of water.

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 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.

Fire-Resistive Coating: An opaque coating labeled and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistive coating shall be tested in accordance with ASTM Designation E 119-98.

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, and other horizontal surfaces which may be subject to foot traffic.

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 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).

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

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 or professional use only (“Not for residential use” or Not intended for residential use”).

- 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;
- Repeated exposure to temperatures above 121°C (250°F);
- Repeated (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.

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 containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95.

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.

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 (Reapproved 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 (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).

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).

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.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

Post-Consumer Coating: A finished coating that would have been disposed of in a landfill, having completed its usefulness to a consumer, and does not include manufacturing wastes.

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: A coating labeled and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.

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.

Recycled Coating: An architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.

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 exclusively for application to roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.

Rust Preventative Coating: A coating formulated exclusively for nonindustrial use to prevent the corrosion of metal surfaces.

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.

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

Secondary Coating (Rework): A fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

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

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

Specialty Primer, Sealer, and Undercoater: A coating labeled for blocking stains, for fire-damaged substrates, for smoke-damaged substrates, for water-damaged substrates, for excessively chalky substrates, and that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces, or to block stains. An excessively chalky surface is one that is defined as having a chalk rating of four or less as determined by ASTM Designation D 4214-98.

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.

Swimming Pool Coating: A coating labeled and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.

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.

Undercoater: A coating labeled and formulated to provide a smooth surface for subsequent coatings.

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);

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

- 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);
- 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” page 17 and 18.

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

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.

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.

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

BITUMINOUS AND CONCRETE COATINGS INFORMATION

If you sold any of the following types of coatings in California in Reporting Year 2000:

- Bituminous dampproofing or foundation coatings sold in containers larger than 16 fluid ounces;
- Bituminous tank and pipe coatings sold in containers larger than 16 fluid ounces;
- Bituminous do-it-yourself driveway repair coatings, sealers, dressings, or crack fillers, sold in containers larger than 16 fluid ounces;
- Bituminous roof cement, flashing compound, adhesive, patching compound, or mastics, sold in containers larger than 16 fluid ounces (bituminous roof coatings and bituminous roof primers are reported as discrete categories);
- Concrete curing and sealing coatings (as defined in the U.S. EPA's National Architectural Coating rule);
- Concrete protective coatings (as defined in the U.S. EPA's National Architectural Coating rule);
- Concrete surface retarders (as defined in the U.S. EPA's National Architectural Coating rule).

Please either:

- (1) Classify these as one of the 50 coating categories in the survey (see page 5 of FORMS) and specify the coating type in the comments section of FORM 2 (bituminous roof coatings and bituminous roof primers are reported as discrete categories); *OR*
- (2) Classify these as "Other" and specify the coating type in the comments section of FORM 2.

Do not report paving asphalt, emulsified asphalt, or cutback asphalt used in building or repairing highways, streets, roads, parking lots, driveways, runways, airfields, sanitary landfills, extruded curbs, and impounded liners.

If you have any questions, please contact Cheryl Young at (916) 324-8018.

2001 California Architectural and Industrial Maintenance Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

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 FORM 2 (Product Information): 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.

$$SWA = \frac{((Value_1 \times Sales_1) + (Value_2 \times Sales_2) + (Value_n \times Sales_n))}{(Sales_1 + Sales_2 + Sales_n)}$$

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

REACTIVITY BIN NUMBERS FOR ALIPHATIC AND AROMATIC HYDROCARBON SOLVENTS

(From the Air Resources Board's Aerosol Coating Products Regulation)

Aliphatic Hydrocarbon Solvents

Bin	Average Boiling Point*** (degrees F)	Criteria	MIR Value
1	80-205	Alkanes (< 2% Aromatics)	2.08
2	80-205	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.59
3	80-205	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	2.52
4	80-205	Alkanes (2 to < 8% Aromatics)	2.24
5	80-205	Alkanes (8 to 22% Aromatics)	2.56
6	>205-340	Alkanes (< 2% Aromatics)	1.41
7	>205-340	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.17
8	>205-340	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.65
9	>205-340	Alkanes (2 to < 8% Aromatics)	1.62
10	>205-340	Alkanes (8 to 22% Aromatics)	2.03
11	>340-460	Alkanes (< 2% Aromatics)	0.91
12	>340-460	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.81
13	>340-460	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.01
14	>340-460	Alkanes (2 to < 8% Aromatics)	1.21
15	>340-460	Alkanes (8 to 22% Aromatics)	1.82
16	>460-580	Alkanes (< 2% Aromatics)	0.57
17	>460-580	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.51
18	>460-580	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	0.63
19	>460-580	Alkanes (2 to < 8% Aromatics)	0.88
20	>460-580	Alkanes (8 to 22% Aromatics)	1.49

***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%)	7.37
22	320-350	Aromatic Content (≥98%)	7.51
23	355-420	Aromatic Content (≥98%)	8.07
24	450-535	Aromatic Content (≥98%)	5.00

Source: Title 17, California Code of Regulations, Article 3, Aerosol Coating Products, Section 94701

Additional details regarding the Aerosol Coating Products Regulation can be found at the following web site:

“www.arb.ca.gov/regact/conspro/aerocoat/aerocoat.htm”

Specific information regarding the table on this page can be found in Chapter VI, Page 57, of the Staff Report which is also available at the web site identified above.

2001 California Architectural and Industrial Maintenance Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

U.S. RESIDENT POPULATION (As of April 1, 2000)

United States Total = 281,422,000

STATE	POPULATION	%	RANK
Alabama	4,447,000	1.6	23
Alaska	627,000	0.2	48
Arizona	5,131,000	1.8	20
Arkansas	2,673,000	0.9	33
California	33,872,000	12.0	1
Colorado	4,301,000	1.5	24
Connecticut	3,406,000	1.2	29
Delaware	784,000	0.3	45
District of Columbia	572,000	0.2	(X)
Florida	15,982,000	5.7	4
Georgia	8,186,000	2.9	10
Hawaii	1,212,000	0.4	42
Idaho	1,294,000	0.5	39
Illinois	12,419,000	4.4	5
Indiana	6,080,000	2.2	14
Iowa	2,926,000	1.0	30
Kansas	2,688,000	1.0	32
Kentucky	4,042,000	1.4	25
Louisiana	4,469,000	1.6	22
Maine	1,275,000	0.5	40
Maryland	5,296,000	1.9	19
Massachusetts	6,349,000	2.3	13
Michigan	9,938,000	3.5	8
Minnesota	4,919,000	1.7	21
Mississippi	2,845,000	1.0	31
Missouri	5,595,000	2.0	17

STATE	POPULATION	%	RANK
Montana	902,000	0.3	44
Nebraska	1,711,000	0.6	38
Nevada	1,998,000	0.7	35
New Hampshire	1,236,000	0.4	41
New Jersey	8,414,000	3.0	9
New Mexico	1,819,000	0.6	36
New York	18,976,000	6.7	3
North Carolina	8,049,000	2.9	11
North Dakota	642,000	0.2	47
Ohio	11,353,000	4.0	7
Oklahoma	3,451,000	1.2	27
Oregon	3,421,000	1.2	28
Pennsylvania	12,281,000	4.4	6
Rhode Island	1,048,000	0.4	43
South Carolina	4,012,000	1.4	26
South Dakota	755,000	0.3	46
Tennessee	5,689,000	2.0	16
Texas	20,852,000	7.4	2
Utah	2,233,000	0.8	34
Vermont	609,000	0.2	49
Virginia	7,079,000	2.5	12
Washington	5,894,000	2.1	15
West Virginia	1,808,000	0.6	37
Wisconsin	5,364,000	1.9	18
Wyoming	494,000	0.2	50

X = Not Applicable

Source: U.S. Census Bureau

<http://www.census.gov/statab/ranks/rank01.txt>

2001 ARCHITECTURAL COATINGS SURVEY

PART C

EXAMPLE OF COMPLETED SURVEY

2001 California Architectural and Industrial Maintenance Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

Product Example #3 – Multicomponent Solventborne Coating

Entry #3

# of Products Grouped:	3	
Coating Code:	19	(Industrial Maintenance)
Substrate Code(s):	10	(Metal)
Interior/Exterior/Dual:	D	(Dual)
Vehicle Technology:	SB	(Solventborne)
Resin Code:	7	(Epoxy)
Single or Multi-Component:	M	(Multi-Component)
Coating Density, SWA:	11.1	(product 1 = 10.5 lbs/gal; product 2 = 11.5 ; product 3 = 11.0)
Weight Percent of Solids, SWA:	69.9	(product 1 = 68%; product 2 = 71%; product 3 = 70%)
Wt. Percent of Volatile Matl, SWA:	30.1	(product 1 = 32%; product 2 = 29%; product 3 = 30%)
Volume Percent of Solids, SWA:	65.1	(product 1 = 64%; product 2 = 66%; product 3 = 65%)
VOC Actual, SWA:	349	(product 1 = 360 g/l; product 2 = 340 g/l; product 3 = 350 g/l)
VOC Regulatory, SWA:	349	(product 1 = 360 g/l; product 2 = 340 g/l; product 3 = 350 g/l)
Sales Information (> 1 qt):	2,300	(product 1 = 500 gallons; product 2 = 800; product 3 = 1000)

Notes:

1. "SWA" = Sales Weighted Average
2. VOC contents for multi-component coatings are as mixed, applied or fully reacted.

Sample Calculation:

$$\text{VOC Regulatory}^{\text{SWA}} = \frac{((\text{Value}_1 \times \text{Sales}_1) + (\text{Value}_2 \times \text{Sales}_2) + (\text{Value}_n \times \text{Sales}_n))}{(\text{Sales}_1 + \text{Sales}_2 + \text{Sales}_n)}$$

$$\text{VOC Regulatory}^{\text{SWA}} = \frac{((360 \text{ g/l} \times 500 \text{ gals}) + (340 \text{ g/l} \times 800 \text{ gals}) + (350 \text{ g/l} \times 1000 \text{ gals}))}{(500 + 800 + 1000 \text{ gals})} = 349 \text{ g/l}$$

Where:

$Value_{(1,2,...n)}$	=	VOC Regulatory for products 1,2,...n
$Sales_{(1,2,...n)}$	=	Sales for products 1,2,...n

2001 California Architectural and Industrial Maintenance Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

Product Example #4 – Single Component Low Solids Coating

Entry #4

# of Products Grouped:	1	
Coating Code:	21	(Low Solids)
Substrate Code(s):	13	(Wood)
Interior/Exterior/Dual:	I	(Interior)
Vehicle Technology:	WB	(Waterborne)
Resin Code:	15	(Urethane, Polyurethane)
Single or Multi-Component:	S	(Single Component)
Coating Density:	8.3	
Weight Percent of Solids:	8.0	
Wt. Percent of Volatile Matl:	92.0	
Wt. Percent of Water:	89.5	
Volume Percent of Solids:	7.5	
Volume Percent of Water:	90.0	
VOC Actual:	25	
VOC Regulatory:	25	
Sales Information (< 1 qt):	200	
Sales Information (> 1 qt):	500	
Sales Information (total):	700	

For a low solids coating, VOC Regulatory is calculated in a different manner. The VOC Regulatory value for a low solids coatings is the same as the VOC Actual value, as shown below:

$$\text{VOC}_{\text{Actual}} = \frac{W_{\text{vm}} - W_{\text{w}} - W_{\text{e}}}{V_{\text{c}}}$$

$$\text{VOC}_{\text{Regulatory(LowSolids)}} = \frac{W_{\text{vm}} - W_{\text{w}} - W_{\text{e}}}{V_{\text{c}}}$$

Where:

- W_{vm} = Total weight of volatile materials (VOC+water+exempt cmpds), in grams
=[Wt. % Volatiles, 92%]*[Coating Density, 8.3 lb/gal]*[454 grams/lb]*[1 gal]=3467 g
- W_{w} = Weight of water in the coating, in grams
=[Wt. % Water, 89.5%]*[Coating Density, 8.3 lb/gal]*[454 grams/lb]*[1 gal]=3373 g
- W_{e} = Weight of exempt compounds in the coating, in grams = 0 grams for this coating example
- V_{c} = Total volume of the coating, in liters = 1 gallon or 3.7854 liters for this coating example

$$\text{VOC}_{\text{Actual}} = \text{VOC}_{\text{Regulatory (Low Solids)}} = \frac{3467 \text{ g} - 3373 \text{ g} - 0 \text{ g}}{3.7854 \text{ liter}} = 25 \text{ g/l}$$

2001 California Architectural Coatings Survey		
Air Resources Board, P.O. Box 2815 - Sacramento, CA 95812 - Attention: Stationary Source Division, Measures Assessment Branch		
Phone: 916.324.8023	FAX: 916.324.8026	www.arb.ca.gov/coatings/arch/survey/2001/survey.htm

FORM 1
Company Information – Reporting Year 2000
(Instructions for completing FORM 1: See back side)

Company Name: Paintsales Company		Web Site: www.paintsales.com
Division: Architectural Div.		
Address: 12345 Main St.		
City: Anytown	State: CA	Zip: 12345-0000
Contact Person: Mr. John Doe		Title: Environmental Manager
Phone: (999) 999-9999	FAX: (999) 999-9998	Email: jdoe@paintsales.com
Type of Business (check all that apply) <input checked="" type="checkbox"/> Manufacturer <input type="checkbox"/> Importer <input type="checkbox"/> Retail Distributor <input checked="" type="checkbox"/> Wholesale Distributor <input type="checkbox"/> Private Label Manufacturer <input type="checkbox"/> Toll Manufacturer <input type="checkbox"/> Other (Specify):		Company – Gross Annual Receipts (\$) <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 500,000 <input type="checkbox"/> Between 500,000 and < 1 million <input type="checkbox"/> Between 1 and < 2 million <input type="checkbox"/> Between 2 and < 5 million <input checked="" type="checkbox"/> Between 5 and < 10 million <input type="checkbox"/> Between 10 and < 100 million <input type="checkbox"/> Between 100 million and < 1 billion <input type="checkbox"/> Greater than or equal to 1 billion
Company Marketing Classification (check all that apply) <input type="checkbox"/> International <input type="checkbox"/> National <input checked="" type="checkbox"/> Regional (e.g., western U.S.): Southwestern U.S. <input type="checkbox"/> California Statewide <input type="checkbox"/> California Local		Company – California Only Gross Annual Receipts (\$) <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 500,000 <input type="checkbox"/> Between 500,000 and < 1 million <input type="checkbox"/> Between 1 and < 2 million <input type="checkbox"/> Between 2 and < 5 million <input checked="" type="checkbox"/> Between 5 and < 10 million <input type="checkbox"/> Between 10 and < 100 million <input type="checkbox"/> Between 100 million and < 1 billion <input type="checkbox"/> Greater than or equal to 1 billion
Company Organization and/or Ownership Parent Company Name: Chemchem Corp.		Employees <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 10 <input type="checkbox"/> Between 10 and < 100 <input checked="" type="checkbox"/> Between 100 and < 250 <input type="checkbox"/> Between 250 and < 500 <input type="checkbox"/> Greater than or equal to 500
Address: 1111 First Avenue		
City: Bigtown		
State: NY		
Zip: 01234-0000		
Contact Person: Ms. Jane Doe		Employees – California Only <i>For Calendar Year 2000</i> <input type="checkbox"/> Less than 10 <input type="checkbox"/> Between 10 and < 100 <input checked="" type="checkbox"/> Between 100 and < 250 <input type="checkbox"/> Between 250 and < 500 <input type="checkbox"/> Greater than or equal to 500
Phone #: (000) 555-5555		
How did you determine California Year 2000 Sales Volume? (check all that apply) <input type="checkbox"/> Direct California retail sales <input checked="" type="checkbox"/> Direct California wholesale distribution <input type="checkbox"/> Prorated from national retail sales <input type="checkbox"/> Prorated from national wholesale distribution <input type="checkbox"/> Other (explain):		

CERTIFICATION

I hereby certify that, to the best of my knowledge and belief, all information entered on the Company Information Form (Form 1), Product Information Form (Form 2), and Ingredient Information Form (Form 3) is complete and accurate.

Name: John Smith	Title: Senior Counsel
Signature: X	Date: September 17, 2001

FORM 2
Product Information – Reporting Year 2000
(Instructions for completing FORM 2: See FORMS pages 4 through 6)

Entry # :	1	Note: This entry # must also appear on your corresponding FORM 3.
Product Code:	WX3000	
Product Name:	WALLCOAT	

Physical & Other Data							
# of Products Grouped	Coating Category Code	Substrate Code(s)	Interior, Exterior, or Dual	Vehicle Technology	Resin Code	Single or Multi-Component	Coating Density*
	1-51	0-18	I, E, D	SB or WB	1-19	S or M	lbs/gal
1	27	9, 13	I	WB	1	S	10.0
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*	Volume Percent of Exempts*	
%	%	%	%	%	%	%	
42.0	58.0	54.0	0.0	40.0	56.0	0.0	

				Report Only If Grouping Products			
				Minimum		Maximum	
VOC Actual*	VOC Regulatory* (Less Water)	How were VOC Actual and Regulatory determined? <input type="checkbox"/> U.S. EPA Method 24 <input checked="" type="checkbox"/> Formulation Data	VOC Actual	VOC Regulatory (Less Water)	VOC Actual	VOC Regulatory (Less Water)	
grams/liter	grams/liter		grams/liter	grams/liter	grams/liter	grams/liter	
48	109						

2000 California Sales in Gallons		
Container Sizes One Quart or Less (gallons)	Container Sizes Larger Than One Quart (gallons)	Total Gallons (quart or less + > quart)
1,000	50,000	51,000

* SWA – Report “Sales Weighted Average” if grouping products.

Comments:

FORM 2
Product Information – Reporting Year 2000
(Instructions for completing FORM 2: See FORMS pages 4 through 6)

Entry # :	2	Note: This entry # must also appear on your corresponding FORM 3.
Product Code:	PX3000	
Product Name:	PRIMERCOAT	

Physical & Other Data							
# of Products Grouped	Coating Category Code	Substrate Code(s)	Interior, Exterior, or Dual	Vehicle Technology	Resin Code	Single or Multi-Component	Coating Density*
	1-51	0-18	I, E, D	SB or WB	1-19	S or M	lbs/gal
2	30	3,9	D	SB	3	S	12,1
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*	Volume Percent of Exempts*	
%	%	%	%	%	%	%	
69.9	30.1	0.0	3.9	65.5	0.0	3.6	

				Report Only If Grouping Products			
				Minimum		Maximum	
VOC Actual*	VOC Regulatory* (Less Water)	How were VOC Actual and Regulatory determined?		VOC Actual	VOC Regulatory (Less Water)	VOC Actual	VOC Regulatory (Less Water)
grams/liter	grams/liter			grams/liter	grams/liter	grams/liter	grams/liter
380	395	<input type="checkbox"/> U.S. EPA Method 24 <input checked="" type="checkbox"/> Formulation Data		367	381	402	418

2000 California Sales in Gallons		
Container Sizes One Quart or Less (gallons)	Container Sizes Larger Than One Quart (gallons)	Total Gallons (quart or less + > quart)
0	55,000	55,000

* SWA – Report “Sales Weighted Average” if grouping products.

Comments:

FORM 2
Product Information – Reporting Year 2000
(Instructions for completing FORM 2: See FORMS pages 4 through 6)

Entry # :	3	Note: This entry # must also appear on your corresponding FORM 3.
Product Code:	MX5000	
Product Name:	IMCOAT	

Physical & Other Data							
# of Products Grouped	Coating Category Code	Substrate Code(s)	Interior, Exterior, or Dual	Vehicle Technology	Resin Code	Single or Multi-Component	Coating Density*
	1-51	0-18	I, E, D	SB or WB	1-19	S or M	lbs/gal
3	19	10	D	SB	7	M	11.1
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*	Volume Percent of Exempts*	
%	%	%	%	%	%	%	
69.9	30.1	0.0	0.0	65.1	0.0	0.0	

				Report Only If Grouping Products			
				Minimum		Maximum	
VOC Actual*	VOC Regulatory* (Less Water)	How were VOC Actual and Regulatory determined?		VOC Actual	VOC Regulatory (Less Water)	VOC Actual	VOC Regulatory (Less Water)
grams/liter	grams/liter			grams/liter	grams/liter	grams/liter	grams/liter
349	349	<input checked="" type="checkbox"/> U.S. EPA Method 24 <input type="checkbox"/> Formulation Data		340	340	360	360

2000 California Sales in Gallons		
Container Sizes One Quart or Less (gallons)	Container Sizes Larger Than One Quart (gallons)	Total Gallons (quart or less + > quart)
0	2,300	2,300

* SWA – Report “Sales Weighted Average” if grouping products.

Comments:

FORM 2
Product Information – Reporting Year 2000
(Instructions for completing FORM 2: See FORMS pages 4 through 6)

Entry # :	4	Note: This entry # must also appear on your corresponding FORM 3.					
Product Code:		LS1000					
Product Name:		LOSOLCOAT					
Physical & Other Data							
# of Products Grouped	Coating Category Code	Substrate Code(s)	Interior, Exterior, or Dual	Vehicle Technology	Resin Code	Single or Multi-Component	Coating Density*
	1-51	0-18	I, E, D	SB or WB	1-19	S or M	lbs/gal
1	21	13	I	WB	15	S	8.3
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*	Volume Percent of Exempts*	
%	%	%	%	%	%	%	
8.0	92.0	89.5	0.0	7.5	90.0	0.0	
				Report Only If Grouping Products			
				Minimum		Maximum	
VOC Actual*	VOC Regulatory* (Less Water)	How were VOC Actual and Regulatory determined? <input type="checkbox"/> U.S. EPA Method 24 <input checked="" type="checkbox"/> Formulation Data		VOC Actual	VOC Regulatory (Less Water)	VOC Actual	VOC Regulatory (Less Water)
grams/liter	grams/liter			grams/liter	grams/liter	grams/liter	grams/liter
25	25						
2000 California Sales in Gallons							
Container Sizes One Quart or Less (gallons)		Container Sizes Larger Than One Quart (gallons)		Total Gallons (quart or less + > quart)			
200		500		700			
* SWA – Report “Sales Weighted Average” if grouping products.							
Comments:							

