

Polyester Resin Daily VOC Calculator

San Diego Air Pollution Control District

1	2	3	4	5	6	7	8	9	10
Month / Year	# Operating Days Per Calendar Month	Manufacturer's name & ID for Polyester Resin/Gel Coat Product	Monthly Usage (gal)	Specific Gravity	Monomer Content (% by weight - Range Maximum)	Density of H2O (lb/gal)	Application Method*	Application Method AP-42 Emission Factor (Range Ave.)*	Average Operating Day VOC Emissions (lb/day)
SAMPLE 2-2002	9	DMC Vinyl Ester Resin CORVE8117	22.2	1.02	0.475	8.33	Hand Application, Polyester Resin Material, Non-Vapor Suppressed	0.075	0.75
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			
						8.33			

* Use the appropriate application method and emission factor (see instructions for Columns 8 and 9).

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INSTRUCTIONS FOR COMPLETING FORM

This form will help you track daily VOC emissions from the use of polyester resins. District Rule 11(d)(13)(vi) exempts from permit requirements polyester resin operations where VOC emissions average less than five pounds per day, averaged over the operating days of a calendar month. In addition, District Compliance Policy No. 3.20 exempts polyester resin operations where VOC emissions average less than five pounds per day, averaged over the operating days of a calendar month, from the requirements of District Rule 67.12.1.

- Column 1:** Enter the calendar month and calendar year
- Column 2:** Enter the number of days during the calendar month that polyester resin materials were used.
- Column 3:** Enter the manufacturer and manufacturer's ID for each polyester resin material used.
- Column 4:** Enter the total amount of each polyester resin material used during the calendar month in gallons.
- Column 5:** Enter the specific gravity for each polyester resin material used. This information can usually be found on the material safety data sheet (MSDS) in the "Physical Properties" section or can be obtained from the manufacturer or supplier.
- Column 6:** Enter the monomer content for each polyester resin material in terms of percent by weight. This may also be found on the MSDS.
- Column 10:** This is your average daily VOC emissions in pounds per day, averaged over the operating days per calendar month. If you are using the Excel Spreadsheet, this will be calculated automatically. If you are doing the calculations by hand (using the PDF format), multiply Columns 4, 5, 6, 7, and 9 together, then divide by Column 2.

Columns 8 & 9:

Enter the appropriate application method and corresponding emission factor from the list below:

Hand Application, Solvent Material, Clean Up	1.0
Hand Application, Gelcoat Material, Non-Vapor Suppressed	0.305
Hand Application, Gelcoat Material, Vapor Suppressed	0.165
Hand Application, Polyester Resin Material, Non-Vapor Suppressed	0.075
Hand Application, Polyester Resin Material, Vapor Suppressed	0.045
Spray Application, Solvent Material, Clean Up	1.0
Spray Application, Gelcoat Material, Non-Vapor Suppressed	0.305
Spray Application, Gelcoat Material, Vapor Suppressed	0.165
Spray Application, Polyester Resin Material, Non-Vapor Suppressed	0.11
Spray Application, Polyester Resin Material, Vapor Suppressed	0.06
Lamination, Solvent Material, Clean Up	1.0
Lamination, Polyester Resin Material, Non-Vapor Suppressed	0.055
Lamination, Polyester Resin Material, Vapor Suppressed	0.03
Pultrusion, Solvent Material, Clean Up	1.0
Pultrusion, Polyester Resin Material, Non-Vapor Suppressed	0.055
Pultrusion, Polyester Resin Material, Vapor Suppressed	0.03
Filament Winding, Solvent Material, Clean Up	1.0
Filament Winding, Polyester Resin Material, Non-Vapor Suppressed	0.075
Filament Winding, Polyester Resin Material, Vapor Suppressed	0.045
Marble Casting, Solvent Material, Clean Up	1.0
Marble Casting, Polyester Resin Material, Non-Vapor Suppressed	0.02
Marble Casting, Polyester Resin Material, Vapor Suppressed	0.015
Closed Mold Casting, Solvent Material, Clean Up	1.0
Closed Mold Casting, Polyester Resin Material, Non-Vapor Suppressed	0.02
Closed Mold Casting, Polyester Resin Material, Vapor Suppressed	0.015