

# VOC Content in Color Pigments

**File number** : 02-0624-19  
**Subject** : VOC content in Color Pigments

VOC content has been tested by 3<sup>rd</sup> party laboratory

## Test methods

**ASTM D-3960** : This practice discusses applicable ASTM test methods used in the determination of the VOC content of paints and related coatings and provides equations for calculating the VOC content expressed as the mass of VOC: (1) per unit volume of coating less water and exempt volatile compounds, and (2) per unit volume of coating solids and (3) per unit mass of coating solids.

**ASTM D-3792** : In order to calculate volatile organic content (VOC) in waterborne paints, it is necessary to know the water content. This gas chromatographic test method provides a relatively simple and direct way to determine water content.

**ASTM D-4457** : Use of 1,1,1-trichloroethane and dichloromethane, which do not measurably contribute to the atmospheric oxidant level, is a way for industry to meet government or other regulations on volatile organic compounds.

This test method is designed to determine the content of these halohydrocarbon solvents in paints and coatings. That content can subsequently be used in calculating the volatile organic compound content of a coating.

**ASTM D-2369** : This test method is the procedure of choice for determining volatiles in coatings for the purpose of calculating the volatile organic content in coatings under specified test conditions. The weight percent solids content (nonvolatile matter) may be determined by difference. This information is useful to the paint producer and user and to environmental interests for determining the volatiles emitted by coatings.

**ASTM D-1475** : This test method is suitable for the determination of density of paint and related products and components when in liquid form. It is particularly applicable when the fluid has too high a viscosity or when a component is too volatile for a density balance determination.

SAMPLE ID : XB600 Color Pigment(1 quart) ID : 8060211-03 Sampled : 06/ 11/19							
Analyte	Results	Flag	Units	PQL	Prep/Test Method	Analyzed	Batch
Volatile Organic Content	2.51		g/l	2.00	ASTM D-3960	06/24/2019	BG80317
Volatile Organic Content	0.0400		lbs/gal	0.0210	ASTM D-3960	06/24/2019	BG80317
VOC in Solids	62.0		g/l	2.00	ASTM D-3960	06/24/2019	BG80317
VOC in Solids	0.600		lbs/l	0.0210	ASTM D-3960	06/24/2019	BG80317
Water Content	76.9		%	2.00	ASTM D- 3792	06/24/2019	BG80317
Exempt Solvent	ND		%	2.00	ASTM D-4457	06/24/2019	BG80317
Non Volatile Residue	9.6		%	0.100	ASTM D-2369	06/24/2019	BG80317
Density	1.947		g/ml		ASTM D-1475	06/24/2019	BG80317

NA Not Applicable  
ND Analyte NOT DETECTED at or above detection limit  
NR Not Reported  
MDL Method Detection Limit  
PQL Practical quantitation Limit

**PRECAUTIONS**  
Always test a small area first to determine ease of application and desired results. Gloves and eye protection should be worn during application. Do not mix with other cleaners. Not for use on humans or animals. If any contact with skin or eyes occurs, wash immediately with plenty of water. Be sure to read container label and Material Safety Data Sheet before using this product.

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