

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see the last paragraph of rule 3745-113-01 titled “Incorporation by reference.”]

(A) For the purpose of determining compliance with the VOC content limits in the table of paragraph (A)(3) of rule 3745-113-03 of the Administrative Code , the VOC content of a coating shall be determined by using the procedures described in paragraphs (A)(1)(a) or (A)(1)(b) of this rule, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

(1) Calculation of VOC content.

(a) With the exception of low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. Determine the VOC content using the following equation:

$$\text{VOC Content} = (W_s - W_w - W_{ec}) / (V_m - V_w - V_{ec})$$

where:

VOC content = grams of VOC per liter of coating

$W_s$  = weight of volatiles, in grams

$W_w$  = weight of water, in grams

$W_{ec}$  = weight of exempt compounds, in grams

$V_m$  = volume of coating, in liters

$V_w$  = volume of water, in liters

$V_{ec}$  = volume of exempt compounds, in liters

(b) For low solids coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. Determine the VOC content using the following equation:

$$\text{VOC Content (ls)} = (W_s - W_w - W_{ec}) / (V_m)$$

where:

VOC Content (ls) = the VOC content of a low solids coating in grams per liter of coating

Ws = weight of volatiles, in grams

Ww = weight of water, in grams

Wec = weight of exempt compounds, in grams

Vm = volume of coating, in liters

- (2) VOC content of coatings: To determine the physical properties of a coating in order to perform the calculations in paragraph (A)(1) of this rule, the reference method for VOC content is USEPA Method 24, except as provided in paragraphs (A)(3) and (A)(4) of this rule. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996). To determine the VOC content of a coating, the manufacturer may use USEPA Method 24, or an alternative method, as provided in paragraph (A)(3) of this rule, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a test conducted utilizing USEPA Method 24 and any other means for determining VOC content, the results of the test utilizing USEPA Method 24 will govern, except when an alternative method is approved as specified in paragraph (A)(3) of this rule. The director may require the manufacturer to conduct an analysis using USEPA Method 24.
- (3) Alternative test methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with paragraph (A)(2) of this rule, after review and approval in writing by the director and the USEPA, may also be used.
- (4) Methacrylate traffic coating markings: Analysis of methacrylate multi-component coatings used as traffic marking coatings shall be conducted according to a modification of USEPA Method 24 contained in 40 CFR 59, Subpart D, Appendix A. This method has not been approved for methacrylate multicomponent coatings used for purposes other than as traffic marking coatings or for other classes of multicomponent coatings.

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