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# Standard Test Method for Determination of Weight Percent Volatile Content of Water-Borne Aerosol Paints<sup>1</sup>

This standard is issued under the fixed designation D 5325; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (\$\epsilon\$) indicates an editorial change since the last revision or reapproval.

ε<sup>1</sup> Note—The units statement in subsection 1.2 was corrected editorially in November 2008.

### 1. Scope

- 1.1 This test method is for the determination of the weight percent volatile content of water-borne paints in aerosols.
- 1.2
- 1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.
- 1.3 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

#### 2. Referenced Documents

- 2.1 ASTM Standards:<sup>2</sup>
- D 2369 Test Method for Volatile Content of Coatings
- D 3792 Test Method for Water Content of Water-Reducible Paints Coatings by Direct Injection into Into a Gas Chromatograph D 4017 Test Method for Water in Paints and Paint Materials by Karl Fischer Method
- E 180 Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial <u>and Specialty Chemicals</u> 2.2 *Other Standard:*

Method 36 Determination of Percent Volatile Organic Compounds (VOC) in Water Based Aerosol Paints<sup>3</sup>

#### 3. Summary of Test Method

3.1 The propellant is released from the can and the content remaining is tested for percent water and nonvolatiles.

#### 4. Significance and Use

4.1 Calculation of the weight percent volatile organic content of water-borne paints, requires that the water content be known. This test method provides a direct way to determine the weight percent volatile organic matter of water-borne aerosol paints minus the matter content. This test method is modeled after Method 36.<sup>3</sup>

## 5. Apparatus

- 5.1 Freezer.
- 5.2 Ice Pick.
- 5.3 Hammer.
- 5.4 Applicator Sticks.
- 5.5 Masking Tape.
- 5.6 Tin Snips or Metal Cutter.
- 5.7 Shaker, similar to Eberbach shaker in Fig. 1.

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<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.21 on Chemical Analysis of Paints and Paint Materials.

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<sup>&</sup>lt;sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For Annual Book of ASTM Standards Vol 06.01. volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 15.05.

<sup>&</sup>lt;sup>3</sup> Bay Area Air Quality Management District, (BAAQMD) Manual of Procedures, Vol III, 939 Ellis St., San Francisco, CA 94109.