



Designation: D3925 – 02

## Standard Practice for Sampling Liquid Paints and Related Pigmented Coatings<sup>1</sup>

This standard is issued under the fixed designation D3925; 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.

*This standard has been approved for use by agencies of the Department of Defense.*

### 1. Scope

1.1 This practice describes methods of taking representative samples of fluid paint or pigmented coating products from containers of any type.

1.2 Two ISO standards, [ISO 1513](#) and [ISO 15528](#), cover the details and equipment for sampling of liquid paints and associated materials in much greater detail than this standard. The reader is referred to those standards for more information.

1.3 The sampling of dry powder paints, clear coatings, mixed solvents, and nonpigmented materials of any type is not covered in this procedure.

1.4 *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>

[D1475](#) Test Method For Density of Liquid Coatings, Inks, and Related Products

2.2 *ISO Documents:*

[ISO 1513](#) Paints and varnishes—Examination and preparation of samples for testing<sup>3</sup>

[ISO 15528](#) Paints, varnishes and raw materials for paints and varnishes—Sampling<sup>3</sup>

### 3. Terminology

3.1 *Definitions of Term Specific to This Standard:*

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee D01 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.

Current edition approved Aug. 10, 2002. Published October 2002. Originally published as D3925 – 80. Last previous edition D3925 – 91 (1996). DOI: 10.1520/D3925-02.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

3.1.1 *batch, n*—the quantity of liquid paint or coating produced in the final mixing operation after all production processes are complete. For example, when a number of pigment dispersions are reduced with additional vehicle together in a large tank, the resulting final mixture is one batch.

### 4. Significance and Use

4.1 Samples are taken from batches, lots, and shipments of paint in order to determine their uniformity and compliance with specification requirements. It is very important that these samples be of convenient and economical size and that they be representative of the batch of paint at the time it was filled into shipping or storage containers.

4.2 The time and effort necessary to ensure that the sample is representative of the original material will be repaid in reduction of laboratory work and elimination of possible rejections of acceptable material.

### 5. Sampling Considerations

5.1 The use of common sense and good judgment is important even in the apparently simple task of taking samples.

5.2 Use care to ensure that all containers, agitating equipment, and sampling apparatus are *clean* and that they can in no way contaminate the sample being taken. Slight contamination of the paint sample may lead to false test results.

5.3 The sample container should be dry and not cooler than the temperature of the area in which the sample is to be taken.

5.4 Because pigmented coatings are dispersions and not solutions, finely divided pigment particles dispersed in the coating vehicle may settle upon standing. Consequently, thorough and careful agitation before sampling is necessary to restore the paint to its original, uniform condition. The method of agitating or stirring is therefore of prime importance.

5.5 As soon as samples of paint are taken from the shipping or storage container, place them in clean, nonreactive, dry, air-tight containers to prevent evaporation. Do not store samples in plastic bottles because volatile solvents may diffuse through the walls. Loss of volatile solvents may introduce errors in such tests as viscosity, weight per gallon, and nonvolatile content as well as other properties. If cap liners are used, they should also be nonreactive with the material. If the