

**Designation:** D2222 - 14 D2222 - 19

# Standard Test Method for Methanol Extract of Vinyl Chloride Resins<sup>1</sup>

This standard is issued under the fixed designation D2222; 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.

# 1. Scope\*

- 1.1 This test method covers the determination of the methanol extract, or nonvolatile methanol-soluble portion, of vinyl chloride resins.
- 1.2 The methanol extract test is most commonly employed with paste- or dispersion-type vinyl resins intended for organosol or plastisol applications. The major ingredient removed is the soap system employed in the polymerization reaction.
  - 1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.
- 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-safety, health, and healthenvironmental practices and determine the applicability of regulatory limitations prior to use.

Note 1—There is no known ISO equivalent to this standard.

1.5 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

### 2. Referenced Documents

2.1 ASTM Standards:<sup>2</sup>

D883 Terminology Relating to Plastics

D1600 Terminology for Abbreviated Terms Relating to Plastics

## 3. Terminology

3.1 Definitions—Definitions are in accordance with Terminologies D883 and D1600 unless otherwise indicated.

## 4. Summary of Test Method/catalog/standards/sist/68e5cbd6-472c-47b8-8104-9fb2b38feb62/astm-d2222-19

4.1 The methanol-soluble materials are extracted from the resin in a Soxhlet extractor, the methanol evaporated to dryness, and the residue weighed as the weight percent methanol extract.

### 5. Significance and Use

5.1 The methanol extract test is most commonly employed with paste- or dispersion-type vinyl resins intended for organosol or plastisol applications. The test result is a quantitative measure of the methanol-soluble, nonvolatile, essentially nonpolymeric content of the virgin, unmodified resin. The major ingredient removed is the soap system employed in the polymerization reaction; methanol extract provides a measure of lot-to-lot uniformity of the resin in this respect.

## 6. Apparatus

- 6.1 Soxhlet Extractor.
- 6.2 Extraction Thimbles, 33 by 94-mm.
- 6.3 Oven, Constant-Temperature, maintained at  $105 \pm 3$  °C.

<sup>&</sup>lt;sup>1</sup> This test method is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.15 on Thermoplastic Materials (Section <del>D20.15.08).</del>D20.15.07).

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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* volume information, refer to the standard's Document Summary page on the ASTM website.