



Designation: D6150 – 24

Standard Test Method for Estimating Processing Losses of Plastisols and Organosols Due to Volatility¹

This standard is issued under the fixed designation D6150; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This test method describes a procedure for the determination of the relative volatility of polyvinyl chloride plastisols and organosols at elevated temperatures.

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes, excluding those in tables and figures, shall not be considered as requirements of 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, health, and environmental 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:*²

D618 Practice for Conditioning Plastics for Testing

D883 Terminology Relating to Plastics

D1600 Terminology for Abbreviated Terms Relating to Plastics (Withdrawn 2024)³

¹ 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 D20.15.07 on Vinyl Chloride Polymers.

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² 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.

³ The last approved version of this historical standard is referenced on www.astm.org.

E145 Specification for Gravity-Convection and Forced-Ventilation Ovens

E456 Terminology Relating to Quality and Statistics

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

E2935 Practice for Evaluating Equivalence of Two Testing Processes

3. Terminology

3.1 *Definitions*—The terms used in this test method are in accordance with Terminology D883 and abbreviations are in accordance with Terminology D1600, unless otherwise indicated.

3.2 For terms relating to precision and bias and associated issues, the terms used in this test method are in accordance with the definitions in Terminology E456.

4. Summary of Test Method

4.1 Plastisols or organosols are weighed in aluminum dishes and heated in a circulating air oven at 177°C (350°F) for 10 min. The specimens are removed from the oven, cooled, and reweighed. The weight loss is determined and reported as either percent weight loss or weight loss per unit area of exposed surface.

5. Significance and Use

5.1 The volatile components of a plastisol or organosol influence the weight loss during processing. It is possible that this information will be useful to the producer and user and to environmental interests for estimating the volatiles emitted by the plastisol or organosol during processing.

5.2 Results obtained by this test method are not strictly equivalent to those experienced during product processing wherein conditions of temperature, air flow, coating mass, and configuration are potentially quite different.

5.3 This test method is not necessarily applicable to all types of plastisol and organosol applications. Any change in the specified testing time or temperature to accommodate unique applications shall be included in the report (see 7.3).

*A Summary of Changes section appears at the end of this standard