



Designation: D2232 – 23

Standard Test Method for Evaporating Residue of Naphthalene¹

This standard is issued under the fixed designation D2232; 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 covers the determination of the evaporation residue of naphthalene.

1.2 This test method has been found applicable to determining residue in the range of 0.3 and 1.5 wt %.

1.3 In determining the conformance of the test results using this method to applicable specifications, results shall be rounded off in accordance with the rounding-off method of Practice E29.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 *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.* For specific hazard statements, see Section 7, 8.1, 9.2, and 9.3.

1.6 *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

D3438 Practice for Sampling and Handling Naphthalene, Maleic Anhydride, and Phthalic Anhydride

D4790 Terminology of Aromatic Hydrocarbons and Related Chemicals

D6809 Guide for Quality Control and Quality Assurance

¹ This test method is under the jurisdiction of ASTM Committee D16 on Aromatic, Industrial, Specialty and Related Chemicals and is the direct responsibility of Subcommittee D16.07 on Styrene, Ethylbenzene and C9 and C10 Aromatic Hydrocarbons.

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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.

Procedures for Aromatic Hydrocarbons and Related Materials

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

E145 Specification for Gravity-Convection and Forced-Ventilation Ovens

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

2.2 Other Document:

OSHA Regulations, 29 CFR 1910.1000 and 1910.1200 Toxic and Hazardous Substances – Air contaminants; Hazard Communication³

3. Terminology

3.1 See Terminology D4790 for the definition of terms used in this test method.

4. Summary of Test Method

4.1 A weighed quantity of naphthalene is heated in a tared dish for 3 h at 105 °C in a forced-draft oven and the residue is weighed.

5. Significance and Use

5.1 Evaporation residue is an empirical measure of nonvolatile impurities in naphthalene. This test method is suitable for setting specifications and for use as an internal quality control tool.

6. Apparatus

6.1 *Evaporating Dishes*, porcelain, shallow form or aluminum weighing dishes, low form, fluted, 60 mm diameter, 15 mm high, 42 mL capacity.

6.2 *Drying Oven*, forced-ventilation, conforming to Specification E145 Type II, Grade A or B.

7. Hazards

7.1 Consult current OSHA regulations, supplier's Safety Data Sheets and local regulations for all materials used in this test method.

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, http://www.access.gpo.gov.

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