



Designation: D6136 – 97(Reapproved 2004)^{ε1}

Standard Test Method for Kerosine Number of Unsaturated (Dry) Felt by Vacuum Method¹

This standard is issued under the fixed designation D6136; 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.

^{ε1} NOTE—A warning note in 9.5 was moved into the text editorially in May 2004.

1. Scope

1.1 This test method covers the determination of the relative saturating capacity of unsaturated (dry) felt papers used in roofing.

1.2 *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:*²

D585 Practice for Sampling and Accepting a Single Lot of Paper, Paperboard, Fiberboard, and Related Product (Withdrawn 2010)³

D1298 Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

D3699 Specification for Kerosine

3. Summary of Test Method

3.1 The kerosine number of unsaturated (dry) felt is computed from the weight of a kerosine of known specific gravity retained by the felt after displacement of the air from interior voids. It is the millilitres of kerosine held /100 g of felt, and thus, is a measure of the quantity of saturant that a given felt will absorb.

¹ This test method is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.04 on Felts and Fabrics.

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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.

4. Significance and Use

4.1 The ability to absorb kerosine is an indication of the ability to absorb hot asphalt. The kerosine number is used in calculating saturation efficiency.

5. Apparatus

5.1 *Glass Vessel*, approximately 1500 mL capacity, for soaking specimens of felt in kerosine, under vacuum.

5.2 *Vacuum Pump*, capable of reaching and maintaining a vacuum of at least 700 mm Hg in the glass vessel.

5.3 *Lightweight Glass or Metal Weighing Container*, with tightly fitting cover, 60 by 140 mm (2.5 by 5.5 in.) or larger, to contain felt strips in a horizontal position without bending or distortion.

5.4 *Drying Oven*, with dimensions at least 300 by 300 by 300 mm (12 by 12 by 12 in.).

5.5 *Other Apparatus*—Desiccator, wire hook, and if necessary, a punch to make a small hole in a corner of the specimens after they are cut.

6. Materials

6.1 *Water-White Kerosine*, complying to the requirements of Specification D3699 and having a specific gravity of 0.800 ± 0.025 at 25°C, as determined in accordance with Practice D1298.

7. Sampling

7.1 Obtain a sample of the felt in accordance with Practice D585.

8. Test Specimen

8.1 From each test unit of the sample cut two sets of six test specimen strips, each strip measuring 51 by 127 ± 13 mm (2 by $5 \pm \frac{1}{2}$ in.) with the longer side parallel to the machine direction of the sheet.

9. Procedure

9.1 Place a set of strips in the tared weighing container and expose them, uncovered, for at least 1 but not more than 2 h in