



Standard Test Methods for Sampling and Testing Dipentene¹

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1. Scope

1.1 These test methods cover procedures for sampling and testing dipentene and related terpene solvents, consisting chiefly of monocyclic terpene hydrocarbons distilling above the range for turpentine.

1.2 The procedures given in these test methods appear in the following order:

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Detection and Removal of Separated Water	5
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Color	7
Odor	8
Specific Gravity	9
Refractive Index	10
Composition	11
Flash Point	12
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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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

[D268 Guide for Sampling and Testing Volatile Solvents and Chemical Intermediates for Use in Paint and Related Coatings and Material](#)

[D890 Test Method for Water in Liquid Pine Chemicals](#)

[D1209 Test Method for Color of Clear Liquids \(Platinum-Cobalt Scale\)](#)

¹ These test methods are under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and are the direct responsibility of Subcommittee D01.34 on Pine Chemicals and Hydrocarbon Resins.

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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.

[D6166 Test Method for Color of Pine Chemicals and Related Products \(Instrumental Determination of Gardner Color\)](#)

[D6387 Test Methods for Composition of Turpentine and Related Terpene Products by Capillary Gas Chromatography](#)

[E300 Practice for Sampling Industrial Chemicals](#)

3. Significance and Use

3.1 The testing procedures described in these test methods have been in use for many years and emphasize the physical properties rather than the chemical composition of dipentene. These procedures were sufficient when dipentene was used primarily as a solvent. Currently, however, dipentene finds application as a chemical raw material and a knowledge of its chemical composition is therefore important. Test Methods [D6387](#) describe a capillary gas chromatography method which is suitable for determining both the major and minor components found in dipentene.

4. Sampling

4.1 Sample the material in accordance with the procedure described in Guide [D268](#) and Practice [E300](#). If a sample from close to the bottom of a tank shows a decided difference in color or appearance from samples taken at other depths, take an extra bottom sample and examine it separately from the composite sample. In such case the composite sample shall not include any portion of such bottom sample.

5. Detection and Removal of Separated Water

5.1 Draw a portion of the dipentene by means of a glass or metal container with a removable stopper or top,³ or with a thief, from the lowest part of the container, or by opening the bottom valve of the level tank car. If water is found to be present, draw it all out, record the quantity, and deduct it from the total volume of liquid delivered.

6. Appearance

6.1 Examine a portion of the sample after agitation to determine its clarity and freedom from foreign matter and separated water.

³ Detailed description of equipment suitable for such sampling is given in Practice [E300](#).