# ASTM D5399-09 Standard Test Method for Boiling Point Distribution of Hydrocarbon Solvents by Gas Chromatography

## Significance and Use

The gas chromatographic determination of the boiling point distribution of hydrocarbon solvents can be used as an alternative to conventional distillation methods for control of solvents quality during manufacture, and specification testing.

Boiling point distribution data can be used to monitor the presence of product contaminants and compositional variation during the manufacture of hydrocarbon solvents.

Boiling point distribution data obtained by this test method are not equivalent to those obtained by Test Methods D86, D850, D1078, D2887, D2892, and D3710.

#### 1. Scope

- 1.1 This test method covers the determination of the boiling point distribution of hydrocarbon solvents by capillary gas chromatography. This test method is limited to samples having a minimum initial boiling point of 37°C (99°F), a maximum final boiling point of 285°C (545°F), and a boiling range of 5 to 150°C (9 to 270°F) as measured by this test method.
- 1.2 For purposes of determining conformance of an observed or calculated value using this test method to relevant specifications, test result(s) shall be rounded off "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E29.
- 1.3 The values stated in SI units are standard. The values given in parentheses are for information purposes only.
- 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 (purchase separately)

# **ASTM Standards**

D86 Test Method for Distillation of Petroleum Products at Atmospheric Pressure

D850 Test Method for Distillation of Industrial Aromatic Hydrocarbons and Related Materials

D1078 Test Method for Distillation Range of Volatile Organic Liquids

D2887 Test Method for Boiling Range Distribution of Petroleum Fractions by Gas Chromatography

D2892 Test Method for Distillation of Crude Petroleum (15-Theoretical Plate Column)

D3710 Test Method for Boiling Range Distribution of Gasoline and Gasoline Fractions by Gas Chromatography

Reference: http://www.astm.org/Standards/D5399.htm