



Standard Specification for High-Flash Aromatic Naphthas¹

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1. Scope

1.1 This specification covers two types of aromatic hydrocarbon solvents, normally petroleum distillates, having high flash points, moderately low volatility, and a distillation range of approximately 50°F (30°C). These solvents are used primarily by the coatings industry and are commonly referred to as high-flash aromatic naphthas.

1.2 For specific hazard information and guidance, see the supplier's Material Safety Data Sheet for materials listed in this specification.

2. Referenced Documents

2.1 ASTM Standards:

- D 56 Test Method for Flash Point by Tag Closed Tester²
- D 86 Test Method for Distillation of Petroleum Products²
- D 156 Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method)²
- D 268 Guide for Sampling and Testing Volatile Solvents and Chemical Intermediates for Use in Paint and Related Coatings and Material³
- D 611 Test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents²
- D 849 Test Method for Copper Corrosion by Industrial Aromatic Hydrocarbons³
- D 891 Test Methods for Specific Gravity, Apparent, of Liquid Industrial Chemicals⁴
- D 1133 Test Method for Kauri-Butanol Value of Hydrocarbon Solvents³
- D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)³
- D 1296 Test Method for Odor of Volatile Solvents and Diluents³
- D 1319 Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Absorption²
- D 3278 Test Methods for Flash Point of Liquids by Set-Flash Closed-Cup Apparatus⁵
- D 4052 Test Method for Density and Relative Density of

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² Annual Book of ASTM Standards, Vol 05.01.

³ Annual Book of ASTM Standards, Vol 06.04.

⁴ Annual Book of ASTM Standards, Vol 15.05.

⁵ Annual Book of ASTM Standards, Vol 06.01.

Liquids by Digital Density Meter⁶

E 300 Practice for Sampling Industrial Chemicals⁴

2.2 U.S. Federal Specification:

PPP-C-2020 Chemicals, Liquid, Dry, and Paste: Packaging of⁷

3. Classification

3.1 High-flash aromatic naphthas shall be of the following types, as specified:

3.1.1 *Type I*—Aromatic 100 (Note 1), having a flash point not less than 100°F (38°C).

3.1.2 *Type II*—Aromatic 150 (Note 2), having a flash point not less than 142°F (61°C).

NOTE 1—Aromatic 100 consists primarily of C₉ aromatic hydrocarbons.

NOTE 2—Aromatic 150 consists primarily of C₁₀ aromatic hydrocarbons.

4. Properties

4.1 The physical and chemical properties of high-flash aromatic naphthas shall conform to the requirements specified in Table 1.

5. Sampling

5.1 The material shall be sampled in accordance with Practice E 300.

6. Test Methods

6.1 The properties enumerated in this specification shall be determined in accordance with the following ASTM test methods (see Guide D 268):

6.1.1 *Aromatics*—Test Method D 1319.

6.1.2 *Color*—Test Method D 156 (Saybolt color) or Test Method D 1209 (platinum-cobalt scale). In case of dispute, the Saybolt color limit is controlling.

6.1.3 *Corrosion*—Test Method D 849.

6.1.4 *Distillation*—Test Method D 86.

6.1.5 *Flash Point*—Test Methods D 56, D 3278 (alternative).

6.1.6 *Kauri-Butanol Value*—Test Method D 1133.

6.1.7 *Mixed Aniline Point*—Test Methods D 611.

6.1.8 *Odor*—Test Method D 1296. Samples of the particular

⁶ Annual Book of ASTM Standards, Vol 05.02.

⁷ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094.