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Standard Specification for Vapor-Degreasing Grade Methylene Chloride¹

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1. Scope

- 1.1 This specification covers vapor-degreasing grade methylene chloride.
- 1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.
- 1.3 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.

Note 1—Guide D3844, Practice D4276, and MNL2² provide additional important information on vapor degreasing and solvent properties.

1.4 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:³
 - D1078 Test Method for Distillation Range of Volatile Organic Liquids
 - D2108 Test Method for Color of Halogenated Organic Solvents and Their Admixtures (Platinum-Cobalt Scale)

- D2109 Test Methods for Nonvolatile Matter in Halogenated Organic Solvents and Their Admixtures
- D2111 Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures
- D2942 Test Method for Total Acid Acceptance of Halogenated Organic Solvents (Nonreflux Methods)
- D2989 Test Method for Acidity-Alkalinity of Halogenated Organic Solvents and Their Admixtures
- D3401 Test Methods for Water in Halogenated Organic Solvents and Their Admixtures
- D3741 Test Methods for Appearance of Admixtures Containing Halogenated Organic Solvents
- D3844 Guide for Labeling Chlorinated Hydrocarbon Solvent Containers (Withdrawn 2013)⁴
- D4276 Practice for Confined Area Entry
- 2.2 Code of Federal Regulations:⁵
- 29 CFR 1910.1200 Department of Labor, OSHA Regulations, Hazard Communication
- 49 CFR Parts 100 to 199 Department of Transportation Hazardous Materials Regulations

3. Properties

3.1 Vapor-degreasing grade methylene chloride shall conform to the requirements prescribed in Table 1.

4. Packaging

4.1 Package and label industrial or commercial quantities in accordance with DOT regulations in 49 CFR Parts 100 to 199, in accordance with state and local regulations, and in accordance with OSHA regulations found in 29 CFR 1910.1200.

5. Keywords

5.1 dichloromethane; methylene chloride; vapor-degreasing solvent

¹ This specification is under the jurisdiction of ASTM Committee D26 on Halogenated Organic Solvents and Fire Extinguishing Agents and is the direct responsibility of Subcommittee D26.02 on Vapor Degreasing.

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² Manual on Vapor Degreasing, MNL2, third edition, ASTM.

³ 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.

⁴ The last approved version of this historical standard is referenced on www.astm.org.

⁵ Available from U.S. Government Publishing Office (GPO), 732 N. Capitol St., NW, Washington, DC 20401-0001, http://www.gpo.gov.

TABLE 1 Properties

Property	Specification	Test Method
Specific gravity, 25/25 °C	1.300 to 1.325	D2111
Distillation Range (760 mm Hg)		D1078
Initial boiling point, °C, min	39.0	
Dry point, °C, max	45.0	
Acidity (as HCI), weight, %, max	0.0010	D2989
Water, weight, %, max	0.0100	D3401
Appearance	clear and free from suspended matter	D3741
Color, Pt-Co, max	20	D2108
Nonvolatile residue, weight, %, max	0.0025	D2109
Acid acceptance (as NaOH), weight, %, min	0.160	D2942

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