



Standard Specification for Technical Grade Methylene Chloride¹

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This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers technical grade methylene chloride.

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.*

NOTE 1—See Practices D 3844 and D 4276 and STP 403A² for additional important information on solvent handling and solvent properties.

2. Referenced Documents

2.1 ASTM Standards:

D 2108 Test Method for Color of Halogenated Organic Solvents and Their Admixtures (Platinum-Cobalt Scale)³

D 2109 Test Methods for Nonvolatile Matter in Halogenated Organic Solvents and Their Admixtures³

D 2111 Test Methods for Specific Gravity of Halogenated Organic Solvents and Their Admixtures³

D 2989 Test Method for Acidity-Alkalinity of Halogenated Organic Solvents and Their Admixtures³

D 3401 Test Methods for Water in Halogenated Organic Solvents and Their Admixtures³

D 3741 Test Method for Appearance of Admixtures Con-

taining Halogenated Organic Solvents³

D 3844 Practice for Labeling Halogenated Hydrocarbon Solvent Containers³

D 4276 Practice for Confined Area Entry³

D 4755 Test Method for Free Halogens in Halogenated Organic Solvents and Their Admixtures³

E 300 Practice for Sampling Industrial Chemicals³

2.2 Federal Documents:

29 CFR, Section 1910.1200 Department of Labor, OSHA Regulations on Hazard Communication⁴

49 CFR, Sections 100 to 199 Department of Transportation Hazardous Materials Regulations⁴

3. Chemical Properties

3.1 Technical grade methylene chloride shall conform to the requirements prescribed in Table 1.

4. Sampling

4.1 Conduct sampling by any of the appropriate procedures for simple liquids as specified in Practice E 300.

5. Packaging and Package Marking

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

6. Keywords

6.1 dichloromethane; methylene chloride

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² *Cold Cleaning with Halogenated Solvents, ASTM STP 403 A*, ASTM, 1981.

³ *Annual Book of ASTM Standards*, Vol 15.05.

⁴ The *Code of Federal Regulations*, is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

TABLE 1 Requirements for Technical Grade Methylene Chloride

Property	Specification	Method
Appearance	clear and free from suspended matter	D 3741
Color, Pt-Co units, max	20	D 2108
Specific gravity, 25°/25°C	1.318 to 1.323	D 2111
Distillating range (760 mm Hg)		
initial boiling point, °C, min	39.0	
dry point, °C, max	41.0	
Nonvolatile residue, weight %, max	0.002	D 2109
Acidity (as HCl), weight %, max	0.0005	D 2989
Water, weight %, max	0.0100	D 3401
Free halogens	none detected	D 4755

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