



Designation: D 4081 – 00

Standard Specification for Drycleaning-Grade Perchloroethylene¹

This standard is issued under the fixed designation D 4081; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

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

1. Scope

1.1 This specification covers drycleaning-grade perchloroethylene suitable for use in the drycleaning industry.

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—Practice D 3844 provides additional important information on proper labeling.

2. Referenced Documents

2.1 ASTM Standards:

- D 1078 Test Method for Distillation Range of Volatile Organic Liquids²
- 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 2942 Test Method for Total Acid Acceptance of Halogenated Organic Solvents (Nonreflux Method)³
- D 3316 Test Method for Stability of Perchloroethylene with Copper³
- D 3401 Test Methods for Water in Halogenated Organic Solvents and Their Admixtures³
- D 3741 Test Method for Appearance of Admixtures Containing Halogenated Organic Solvents³

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 D26.06 on Drycleaning.

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² *Annual Book of ASTM Standards*, Vol 06.04.

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

D 3844 Practice for Labeling Halogenated Hydrocarbon Solvent Containers³

D 4376 Specification for Vapor-Degreasing Grade Perchloroethylene³

D 4494 Test Method for Detecting Residual Odor in Drycleaning Grade Perchloroethylene³

2.2 *Code of Federal Regulations*:⁴

29 CFR 1910.1200 Department of Labor, OSHA Regulations on Hazard Communications

49 CFR 100 to 199 Department of Transportation Hazardous Materials Regulations

3. Properties

3.1 Drycleaning-grade perchloroethylene shall conform to the requirements prescribed in Table 1.

3.2 Maximum acid acceptance specification of 0.03 weight % as NaOH distinguishes drycleaning-grade perchloroethylene from vapor-degreasing-grade perchloroethylene which is formulated specifically for that application.

4. Packaging and Package Marking

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

4.1.1 The proper shipping name for perchloroethylene is UN 1897, tetrachloroethylene.

5. Keywords

5.1 perchloroethylene; tetrachloroethylene drycleaning solvent

⁴ The *Code of Federal Regulations* may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.