



Designation: D4081 – 00 (Reapproved 2006)

Standard Specification for Drycleaning-Grade Perchloroethylene¹

This standard is issued under the fixed designation D4081; 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 reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

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 D3844 provides additional important information on proper labeling.

2. Referenced Documents

2.1 *ASTM Standards:*²

D1078 Test Method for Distillation Range of Volatile Organic Liquids

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)

D3316 Test Method for Stability of Perchloroethylene with Copper

D3401 Test Methods for Water in Halogenated Organic Solvents and Their Admixtures

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.

Current edition approved Feb. 1, 2006. Published March 2006. Originally approved in 1982. Last previous edition approved in 2000 as D4081 – 00. DOI: 10.1520/D4081-00R06.

² 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.

D3741 Test Methods for Appearance of Admixtures Containing Halogenated Organic Solvents

D3844 Guide for Labeling Chlorinated Hydrocarbon Solvent Containers

D4494 Test Method for Detecting Residual Odor of Drycleaning Grade Perchloroethylene

2.2 *Code of Federal Regulations:*³

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

³ The *Code of Federal Regulations* may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.