



Designation: D5396 – 04

## Standard Specification for Reclaimed Perchloroethylene<sup>1, 2</sup>

This standard is issued under the fixed designation D5396; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This specification covers the grade of perchloroethylene typically needed in various industries for noncritical applications, such as in metal cleaning formulations. It is not recommended for dry cleaning applications (see Specification D4081). It may be used as a reference document by purchasers or by persons establishing in-house perchloroethylene recovery programs.

### 2. Referenced Documents

#### 2.1 ASTM Standards:<sup>3</sup>

- 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)
- D2988 Test Methods for Water-Soluble Halide Ion in Halogenated Organic Solvents and Their Admixtures
- 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
- D4081 Specification for Drycleaning-Grade Perchloroethylene

<sup>1</sup> 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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<sup>2</sup> Tetrachloroethylene: CAS #127-18-4.

<sup>3</sup> 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.

- D6806 Practice for Analysis of Halogenated Organic Solvents and Their Admixtures by Gas Chromatography
- E1064 Test Method for Water in Organic Liquids by Coulometric Karl Fischer Titration

#### 2.2 Other Documents:

- 29 CFR 1910.1200 Department of Labor, OSHA Regulations, Hazard Communication<sup>4</sup>
- 49 CFR 100 to 199 Department of Transportation Hazardous Materials Regulations<sup>4</sup>

### 3. Classification

- 3.1 *Type I*—Generally recognized for use in precision applications.
- 3.2 *Type II*—Use for less demanding precision applications.
- 3.3 *Type III*—General-purpose technical grade.

### 4. Properties

- 4.1 Reclaimed perchloroethylene, Type I, shall meet the requirements of Table 1.
- 4.2 Reclaimed perchloroethylene, Type II, shall meet the requirements of Table 1.
- 4.3 Reclaimed perchloroethylene, Type III, shall meet the requirements of Table 1.

### 5. Packaging and Package Marking

5.1 Industrial or commercial quantities shall be packaged and labeled in accordance with DOT regulations as found in 49 CFR 100 to 199, in accordance with state and local regulations, and in accordance with OSHA regulations found in 29 CFR 1919.1200.

### 6. Keywords

6.1 halogenated solvent; perchlor.; perchloroethylene, Types I, II, and III; perk; reclaimed

<sup>4</sup> *Code of Federal Regulations*, available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.