



Designation: ~~D7388-07~~ Designation: D 7388 – 08

## Standard Specification for Engine Coolant Grade 1,3-Propanediol (PDO)<sup>1</sup>

This standard is issued under the fixed designation D 7388; 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 engine coolant grade 1,3-propanediol (PDO).

~~1.2 The values stated in SI units are to be regarded as the standard. No other units of measurement are included in this standard.~~

1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

D 1122 Test Method for Density or Relative Density of Engine Coolant Concentrates and Engine Coolants By The Hydrometer

D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)

D 1287 Test Method for pH of Engine Coolants and Antirusts

D 3634 Test Method for Trace Chloride Ion in Engine Coolants

D 4052 Test Method for Density and Relative Density of Liquids by Digital Density Meter

D 5827 Test Method for Analysis of Engine Coolant for Chloride and Other Anions by Ion Chromatography

D 5931 Test Method for Density and Relative Density of Engine Coolant Concentrates and Aqueous Engine Coolants by Digital Density Meter

D 6130 Test Method for Determination of Silicon and Other Elements in Engine Coolant by Inductively Coupled Plasma-Atomic Emission Spectroscopy

E 202 Test Methods for Analysis of Ethylene Glycols and Propylene Glycols

E 300 Practice for Sampling Industrial Chemicals

### 3. Requirements

3.1 Engine coolant grade 1,3-propanediol shall conform to the chemical and physical property requirements in Table 1.

### 4. Sampling

4.1 Sample 1,3-propanediol in accordance with the appropriate sections of Practice E 300 for liquid samples.

### 5. Packaging, Package Marking, and Transportation

5.1 The packaging, labeling, and transportation of commercial quantities shall conform to applicable federal, state, and local regulations. Conformance is the responsibility of the manufacturer and the ~~shipper~~; shipper.

### 6. Keywords

6.1 engine coolant; glycol; 1,3-propanediol; PDO

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D15 on Engine Coolants and is the direct responsibility of Subcommittee D15.07 on Specifications. Current edition approved Oct. 1, 2007. Published October 2007.

Current edition approved May 15, 2008. Published July 2008. Originally approved in 2007. Last previous edition approved in 2007 as D 3306-07.

<sup>2</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.

\*A Summary of Changes section appears at the end of this standard.