



Designation: D 5752 – 9804

Standard Specification for Supplemental Coolant Additives (SCAs) for Use in Precharging Coolants for Heavy-Duty Engines¹

This standard is issued under the fixed designation D 5752; 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.

1. Scope

1.1 This specification covers the general, physical, chemical, and performance requirements for Supplemental Coolant Additives (SCAs) at a precharged level in the cooling systems of heavy-duty engines.

NOTE 1—After precharging, SCAs are customarily used periodically to service cooling systems at $\frac{1}{4}$ to $\frac{1}{3}$ the precharged dosage to compensate for additives lost through dilution and depletion.

1.2 The SCA products meeting this specification are intended for use with water or recommended dilutions of coolant concentrates or prediluted engine coolants. Engine coolant products shall be of the low-silicate type ~~Specification D 4985, or Specification D 5345; and, if ethylene glycol based, shall meet Specification D 4985.~~ Propylene glycol base low-silicate-type coolant products may also be used, if these materials meet the chemical and performance requirements of ~~Specification D 4985 or Specification D 5345.~~ D 4985.

1.3 The SCA concentrate before dissolution may be in either liquid, solid, or slurry form. The form is as agreed upon between the manufacturer and the user.

1.4 The values stated in SI units are to be regarded as standard. The inch-pound units in parentheses are approximate equivalents provided for information only.

1.5 *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.* Specific precautionary statements are given in ~~Note 2;~~ 4.1.

2. Referenced Documents

2.1 ASTM Standards:²

D 512 Test Method for Chloride Ion in Water

D 516 Test Method for Sulfate Ion in Water

D 1119 Test Method for Ash Content of Engine Coolants and Antirusts

D 1121 Test Method for Reserve Alkalinity of Engine Coolants and Antirusts

D 1126 Test Method for Hardness of Water

D 1193 Specification for Reagent Water

D 1287 Test Method for pH of Engine Coolants and Antirusts

D 1293 Test Methods for pH of Water

D 1384 Test Method for Corrosion Test for Engine Coolants in Glassware

D 1881 Test Method for Foaming Tendencies of Engine Coolants in Glassware

D 1882 Test Method for Effect of Cooling System Chemical Solutions on Organic Finishes for Automotive Vehicles

D 1888 Test Methods for Particulate and Dissolved Matter in Water

D 2570 Test Method for Simulated Service Corrosion Testing of Engine Coolants

D 2809 Test Method for Cavitation Corrosion and Erosion-Corrosion Characteristics of Aluminum Pumps with Engine Coolants

D 3634 Test Method for Trace Chloride Ion in Engine Coolants

D 4327 Test Method for Anions in Water by Chemically Suppressed Ion Chromatography

D 4340 Test Method for Corrosion of Cast Aluminum Alloys in Engine Coolants Under Heat-Rejecting Conditions

¹ 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 April 10, 1998; May 1, 2004. Published December 1998; June 2004. Originally published as D 5752 – 95; approved in 1995. Last previous edition approved in 1998 as D 5752 - 958.

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, Vol 15.05, volume information, refer to the standard's Document Summary page on the ASTM website.