



Designation: D 1763 – 9400

An American National Standard

Standard Specification for Epoxy Resins¹

This standard is issued under the fixed designation D 1763; 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 totally reactive epoxy resins supplied as liquids or solids which can be used for castings, coatings, tooling, potting, adhesives, or reinforced applications. The addition of hardeners in the proper proportions causes these resins to polymerize into infusible products. The properties of these products can be modified by the addition of various fillers, reinforcements, extenders, plasticizers, thixotropic agents, etc. The epoxy resins described also can be used as stabilizers and cross-linking agents; and they can be combined with other reactive products.

1.2 It is not the function of this specification to provide engineering data or to guide the purchaser in the selection of a material for a specific end use. Ordinarily the properties listed in Table 1 and Table 2 are sufficient to characterize a material under this specification, and it is recommended that routine inspection be limited to testing for such properties.

1.3 ~~The following safety hazards caveat pertains only to the test methods portion, Section 7, of this specification: 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. For specific cautionary statement, see Note 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.

1.4 The values stated in SI units are to be regarded as standard.

NOTE 1—ISO 3673-1² 1980(E) is similar but not equivalent to this specification. Product classification and characterization are not the same.

2. Referenced Documents

2.1 ASTM Standards:

D 445 Test Method for Kinematic Viscosity of Transparent and Opaque Liquids ~~(and the Calculation~~ (Calculation of Dynamic Viscosity)²

¹ This specification is under the jurisdiction of ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee D20.16 on Thermosetting Materials. ~~This standard was revised in 1994 to include an ISO equivalency statement and keywords, to remove sections regarding purchaser/producer agreements outside Practice D-1898, and to remove quality assurance (QA) provisions for government/military procurement materials.~~

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