



Designation: E 1 – 03a

Method 9501—Federal Test
Method Standard No. 791b

Standard Specification for ASTM Liquid-in-Glass Thermometers¹

This standard is issued under the fixed designation E 1; 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 liquid-in-glass thermometers graduated in degrees Celsius (~~centigrade~~) or ~~Fahrenheit~~ degrees ~~which Fahrenheit that~~ are frequently ~~specified~~ identified and used in methods under the jurisdiction of the various technical committees within ASTM. The various thermometers ~~covered~~ specified are listed in Table 1. The ~~designation~~ inclusion of an IP number in Table 1 indicates, where appearing, that the thermometer specification has been jointly agreed upon by the British Institute of Petroleum (IP) and ASTM.

1.2 This specification also covers adjustable-range enclosed-scale thermometers, graduated in ~~Celsius (centigrade) degrees,~~ degrees Celsius, which are ~~specified used in methods of ASTM.~~ ASTM methods.

1.3 The enclosed-scale thermometers are commonly called Beckmann thermometers. They are suitable for measuring small temperature differences not exceeding 6 °C within a larger range of temperature. The thermometers are unsuitable for measuring Celsius- or kelvin-scale temperatures unless they have been compared with standard instruments immediately before use.

1.4 An alphabetic list of the ASTM Thermometers included in this standard is given in Table 2.

1.5 A list of ASTM Thermometers is given in Table 3 to facilitate selection according to temperature range, immersion, and scale-error requirements.

NOTE 1—For a listing of thermometers recommended for general laboratory use, the Scientific Apparatus Makers Association: Specifications for

¹ This specification is under the jurisdiction of ASTM Committee E20 on Temperature Measurement and is the direct responsibility of Subcommittee E20.05 on Liquid-in-Glass Thermometers and Hydrometers.

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