



Designation: D 4517 – ~~85~~ (Reapproved 1999) 04

An American National Standard

Standard Test Method for Low-Level Total Silica in High-Purity Water by Flameless Atomic Absorption Spectroscopy¹

This standard is issued under the fixed designation D 4517; 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 test method covers the determination of total silica in water.
- 1.2 This test method is applicable in the range from 25 to 250 µg/L of silica as SiO₂. Higher concentrations may be determined by decreasing the aliquot volume (see Note 6). Concentration range should not be extended by dilution.
- 1.3 This test method determines total silica, and does not distinguish between soluble and insoluble forms.
- 1.4 This test method was tested on reagent water only. It is the user's responsibility to assure the validity of the test method for waters of other matrices.
- 1.5 *This standard does not purport to address 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 This test method is under the jurisdiction of ASTM Committee D19 on Water and is the direct responsibility of Subcommittee D19.03 on Sampling of Water and Water-Formed Deposits, Surveillance of Water, and Flow Measurement of Water.

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