



Designation: D 5550 – 9400

Standard Test Method for Specific Gravity of Soil Solids by Gas Pycnometer¹

This standard is issued under the fixed designation D 5550; 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 the specific gravity of soil solids by means of a gas pycnometer. Particle size is limited by the dimensions of the specimen container of the particular pycnometer being used.

1.2 Test Method D 854 may be used instead of or in conjunction with this test method for performing specific gravity tests on soils. Note that Test Method D 854 does not require the specialized test apparatus needed by this test method. However, Test Method D 854 may not be used if the specimen contains matter that can readily dissolve in water, whereas this test method does not have that limitation.

1.3 The values stated in acceptable SI units are to be regarded as the standard. The inch-pound units given in parentheses are for information only.

1.4 *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:

C 670 Practice for Preparing Precision and Bias Statements for Test Methods for Construction Materials²

¹ This test method is under the jurisdiction of ASTM Committee D-18 on Soil and Rock and is the direct responsibility of Subcommittee D18.13 on Marine and Coastal Geotechnical.

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