



Designation: D 4567 – 9903

## Standard Test Method for Single-Point Determination of Specific Surface Area of Catalysts and Catalyst Carriers Using Nitrogen Adsorption by Continuous Flow Method<sup>1</sup>

This standard is issued under the fixed designation D 4567; 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 single-point determination of the surface area of catalysts and catalyst carriers that exhibit Type II or Type IV nitrogen adsorption isotherms using a nitrogen-helium flowing gas mixture. This test method is applicable for the determination of total surface areas from 0.1 to 300 m<sup>2</sup>, where rapid surface area determinations are desired.

1.2 Because the single-point method uses an approximation of the BET equation, the multipoint BET method (Test Method D 3663) is preferred to the single-point method.

NOTE 1—This is particularly true when testing microporous materials.

1.3 The values stated in SI units are to be regarded as the standard. The values 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 whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

<sup>1</sup> This test method is under the jurisdiction of Committee D-32 on Catalysts and is the direct responsibility of Subcommittee D32.01 on Physical-Chemical Properties. Current edition approved April 10, 1999; Oct. 1, 2003. Published June 1999; October 2003. Originally published as D 4567–86, approved in 1986. Last previous edition D 4567–86 (1994); approved in 1999 as D 4567–99.