



Standard Test Method for Classification of Asbestos by Quebec Standard Test¹

This standard is issued under the fixed designation D3639/D3639M; 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.

^{ε1} NOTE—Units information was editorially corrected in February 2012.

1. Scope

1.1 This test method covers a procedure for dry classification of chrysotile asbestos fiber by length distribution.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.3 **Warning**—Breathing of asbestos dust is hazardous. Asbestos and asbestos products present demonstrated health risks for users and for those with whom they come into contact. In addition to other precautions, when working with asbestos-cement products, minimize the dust that results. For information on the safe use of chrysotile asbestos, refer to “Safe Use of Chrysotile Asbestos: A Manual on Preventive and Control Measures.”²

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. See 1.3 for a specific hazard warning.*

2. Referenced Documents

2.1 *ASTM Standards:*³

- D2590 Test Method for Sampling Chrysotile Asbestos
- D2946 Terminology for Asbestos and Asbestos-Cement Products
- D2987 Test Method for Moisture Content of Asbestos Fiber

¹ This test method is under the jurisdiction of ASTM Committee C17 on Fiber-Reinforced Cement Products and is the direct responsibility of Subcommittee C17.03 on Asbestos - Cement Sheet Products and Accessories.

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² Available from The Asbestos Institute, http://www.chrysotile.com/en/sr_use/manual.htm.

³ For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

D3879 Test Method for Sampling Amphibole Asbestos (Withdrawn 2009)⁴

E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

2.2 *ASTM Adjunct:*

Quebec Asbestos Testing Machine Construction and Operation Instructions⁵

2.3 *Quebec Asbestos Mining Association Documents:*

Quebec Standard Classification of Chrysotile Asbestos Grades⁶

Specifications and Drawings for Quebec Standard Asbestos Testing Machine Model No. 2⁶

3. Terminology

3.1 *Definitions*—Refer to Terminology D2946 and the Terminology Section of Test Method D2590.

4. Summary of Test Method

4.1 A 454-g [16-oz] sample is sifted through three progressively finer screens, and the mass fraction retained by each is determined, and reported in ounces (1 oz = 28.35 g).

5. Significance and Use

5.1 The Quebec Standard Testing Machine classifies milled chrysotile asbestos grades according to the mass fractions retained on each screen. Specimens that are not properly conditioned prior to testing or that have excessive moisture content (above 3 % in accordance with Method D2987), or both, may give erratic and false results.

5.2 Some amphibole asbestos fibers may be classified by this test method but a standard classification for these has not been established.

⁴ The last approved version of this historical standard is referenced on www.astm.org.

⁵ Available from ASTM International Headquarters. Order Adjunct No. ADJD3639. Original adjunct produced in 1977.

⁶ Available from the Quebec Asbestos Mining Association, 1130 Sherbrooke St. West, Montreal, QC Canada H3A 2M8.