

Standard Methods of Test for
RESISTANCE OF TEXTILE MATERIALS TO
MICROORGANISMS¹



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This Standard of the American Society for Testing Materials is issued under the fixed designation D 684; the final number indicates the year of original adoption as standard or, in the case of revision, the year of last revision.

NOTE—Editorial changes in Section 4(a) were made in October, 1957.

These methods, developed by the AATCC Technical Committee on Research, have been approved jointly by the American Association of Textile Chemists and Colorists and the American Society for Testing Materials

Scope

1. These methods of test cover biological procedures for determining the resistance of textile materials to attack by microorganisms, and are applicable to all types of textile materials (loose fiber, yarns, threads, cords, and fabrics) regardless of the kinds of fiber used in their manufacture. Two procedures are covered, as follows:

Accelerated Fungal Inoculation Method.—Applicable to textile materials that are expected to be used or stored in a damp, warm atmosphere, but out of contact with damp soil.

Soil Burial Method.—Applicable to textile materials that are expected to be in contact with damp soil for long periods of time, such as sandbag fabrics stored on damp ground.

ACCELERATED FUNGAL INOCULATION
METHOD

Test Organisms³

2. Cultures of the required strains shall be used as follows:

- (a) *Chaetomium globosum* (USDA 1042.4 or ATCC 6205), and
- (b) *Aspergillus niger* (USDA TC2154247 or ATCC 6275).

Inoculum

3. Add about 10 ml of sterile distilled

¹ Under the standardization procedure of the Society, these methods are under the jurisdiction of the ASTM Committee D-13 on Textile Materials.

² Prior to adoption as standard, these methods were published as tentative from 1942 to 1954, being revised in 1945 and 1953.

³ Cultures of these test organisms are available from the American Type Culture Collection Laboratory, Georgetown University, Washington, D. C.