

Tentative Methods of Test for

AMOUNT OF MOISTURE IN TEXTILE MATERIALS¹



ASTM Designation: D 2654 – 67 T

These Tentative Methods have been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia, Pa. 19103.

1. Scope

1.1 These methods cover the determination of the moisture content in textile materials. These methods are applicable to all fibers, natural and man-made, and in all forms from bulk fiber or filaments to finished fabrics, subject to the limitations set forth in 1.1.1 through 1.1.3.

1.1.1 *Option 1*—Oven-drying using ambient air heated to 105 C may be used in any situation in which a simple and convenient method for routine process control or in-plant evaluation is needed. It is not recommended for jute or grease wool, or for acceptance testing in commercial transactions.

1.1.2 *Option 2*—Oven-drying using desiccated air heated to 105 C and other refinements in technique may be used as a basis for commercial transactions for all materials for which it is known that no significant quantity of nonaqueous vola-

tile matter is present on or in the material to be tested.

1.1.3 *Option 3*—Distillation with toluene is the preferred method for jute and grease wool in any circumstance, and is the preferred method for any material where it is known or suspected that a significant quantity of nonaqueous and non-water-miscible volatile matter is present. It also has the best reproducibility of the three options and, therefore, may be preferred in case of dispute.

1.2 Blends of fibers may also be tested by these methods.

1.3 *Options 1 and 2* describe alternative procedures for weighing the dried specimens; a procedure for weighing the specimens in the oven while hot, and a procedure for sealing the specimens in a moisture-tight weighing container and cooling it in a desiccator before weighing it at room temperature.

¹ Under the standardization procedure of the Society, these methods are under the jurisdiction of the ASTM Committee D-13 on Textile Materials, and are the direct responsibility of Subcommittee B-3 on Atmospheric Conditions and Regains. A list of committee members may be found in the ASTM Year Book.

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NOTE 1—Other methods for determining the amount of moisture in textile materials are covered in ASTM Method D 2495, Moisture in Cotton (Oven-Drying Method),² ASTM Method D 1576, Moisture in Wool by Oven-Drying,² ASTM Method D 2462, Moisture in Wool by

² 1969 Book of ASTM Standards, Part 25.