



Standard Practice for Sampling Man-Made Staple Fibers, Sliver, or Tow for Testing¹

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1. Scope

1.1 This practice covers a procedure for the division of shipments of man-made staple fiber, sliver (or top) or tow into lots and the sampling of such lots for testing.

NOTE 1—For sampling yarns, refer to Practice D 2258.

NOTE 2—This practice differs from BISFA² rules for staple fibers in the lot sampling, by the elimination of separate sampling of outer versus inner container areas, in the reduction of number of strata from 6 to 5, and by the elimination of compositing to obtain a single laboratory sample for the lot when testing properties which do not depend on as-received moisture content.

1.2 *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:

D 123 Terminology Relating to Textiles³

D 2258 Practice for Sampling Yarn for Testing³

D 2494 Test Method for Commercial Mass of a Shipment of Yarn or Man-Made Staple Fiber or Tow³

D 4271 Practice for Writing Statements on Sampling in Test Methods for Textiles³

3. Terminology

3.1 Definitions:

3.1.1 *container, n*—a receptacle designed to hold a material, or to give integrity to the material.

3.1.1.1 *Discussion*—for the purposes of this standard, the term container includes bales, cartons and other shipping units.

3.1.2 *laboratory sample, n*—a portion of material taken to represent the lot sample, or the original material, and used in

the laboratory as a source of test specimens.

3.1.3 *lot, n—in acceptance testing*, that part of a consignment or shipment consisting of material from one production lot.

3.1.4 *lot sample, n*—one or more shipping units taken at random to represent an acceptance sampling lot and used as a source of laboratory samples.

3.1.5 *man-made staple fiber, n*—fiber of spinnable length manufactured directly or by cutting filaments.

3.1.6 *primary sampling unit, n*—the sampling unit containing all of the sources of variability which should be considered in acceptance testing; the sampling unit taken in first stage of selection in any procedure for sampling a lot or shipment.

3.1.7 *sample, n*—(1) a portion of material which is taken for testing or for record purposes. (2) a group of specimens used, or of observations made, which provide information that can be used for making statistical inferences about the population(s) from which the specimens are drawn. (See also *lot sample*, *laboratory sample*, and *specimen*.)

3.1.8 *sampling unit, n*—an identifiable, discrete unit or subunit of material that could be taken as part of a sample.

3.1.9 *shipping unit, n—in textiles*, any type of packaging used to facilitate the handling and shipping of fibers, yarns and fabrics.

3.1.9.1 *Discussion*—For the purposes of this practice, packaging includes bales, cartons, and other such containers.

3.1.10 *specimen, n*—a specific portion of a material or laboratory sample upon which a test is performed or which is taken for that purpose. (Syn. *test specimen*.)

3.1.11 For definitions of other textile terms used in this practice, refer to Terminology D 123.

4. Summary of Practice

4.1 Instructions are given for dividing containers into lots, for determining the number of containers to be selected from each lot as the lot sample, and for determining the number of containers taken from the lot sample as a laboratory sample. See Practice D 4271.

4.2 Separate laboratory samples are taken for commercial weight measurement and for other testing, for example, physical or chemical tests.

4.3 The manner of preparing laboratory sampling units for commercial weight, and the manner of collecting laboratory sampling units for other testing are based on the following:

¹ This practice is under the jurisdiction of ASTM Committee D-13 on Textiles and is the direct responsibility of Subcommittee D13.57 on Fiber Test Methods, General.

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² BISFA Internationally Agreed Methods for Testing Polyamide Staple Fibers, 1974 edition, BISFA Internationally Agreed Methods for Testing Polyester Staple Fibers, 1972 edition, and BISFA Rules for Testing Regenerated Cellulose and Acetate Staple Fibers, 1970 edition, available from the Bureau International pour la Standardisation de la Rayonne et des Fibres Synthétiques.

³ *Annual Book of ASTM Standards*, Vol 07.01.