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## Standard Terminology Relating to Flax and Linen<sup>1</sup>

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### 1. Scope

1.1 This terminology covers definitions of technical terms related to flax and linen.

### 2. Referenced Documents

- 2.1 *ASTM Standards*:  
D 123 Terminology Relating to Textiles<sup>2</sup>

### 3. Terminology

#### 3.1 Definitions:

**bast fibers**, *n—in flax stems*, fibers found in the layer of phloem of the flax stem between the inner xylem tissue and the epidermis tissue.

**breaking**, *v—in flax stems*, the crushing of the structure of the stem; loosening the bond between the fiber bundles and shives and breaking the shives into short pieces to facilitate its removal.

**combing**, *v—in flax*, the processing of tow so as to produce tops or silver which have the staple length and width suitable for use in the worsted spinning system.

**cottonizing**, *v—in flax*, the processing of flax fiber so as to make it suitable for use in the cotton spinning system.

**decorticating**, *v—in flax*, the process of mechanically separating fiber bundles from straw.

**de-seeding**, *v—in flax*, the process of removing seeds and seed-holding structures from plants.

**fiber bundle**, *n—in flax*, group of ultimate fibers which are held together in the flax stem by pectins, lignins or any combination thereof.

**flax**, *n*—the generic name for plants that are botanically classified as *Linum usitatissimum*, which are cultivated for seed and/or fiber.

**hackling**, *v—in flax*, the process of cleaning and aligning

long-line fibers to improve fineness and remove non-fibrous materials and short fibers.

**linen**, *n*—a yarn or fabric made solely from flax fibers.

**linen blend**, *n*—a yarn or fabric made from a combination of flax and other fibers.

**long line**, *n—in flax*, flax fiber bundles that have a minimum length of 50 cm.

**over-retting**, *v—in flax*, indicates that decomposition has caused excessive deterioration of bast fibers. (See retting and underretting)

**retting**, *v—in flax*, the process of partial biological or chemical decomposition of pectins and other components which bind the fiber, fiber bundles, and the non-fiber structures, thereby facilitating removal of bast fibers from stems. (See under-retting and over-retting)

**scutching**, *v*—the mechanical beating and scraping of flax straw subsequent to breaking to separate the shives and tow from the long line flax fiber.

**shives**, *n*—the woody parts of the flax plant which are not fibers.

**straw**, *n—in flax*, refers to dried stems and plant parts such as roots, leaves, and seed holding structures.

**tow**, *n—in flax fibers*, a combination of fiber bundles and ultimate fibers that have a maximum length of 50 cm.

DISCUSSION—Tow can be made during any stage of processing. For example, breaker, scutched and hackled tow are respectively created subsequent to breaking, scutching and hackling.

**trash**, *n—in flax fiber*, any non-fibrous material.

**ultimate fiber**, *n—in flax*, an individual bast fiber.

**under-retting**, *v—in flax*, indicates that decomposition is insufficient to allow fiber bundles to be easily removed from the non-fibrous parts of the stem. (See retting and over-retting)

3.2 *Other Definitions*—For the definitions of other textile terms used in this standard, refer to Terminology D 123.

### 4. Keywords

- 4.1 definitions; flax; linen; terminology

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.17 on Flax and Linen. Current edition approved Sept 10, 2002. Published January 2003.

<sup>2</sup> *Annual Book of ASTM Standards*, Vol 07.01.