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Standard Guide for Textile Fibers¹

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1. Scope

1.1 This guide lists fibers used to manufacture textile products.

1.2 Specific groups of fibers are identified using tables of standard classification.

1.2.1 Animal fibers are identified by commercial name, biological name, end use, and geographic source.

1.2.2 Vegetable fibers are identified by commercial name, botanical name, staple length or description, and geographic source.

1.2.3 Mineral fibers are identified by commercial name, mineralogical name, chemical description, and geographic source.

1.2.4 Manufactured fibers are identified by commercial name, generic name, and major component.

1.3 Major fiber types used for textile purposes are further classified.

1.3.1 Manufactured fibers are identified as having either an organic base or inorganic base.

1.3.2 Natural fibers are identified as having a cellulosic, protein, or mineral base.

1.4 A glossary of generic names and definitions for manufactured fibers is included as additional information.

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This guide is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.92 on Terminology.

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2. Referenced Documents

2.1 *ASTM Standards:*²

D123 Terminology Relating to Textiles

2.2 *ISO Standards:*

ISO 2076:1999 (E) Textiles—Man-made Fibers—Generic Names

2.3 *Other Documents:*

Code of Federal Regulations, Title 16, Section 303.7

3. Terminology

3.1 *Definitions:*

3.1.1 *plastic, n—as related to textiles*, a polymer which can be combined with curatives, plasticizers, and fillers that can be molded under heat and pressure.

3.1.1.1 *Discussion—General* – One of a large group of organic compounds synthesized from cellular hydrocarbons, protein, and resins. The compounds are capable of being cast, extruded, or molded into various shapes.

Specific – Derivation from Greek “plastikos” which means “fit for molding”.

3.2 For definitions of textile terms used in the guide see Terminology **D123**.

4. Significance and Use

4.1 This guide is intended for use as a reference to improve the understanding of the relationship between commercial name, fiber identification and geographical regions of fiber origins that make up the composition of textile products.

4.2 This guide is intended to be used as a source of information only.

4.2.1 Detailed analysis, to verify specific data related to the composition of a particular fiber, may be necessary.

5. Animal (Protein Base) Fibers

5.1 See **Table 1**.

² 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.

TABLE 1 Animal (Protein-Base) Fibers

Commercial and Biological Name ^a		Use	Geographical Regions
ALPACA WOOL	<i>Llama glama</i>	textiles	South America, North America