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Standard Table of Commercial Moisture Regains for Textile Fibers¹

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1. Scope

1.1 This table lists the commercial moisture regains commonly used for a number of textile fibers. Such moisture regain values are intended primarily for determining the commercial weight of a specific fiber when the fiber is bought or sold on this basis. These regain values also are used in calculating the linear density of yarn in procedures employing such factors and in the quantitative analysis of fiber blends.

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textiles²

D 2118 Practice for Assigning a Standard Commercial Moisture Content for Wool and Its Products²

D 2720 Practice for Calculation of Commercial Weight and Yield of Scoured Wool, Top, and Noil for Various Commercial Compositions²

3. Terminology

3.1 Definitions:

3.1.1 *commercial moisture regain (CMR), n*—a formally adopted, arbitrary value, to be used with the oven-dried mass of textile fibers, when calculating the commercial mass of a shipment or delivery.

3.1.2 For definitions of other textile terms used, refer to Terminology D 123.

4. Significance and Use

4.1 The value listed for the commercial moisture regain of a specific fiber type is not an experimentally determined quantity but a purely arbitrary value arrived at for commercial purposes by interested parties. The actual moisture regain values of textile materials, when in moisture equilibrium with the standard atmosphere for testing, bear no consistent relation to the commercial moisture regain values listed herein. Equilibrium moisture regain values depend upon the previous history of the material.

5. Table of Commercial Moisture Regain Values

5.1 Commercial moisture regain values for specified fibers are listed in Table 1.

6. Keywords

6.1 moisture regain; textile fiber

¹ This table is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.51 on Chemical Conditioning and Performance Test Methods.

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² *Annual Book of ASTM Standards*, Vol 07.01.