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Part B: Test Methods Section, Method F-00

GENERAL INFORMATION FOR FLAMMABILITY TEST METHODS

Amendment number-Numéro de la modification 3

1 SCOPE

1.1 This method is intended to provide general information that may be needed for a better understanding of the flammability test methods in this manual.

2 APPLICABLE DOCUMENTS

2.1 Textile Terms and Definitions, 1991 Annual Book of ASTM Standards, Volume 7.01, Textiles, Method D 123.

3 DEFINITIONS

- 3.1 *Warp*: The yarn running lengthwise in a woven fabric.
- 3.2 Weft: Yarn running from selvage to selvage at right angles to the warp in a woven fabric.
- 3.3 Wales: In knitted fabrics, a column of loops in successive courses. The column is parallel with the loop axis.
- 3.4 Courses: In knitted fabrics, the series of successive loops lying crosswise of a knitted fabric.
- 3.5 Still Air Conditions: (also known as draft-free conditions): When the air velocity is 0.3 m/s or less, when measured by a hot-wire anemometer (unless otherwise specified).

4 PROCEDURES

- 4.1 To determine the warp and weft directions of a woven fabric (the warp direction usually contains more yarns per unit length than the weft direction), count the number of yarn in each direction (a pick counter can be used to count the number of yarns per unit of length in both directions of a fabric).
- 4.2 The air velocity must be measured in testing areas where a method specifies that the test is to be performed in still-air or draft-free conditions. For this purpose, a hot-wire anemometer is used immediately before the start of the test and a record is made of the determined air velocity value.
- 4.3 A record of the temperature and humidity should be kept, when relevant (consult the table in section 5), using a hygrothermograph or a psychrometer for smaller areas.
- 4.4 The cigarettes used for methods F-06 and F-08 must:
 - not have a filter tip
 - be 85 ± 2 mm long
 - have a 270 ± 20 kg/m³ tobacco packing density
 - weigh 1.1 \pm 0.1 g at 65 \pm 2 %R.H. and 20 \pm 2 °C



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- have a burning time of 1500 ± 100 seconds (the cigarette is conditioned to constant mass at 21 ± 3 °C and 35-50% R.H.), ignited at one end and placed horizontally on bonded glass fibre fabric (55 g/m^2))

This last requirement should be checked with one cigarette taken at random from a newly opened package. The date that each package was opened should also be marked on the package.

4.5 The methenamine tablets used for methods F-04 and F-16 should be used before their expiry dates. However, older tablets can still be used if they weigh 150±5 mg and have the same burning time as the non-expired tablets.

5 TABLE OF AMBIENT HUMIDITY AND TEMPERATURE RANGES FOR METHODS

Method name	Method number	Temperature Range ¹ (°C)	Humidity Range ¹ (%R.H.)
Textiles	F-01	R.T. ²	N/A
Toys	F-02	R.T.	N/A
Carpets (conditioning)	F-04	18-22	63-67
Carpets (testing)	F-04	R.T.	N/A
Mattresses	F-06	18-24	35-50
Cellulose Insulation (Smoulder Resistance Test)	F-08	21-25	45-55
Tents	F-16	20-22	63-67 ³
Children's Sleepwear	F-17	R.T.	N/A
Lighters	F-19	21-25	ambient
Matches	F-20	18-24	30-50
Relight Candles	F-21	21-25	45-55

¹ Laboratory conditions

² Room temperature

³ Testing to be done under these conditions or upon immediate removal of the specimen from such conditions.