TABLE 1
CHEMICAL FABRICS & FILM ASSOCIATION, INC.
Minimum Performance Standards for Vinyl-Coated and Other Chemical Coated Upholstery Fabrics - Indoor

TEST PROCEDURE	TEST METHOD	KNITS	NON-WOVENS	WOVENS
ABRASION	CFFA 1a[1]	NO APPRECIABLE WEAR	NO APPRECIABLE WEAR	NO APPRECIABLE WEAR
ACCELER-ATED LIGHT AGING	CFFA 2[2]	NO APPRECIABLE COLOR CHANGE	NO APPRECIABLE COLOR CHANGE	NO APPRECIABLE COLOR CHANGE
ADHESION	CFFA 3	3.0 lbs.	3.0 lbs.	3.0 lbs.
BLOCKING	CFFA 4	NO BLOCKING, SLIGHT ADHESION	NO BLOCKING, SLIGHT ADHESION	NO BLOCKING, SLIGHT ADHESION
COLD CRACK	CFFA 6a[3]	NO CRACKING	NO CRACKING	NO CRACKING
CROCKING	CFFA 7	GOOD	GOOD	GOOD
FLEX	CFFA 10[4]	NO APPRECIABLE CRAZING	NO APPRECIABLE CRAZING	NO APPRECIABLE CRAZING
SCRUBBAB-ILITY	CFFA 130	200	300	500
SEAM STRENGTH	CFFA 14	30 x 25 lbs.	35 x 35 lbs.	25 x 25 lbs.
TEAR TONGUE TRAP	 CFFA 16b CFFA 16c	 4 x 4 lbs. NA	 NA 15 x 15 lbs.	 4 x 4 lbs. NA
TENSILE	CFFA 17	50 x 50 lbs.	50 x 50 lbs.	40 x 40 lbs.
VOLATILITY	CFFA 18[5]	8%	8%	8%

[1] Wyzenbeek Test Method with Wire Screen as the Abradent, minimum 3,000 cycles.
[2] 200 hours using a Carbon Arc or Xenon Arc Fadeometer or 150 hours using a QUV - dry cycle.
[3] Using a 5 lb. roller, 20° F (-6.6°C).
[4] 25,000 cycles.
[5] Activated carbon technique at 220°F (104°C).

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Recommended Performance Standards for VINYL-COATED AND OTHER CHEMICAL COATED UPHOLSTERY FABRICS - INDOOR

Developed by

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1. Scope

1.1 This document sets forth recommended performance standards for vinyl and other chemical coated upholstery fabrics produced with woven, non-woven, or knit substrates which are used as upholstery materials for indoor furniture.

1.2 This specification is not applicable to vinyl or chemical coated fabrics used in outdoor applications.

1.3 This standard covers but is not limited to other chemical coatings widely used for upholstery such as urethane and acrylic.

2. Applicable Documents

For applicable documents used in this specification, refer to the Chemical Fabrics & Film Association, Inc., Standard Test Methods Pamphlet, most recent Edition.

3. Definitions

Abrasion - Measurement of the ability of the chemical coating to resist surface wear when rubbed against another (abradent) surface.

Adhesion - A measure of the force required to separate a chemical coating from the base substrate.

Colorfastness to Light - A determination of the resistance of chemical coated fabrics to exposure to laboratory simulated sunlight.

Crocking - A measure of resistance to transfer of color from a chemical coating to another surface (usually a fabric) by rubbing action.

Flex - A determination of the change in surface appearance of a chemical coated fabric when subjected to a multiple flexing.

Low Temperature Resistance - The measurement of the ability of a chemical coated fabric to withstand cracking at low temperatures.

Tear Strength - A measurement of the force required to continue or propagate a tear in a coated fabric.

Tensile Strength - A measurement of the force required to break a coated fabric.

Volatility - A measurement of weight loss of a chemical coated fabric when subjected to an elevated temperature.

4. Performance Requirements

4.1 Vinyl and other chemical coated upholstery fabrics are manufactured from natural and/or synthetic fibers chemically coated on one side to provide a durable, protective surface. Depending upon application, the coated fabrics will be colored, decorated and/or textured to provide an aesthetically pleasing appearance and feel while maintaining minimum performance standards under non-abrasive consumer usage.

4.2 Three coated fabric categories are included: knits, wovens and non-wovens. See Table 1 for minimum test values.

4.3 Properties described in Table 1 for coated fabrics collectively make up the minimum performance standards. Depending upon specific tailoring and performance requirements, these properties should be used to select the construction of coated fabric most suited for each end use. Properties are measured using CFFA Standard Test Methods. All test methods are outlined in the CFFA Standard Test Methods pamphlet which describes their purpose and relates the properties tested to various aspects of performance.

4.4 The test results for coated fabrics, when tested in accordance with the CFFA Standard Test Methods, must attain the minimum values of all properties listed in Table 1 for a given construction in order to conform to this standard.

5. Test Procedures

5.1 Abrasion (Surface Resistance) - Using a stainless steel wire screen described in ASTM D3597 as the abradent (surface screen of 50 x 70 mesh, support screen 14-18 mesh). See CFFA Standard Test Method 1 (1995 Addendum).

5.2 Accelerated Light Aging - 200 hours using a Carbon Arc or Xenon Arc Fadeometer or 150 hours using a QUV, dry cycle. See CFFA Standard Test Method 2 (1997 Addendum).

5.3 Adhesion of Coating to Fabric - See CFFA Standard Test Method 3.

5.4 Blocking - See CFFA Standard Test Method 4.

5.5 Cold Crack Resistance - Using a 5 lb. Roller. See CFFA Standard Test Method 6a.

5.6 Crocking Resistance - See CFFA Standard Test Method 7.

5.7 Flex Test - See CFFA Standard Test Method 10.

5.8 Scrubbability - See CFFA Standard Test Method 130 (1995 Addendum).

5.9 Seam Strength - See CFFA Standard Test Method 14.

5.10 Tearing Strength - See CFFA Standard Test Method 16b and 16c.

5.11 Tensile Strength - See CFFA Standard Test Method 17.

5.12 Volatility based on Activated Carbon Technique for Products on Non-Woven Substrates, except at 220°F. (104°C.) - See CFFA Standard Test Method 18.

6. Notes

6.1 Flammability - If there is a flammability requirement, such requirement shall be as agreed upon by user and supplier.

6.2 Stretch and Set - Stretch and set properties are often required by the user. However, this standard covers such a wide range of products that vary in these properties that it is not feasible

to provide meaningful values. Stretch and set properties should be as agreed upon by user and supplier. See CFFA Standard Test Method 15.

6.3 Mildew and/or Bacterial Resistance - In some upholstery applications (hospital, health care, etc.) biological resistance requirements may be incorporated into the specifications to meet the needs of the final customer. CFFA Standard Test Method 120 - Mildew Resistance and CFFA Standard Test Method 300 - Bacterial Resistance can be added to the specific product specifications to facilitate the customer's needs.