



AEROSPACE MATERIAL SPECIFICATION

AMS3800™

REV. B

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Superseding AMS3800A

Cloth, Knitted, Polyamide, High Temperature Resistant
Reverse Jersey

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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Documents

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1. SCOPE:

1.1 Form: This specification covers one type of polyamide fiber in the form of knitted cloth.

1.2 Application: Primarily for use as seat cushion covers in aircraft.

2. APPLICABLE DOCUMENTS: The following publications form a part of this specification to the extent specified herein. The latest issue of Aerospace Material Specifications shall apply. The applicable issue of other documents shall be as specified in AMS 2350.

2.1 SAE Publications: Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096.

2.1.1 Aerospace Material Specifications:

AMS 2350 - Standards and Test Methods

2.2 ASTM Publications: Available from Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

ASTM D123 - Definition of Terms Relating to Textiles

2.3 U.S. Government Publications: Available from Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120.

2.3.1 Federal Specifications:

PPP-P-1133 - Packaging and Packing of Synthetic Fiber Fabrics

2.3.2 Federal Standards:

FED-STD-4 - Glossary of Fabric Imperfections
FED-STD-191 - Textile Test Methods

2.3.3 Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes

3. TECHNICAL REQUIREMENTS:

3.1 Material: The cloth shall be knitted from bright, non-melting aromatic polyamide fibers.

3.1.1 Denier and Filament: Yarn shall be 200 denier, 100 filament, determined in accordance with 4.5.1.

3.1.2 Color: Yarn shall be dyed Sage Green color as approved in accordance with 4.4.1.

3.1.3 Twist: The course and wale yarns used shall be twisted to a maximum of three turns per in. (25.4 mm).

3.1.4 Finish: Cloth shall be finished including application of a durable, antistatic finish (See 8.1) to meet the requirements of 3.2.

3.2 Properties: Cloth shall conform to the following requirements; tests shall be performed on the cloth supplied and in accordance with specified test methods insofar as is practicable:

3.2.1	Construction		FED-STD-191,
	Wales, min	24	Method 5070
	Course, min	28	
3.2.2	Weight, min	7 oz per sq yd (0.240 kg/m ²)	FED-STD-191, Method 5041
3.2.3	Abrasion (cycles to destruction), min	1,000	FED-STD-191, Method 5302 <u>1</u> /
3.2.4	Bursting Strength Ball Method, min	150 lb <u>2</u> / (70 kg)	FED-STD-191, Method 5120
3.2.5	Stretch, max		4.5.3
	Wales	35%	
	Courses	70%	

3.2.6	Set, max	4.5.3
	Wales	5%
	Courses	10%

- 1/ "0" grit emery paper, 3 psi (20 kPa), 2 lb (1 kg) load
2/ Fabric does not burst at 150 lb (70 kg) max on Scott tester

3.2.7 Width: Shall be as specified by purchaser.

3.3 Quality: Cloth, as received by purchaser, shall be evenly knitted, as free from foreign materials as commercially practicable, and free from imperfections detrimental to usage of the cloth.

3.3.1 Imperfections: Acceptability of each lot of cloth shall be based on defects listed in Table I.

TABLE I

CLASSIFICATION OF DEFECTS (1)

Defect	<u>Classification</u>	
	Major	Minor
Any hole, cut, or tear	X	
Run or dropped stitch, end out	X	
Tuck stitch, pulled stitch, or needle streak		X
Mend	X	
Abrasion mark resulting from weak area (2)	X	
Thin or uneven cloth (2)	X	
Coarse or fine yarn (2)		X
Tight twist yarn		X
Slubs or gouts, more than twice the size of normal yarn		X
Knots extending above the surface of cloth		X
Kinks or untrimmed ends		X
Crease or wrinkle (embedded)		X