

AEROSPACE MATERIAL SPECIFICATION

Submitted for recognition as an American National Standard

SAE

AMS-3788/3

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Superseding AMS-3788/3

CLOTH, NYLON TWILL
5.4 Ounces per Square Yard (183 g/m²), Smooth Finish

1. SCOPE:

- 1.1 Form: This specification covers one weight and one type of finish of nylon cloth.
- 1.2 Application: Primarily for use in the manufacture of aviation ground clothing.
- 1.3 Classification: 5.4 ounces per square yard (183 g/m²) weight with a smooth finish.

2. APPLICABLE DOCUMENTS: See AMS-3788.

3. TECHNICAL REQUIREMENTS:

- 3.1 Basic Specification: The complete requirements for procuring the cloth described herein shall consist of this document and the latest issue of the basic specification, AMS-3788.
- 3.2 Properties: Cloth shall conform to the requirements of Table I and the following:
 - 3.2.1 Weave: Shall be 2 up 2 down or 2 up 1 down right hand twill.
 - 3.2.2 Width: Shall be not less than 40 inches (1 m) inclusive of selvages.
 - 3.2.3 Weight: Shall be not greater than 5.4 ounces per square yard (183 g/m²).
 - 3.2.4 Finish: Cloth shall be smooth and free from wrinkles.

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4. QUALITY ASSURANCE PROVISIONS: See AMS-3788.
5. PREPARATION FOR DELIVERY: See AMS-3788.
6. ACKNOWLEDGMENT: See AMS-3788.
7. REJECTIONS: See AMS-3788.
8. NOTES: See AMS-3788.

TABLE I

Property	Requirement
<u>Yarn:</u>	
Denier, Nominal	
Warp	70
Filling	200
Filling Yarn Twist, turns per inch (25.4 mm)	6.0 to 8.0
<u>Cloth:</u>	
Thread Count, threads per inch (25.4 mm), min	
Warp	250
Filling	72
Breaking Strength, Ravel Strip, min	
Warp	170 pounds force per inch (30,282 N/m)
Filling	160 pounds force per inch (28,500 N/m)
Tear Strength, Strip Tear, min	
Warp	10 pounds force (45 N)
Filling	10 pounds force (45 N)
Elongation, min	
Warp	20%
Filling	20%
Air Permeability, max	18 cubic feet/minute per square foot (18 m/minute per m ²)
pH	6.0 to 8.0
Non-Fibrous Materials, by weight, max	3%
Residual Shrinkage, max	
Warp Direction	2.0%
Filling Direction	1.5%