



AEROSPACE MATERIAL SPECIFICATION

AMS3907™/2

Issued 1985-10
Reaffirmed 2022-10

Superseding AMS3907/2

Cloth, Aramid
4.3 oz per sq yd (145 g/m²) Plain Weave

RATIONALE

AMS3907/2 has been reaffirmed to comply with the SAE Five-Year Review policy.

1. SCOPE:

- 1.1 **Form:** This specification covers one weight and type of weave of aramid cloth.
- 1.2 **Application:** Primarily for use in the fabrication of special clothing.
- 1.3 **Classification:** Shall consist of 4.3 oz per sq yd (145 g/m²) aramid cloth with a plain weave and the following classes:

Class 1 - Type 456 fiber
Class 2 - Type 452 fiber
Class 3 - Type 457 fiber

2. APPLICABLE DOCUMENTS: See AMS 3907.

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 3907.
- 3.2 **Properties:** Shall conform to the requirements of Table I and the following:
 - 3.2.1 **Yarn:** Shall be 2 ply.
 - 3.2.2 **Flame Resistance, Class 1:** The flame from a Meker burner shall not pass from the flame side to the other side of the cloth due to the cloth breaking open.

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Documents

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3.2.3 Color: The color of each cloth shall be obtained by the use of dry spun solution dyed fiber and shall be as shown below; colors shown are the manufacturer's identification number for each color.

Fiber Type	Color
452	Sage Green 1565
456	Sage Green 1590
457	Olive Green 106

3.2.3.1 Matching: The color of the finished cloth shall match the standard sample under artificial daylight having a correlated color temperature of 7,000° Kelvin $\pm$ 500 and shall be a good approximation to the standard sample under incandescent lamplight at 2,850° Kelvin $\pm$ 100.

3.2.3.2 Colorfastness: The dyed and finished cloth shall show colorfastness to light and to laundering equal to or better than the standard sample.

3.2.4 Weave: Shall be a plain weave.

3.2.5 Width: Shall be not less than 45 in. (1,140 mm) inclusive of the selvages. When the cloth has a shuttleless loom selvages, the width of the cloth should be as specified and shall be not less than the width of the woven cloth, excluding the selvages.

3.2.6 Nonfibrous Material: Prior to application of the antistatic finish, the cloth shall contain no more than 1.0% starch and protein material, including the chloroform-soluble and water-soluble material.

3.2.7 Finishing: Cloth shall be desized, scoured, heat set and given a suitable durable antistatic finish (See 8.2) to meet the requirements of Table I.

3.2.7.1 Finishing Procedure: Cloth should be finished by a procedure equivalent to the following:

3.2.7.1.1 Scour open width on continuous scouring range at 70°C $\pm$ 3 (160°F $\pm$ 5) in a scouring solution of 0.07 oz per gal (0.5 g/L) of trisodiumphosphate and detergent.

3.2.7.1.2 Dry at 150°C $\pm$ 5 (300°F $\pm$ 9) to set construction.

3.2.7.1.3 Autoclave heat set using the following procedure:

5 min.	pre-vacuum
20 min.	30 psi (207 kPa) steam
5 min.	vacuum
20 min.	30 psi (270 kPa) steam
5 min.	vacuum