

# AEROSPACE MATERIAL SPECIFICATION

Submitted for recognition as an American National Standard



**AMS 3798/13B**

Issued OCT 1983  
Revised JUL 1993  
Reaffirmed JAN 1999

Superseding AMS 3798/13A

Webbing, Low Modulus Aramid  
1-23/32 (44) Wide, 7300 (32,472) Breaking Strength  
Twill, Resin Treated

## FOREWORD

Changes in this Reaffirm are format/editorial only.

### 1. SCOPE:

#### 1.1 Form:

This specification covers one width and one breaking strength of low-modulus aramid webbing.

#### 1.2 Application:

See AMS 3798.

#### 1.3 Classification:

1-23/32 inches (44 mm) wide low-modulus aramid webbing having 7300 pounds force (32,474 N) breaking strength.

### 2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

#### 2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

See AMS 3798.

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### 3. TECHNICAL REQUIREMENTS:

#### 3.1 Basic Specification:

The complete requirements for procuring the webbing described herein shall consist of this document and the latest issue of the basic specification, AMS 3798.

#### 3.2 Construction and Properties:

3.2.1 Yarn: Yarn used in weaving the webbing shall be low-modulus aramid with a carbonization (char) temperature not lower than 355 °C (671 °F).

3.2.1.1 Denier and Filament Count: The yarn shall be 1200 denier  $\pm 15$  and shall consist of 600 filaments  $\pm 15$ .

3.2.1.2 Ply: Final warp yarn shall be not less than two ply; filling yarn shall be not less than two ply.

3.2.1.3 Twist: The final ply of yarn shall have not less than 2.5 turns per inch (25.4 mm) twist. The required denier and number of single yarns shall be twisted together (plied) in one operation.

3.2.2 Webbing: Shall conform to the following requirements:

3.2.2.1 Weave: Shall be as shown in Figure 1.

3.2.2.2 Color: Shall be FED-STD-595, Olive Green 106 solution dyed.

3.2.2.3 Width: Shall be 1.72 inches  $\pm 0.06$  (43.7 mm  $\pm 1.5$ ), determined in accordance with ASTM D 3774.

3.2.2.4 Thickness: Shall be 0.090 to 0.120 inch (2.29 to 3.05 mm), determined in accordance with ASTM D 1777.

3.2.2.5 Weight: Shall not exceed 2.40 ounces/yard (74.4 g/m), determined in accordance with ASTM D 3776.

3.2.2.6 Breaking Strength: Shall be not less than 7300 pounds force (32,472 N) unaged and not less than 85% of the unaged strength after aging, determined in accordance with FED-STD-191, Method 4108.

3.2.2.7 Thread Count: Total warp ends (face and back) shall be not less than 305. Filling picks shall be not less than 17 per inch (25.4 mm).

3.2.2.8 Resin Treatment: The webbing shall have an abrasion protective resin treatment. Treatment shall be polyvinyl butyral plasticized with butyl ricinoleate applied by water dispersion, dried, and cured to form a firmly adherent and evenly distributed deposit or coating on the yarns of the webbing. The curing of the resin shall be conducted within the range 115 to 180 °C (239 to 356 °F).

3.2.2.9 Extractable Matter: After resin treatment, the webbing shall contain not more than 8.5% by weight of matter extractable in methyl ethyl ketone, determined in accordance with 4.5.7, AMS 3798.

### 3.3 Length and Put-up:

Webbing shall be furnished in rolls containing 90 to 110 yards (82 to 101 m). No roll shall contain more than three pieces and no piece shall be less than 10 yards (9 m) in length.

## 4. QUALITY ASSURANCE PROVISIONS:

See AMS 3798.

## 5. PREPARATION FOR DELIVERY:

See AMS 3798.

## 6. ACKNOWLEDGMENT:

See AMS 3798.

## 7. REJECTIONS:

See AMS 3798.

## 8. NOTES:

See AMS 3798.

8.1 The change bar ( I ) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this specification. An (R) symbol to the left of the document title indicates a complete revision of the specification.

PREPARED UNDER THE JURISDICTION OF AMS COMMITTEE "P"