



AEROSPACE MATERIAL SPECIFICATION

AMS3904™

REV. C

Issued 1978-04
Revised 1999-03
Stabilized 2016-08

Superseding AMS3904B

Organic Fiber (Para-Aramid), Yarn and Roving
Intermediate Modulus
For Cables, Cordage, and Woven Goods

RATIONALE

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

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1. SCOPE:

1.1 Form:

This specification and its supplementary detail specifications cover intermediate modulus para-aramid organic fibers in the form of continuous, multifilament yarn and roving.

1.2 Application:

These products have been used typically as primary elements in cables, cordage, and woven goods, but usage is not limited to such applications. Each application should be considered individually.

1.3 Classification:

The fibers shall be as specified in the applicable detail specification, wherein each product is defined by form, denier, and finish. An example is shown in 8.2. The product covered by each detail specification appears as part of the title.

1.4 Safety - Hazardous Materials:

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS:

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

2.1 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM D 885	Testing Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Man-Made Organic-Base Fibers
ASTM D 1505	Density of Plastics by the Density-Gradient Technique
ASTM D 1907	Yarn Number by the Skein Method

2.2 ANSI Publications:

Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ANSI/ASQ Z1.4 Sampling Procedures and Tables for Inspection by Attributes

3. TECHNICAL REQUIREMENTS:

3.1 Detail Specifications:

The requirements for a specific product shall consist of all requirements specified herein in addition to requirements specified in the applicable detail specification. In case of conflict between requirements of this basic specification and an applicable detail specification, requirements of the detail specification shall govern.

3.2 Material:

- 3.2.1 Construction: Shall consist of parallel, unidirectional, continuous, organic filaments characterized by flexibility and fineness.
- 3.2.2 Finish: A finish or treatment shall be applied to the fibers to promote internal abrasion resistance. The amount of finish shall be as specified in the applicable detail specification.
- 3.2.3 Color: Shall be essentially yellow.

3.3 Properties:

The product shall conform to the requirements of this specification and the applicable detail specification. Tests shall be performed on the product supplied and in accordance with specified methods, insofar as practicable.