



400 Commonwealth Drive, Warrendale, PA 15096-0001

AEROSPACE MATERIAL SPECIFICATION



AMS 3901/1B

Issued 1 JUN 1974
Revised 1 OCT 1992
Superseding AMS 3901/1A

Submitted for recognition as an American National Standard

YARN, ORGANIC FIBER (PARA-ARAMID), HIGH MODULUS
OY 390 (2689)/23.5 Tensile Strength, 18 (124)/982 Tensile Modulus
195 Denier, 0.6% Finish

1. SCOPE:

1.1 Form:

This specification covers one type of organic fiber in the form of yarn. The product shall be formed as a multiplicity of filaments drawn together and gathered into an approximately parallel arrangement.

1.2 Classification:

Organic 195 denier yarn with 390 ksi (2689 MPa) or 23.5 g/d tensile strength and 18 Msi (124 GPa) or 982 g/d tensile modulus for use in general purpose composites requiring high tensile strength and high modulus of elasticity in tension.

2. APPLICABLE DOCUMENTS:

See AMS 3901.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification:

The complete requirements for procuring the organic yarn described herein shall consist of this document and the latest issue of the basic specification.

3.2 Properties:

Shall be as shown in Table 1; no individual package, based on the average of three determinations, shall have less than 90% of the lot minimum values specified in 3.2.1 and 3.2.2.

SAE Technical Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.