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AEROSPACE MATERIAL SPECIFICATION

SAE AMS 3904/4B

Issued APR 1978
Revised APR 1989
Cancelled MAR 1999

Submitted for recognition as an American National Standard

Superseding AMS 3904/4A

Yarn, Organic Fiber (Para-Aramid)
Intermediate Modulus
1000 Denier, 1.5% Finish
For Weaving

CANCELLATION NOTICE

This specification has been "CANCELLED" by the Aerospace Materials Division, SAE, as of March 1999. By this action, this document will remain listed in the Numerical Section of the Index of Aerospace Material Specifications.

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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 fiber 1000 denier yarn with 390,000 psi (2689 MPa) tensile strength and 8,500,000 psi (59 GPa) tensile modulus for use in weaving requiring high tensile strength and moderate modulus of elasticity in tension.

2. APPLICABLE DOCUMENTS:

See AMS 3904.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification:

The complete requirements for procuring organic yarn described herein shall consist of this document and the latest issue of the basic specification, AMS 3904.

3.2 Properties:

Shall be as follows; no individual value shall be less than 90% of the lot minimum values specified in 3.2.1 and 3.2.2:

3.2.1 Tensile Strength, minimum	390,000 psi (2689 MPa)
3.2.2 Modulus of Elasticity, minimum	8,500,000 psi (59 GPa)
3.2.3 Denier	1000 ± 60
3.2.4 Fiber Finish, by weight	1.5%, + 1.0, - 1.25
3.2.5 Fiber Density	0.052 pound/cubic inch ± 0.001 (1.44 g/cm ³ ± 0.03)

3.3 Splicing:

There shall be no more than one splice or surfaced knot for each 5 pounds (2.3 kg) of yarn.