

INCH-POUND

A-A-55220

December 11, 1995

COMMERCIAL ITEM DESCRIPTION

THREAD, PARA-ARAMID, INTERMEDIATE MODULUS

The General Services Administration has authorized the use of this commercial item description as a replacement for MIL-T-87128 for all Federal agencies.

1. SCOPE

This commercial item description covers the requirements for para-aramid, intermediate modulus thread used for machine and hand-sewing; and intended for use in items of clothing and equipage, and in air delivery and safety equipment.

2. CLASSIFICATION

The thread shall be furnished as twisted, soft multiple cord (soft finish), or as the same cord with resin finish, designated by a suffix R, or as a monocord.

3. SALIENT CHARACTERISTICS

3.1 General description. The yarn used in the manufacture of the threads shall be a para-aramid, intermediate modulus type of the denier and ply specified in Tables I and Ia. The thread shall be waxed or have finish applied so that it shall have a smooth, dressed

Beneficial comments, recommendations additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Defense Personnel Support Center, Clothing and Textiles Directorate, ATTN: DPSC-FNSC, 2800 South 20th Street, Philadelphia, PA 19145-5099.

AMSC N/A

FSC 8310

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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surface suitable for high-speed machine sewing. If better structural integrity is desired, application of a 0.5 to 1.0 percent by weight (dry add-on) of a resinous finish such as polyvinyl butyral may be appropriate.

Table I Twisted Soft Multiple Cord

TEX Label Size (TEX)	Approximate Denier	Ply	Yards per pound (minimum)	Breaking strength (pounds) (minimum)
40	400	2	10,000	14
60	600	3	6,700	23
80	800	4	5,000	30
120	1200	3	3,350	45
210	2000	5	2,100	64
400	4000	4	1,050	135
450	4500	3	900	150
800	7500	5	550	225

TEST METHOD 1/ASTM-D 1907 Visual 2/ ASTM-D 1907 ASTM-D 2256 3/

NOTE: Unless otherwise specified, a certificate of compliance shall be submitted and will be acceptable for the stated requirement.

Table Ia Monocord

TEX Label Size (TEX)	Approximate Denier	Yards per pound (minimum)	Breaking strength (pounds)
21	200	21,500	7.5
40	400	10,750	15.0
105	1000	4,300	45.0
150	1500	2,875	70.0
240	2250	2,175	95.0
300	3000	1,450	130.0

TEST METHOD 1/

ASTM-D 1907

ASTM-D 1907

ASTM-D 2256 3/

Footnotes for Tables I and Ia:

1/ All test reports shall contain the individual values utilized in expressing the final result. The sample unit shall be sufficient holders to provide enough thread for the applicable

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tests. The lot size shall be expressed in units of one holder.

2/ One determination per sample unit and the result reported as pass or fail.

3/ Except that capstan or drum type clamps shall be used, and five determinations shall be made per sample unit.

3.2 Label/markings. Except when commercial identification markings are specified in the invitation to bid, each holder shall have a label attached in such a manner as to remain in place and be clearly legible until all thread has been removed. The label shall be printed with the information as specified below:

- a. Weight (net)
- b. Letter or number designation and ply
- c. Nomenclature
- d. Contract or Purchase Order Number
- e. Name of contractor
- f. Date (month and year)

3.3 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulations (FAR).

3.4 Toxic chemicals, hazardous substances, and ozone depleting chemicals (ODCs). The use of toxic chemicals, hazardous substances, or ODCs shall be avoided, whenever feasible. The SD-14 provides a readily accessible list of toxic chemicals, hazardous substances, and ODCs. (Note: The list of toxic chemicals and hazardous substances changes. Any updates to the list will be reflected first in the Environmental Protection Agency [EPA] Title III List of Lists [EPA 560/4-92-011].) The desired performance requirements should be specified rather than the specific chemical or substance. If applicable, a toxic chemical, hazardous substance, or ODC must be specified.

4. QUALITY ASSURANCE PROVISIONS

4.1 Certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description and conforms to the producer's own drawings, specifications, standards, and quality

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practices. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

4.2 Market acceptance criteria. The item offered, or a generic equivalent, must have been sold to the commercial market or to the Government for at least two years.

4.3 Acceptance criteria. Acceptance shall be as specified in the contract or purchase order.

4.4 Warranty. The item offered shall include the standard warranty given to the commercial market beginning with the date of delivery of the individual items.

4.5 Visual Examination. The thread shall be examined on the tube for the defects listed in Table II.

Table II. Defects of thread

Examine	Defect on tubes
Identification label	Missing, incorrect, incomplete, illegible or insecurely attached.
Type of holder	Other than specified.
Surface condition	Cut, tear, chafe, slip, affecting strength of thread or interfering with easy location of end and initial unwinding.
Cleanliness	Dirt, spot, or stain clearly noticeable.
Finish	Other than specified.
Continuous length	Not in continuous lengths.
Knots	Size FF and finer thread shall average not more than one thread knot per two ounces, and size 3 and heavier thread shall average not more than one thread knot per four ounces.

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Table II. Defects of thread (cont'd)

Examine	Defect on tubes
Winding	Improperly or not firmly wound, resulting in kinks, knots, entangling or slippage during unwinding or otherwise affecting unwinding of thread.
Tackiness or adhesion	Strands adhere to each other or to holder affecting unwinding tension.

4.6 Put-up. Unless otherwise specified, the thread shall be wound on commercial spools, cones, or tubes as specified in the contract or purchase order.

5. PACKAGING

5.1 Preservation, Packing, and Marking. The preservation, packing, and marking shall be as specified in the contract or purchase order.

6. NOTES

6.1 Source of Government documents.

Copies of Military and Federal documents are available from:

Standardization Documents Order Desk
700 Robbins Avenue
Bldg. 4D
Philadelphia, PA 19111-5094

6.2 Source of non-Government documents.

ASTM Tests Methods

(Applications for copies should be addressed to American Society For Testing and Materials, 100 Harbor Drive, West Conshohocken, PA 19428-2959.)

Custodian:
Air Force - 99

Civil Agency Coordinating
Activity:
GSA - FSS

Review Activities:
Air Force - 32, 45, 82

Preparing Activity:
DLA - CT

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