

A-A-50199
June 30, 1989

COMMERCIAL ITEM DESCRIPTION

THREAD, POLYESTER CORE, COTTON- OR POLYESTER-COVERED

The General Services Administration has authorized the use of this commercial item description in preference to Military Specification MIL-T-43548.

1. CLASSIFICATION

1.1 Classification.

Type I - Cotton-covered
 Type II - Polyester-covered

Ticket number (sizes)	Tex (sizes) (range)	Ply	Length per pound (yards) nominal	Breaking strength (min) lbs. 1/		Elongation (max) % 1/
				Type I	Type II	
120	21-24	2	20,500	1.4	1.8	26
100	25-30	2	16,750	2.0	2.4	26
70	31-35	2	13,750	2.6	3.0	26
50	36-45	2	11,250	3.2	3.7	26
40	46-60	2 or 3	9,000	4.0	4.7	26
30	61-70	2 or 3	7,250	5.0	6.1	26
24	71-105	2, 3 or 4	5,550	6.8	7.2	26
16	106-150	2, 3 or 4	3,850	9.9	10.8	26
12	151-210	2, 3 or 4	2,600	13.0	14.1	26

1/ Test Method 4100 of FED-STD-191.

Beneficial comments, recommendations, additions, deletions and clarifications, etc. and any other data which may improve this document should be sent by letter to: Commander, U.S. Army Natick Research, Development and Engineering Center, ATTN: STRNC-ES, Natick, MA 01760-5014.

AMSC N/A

FSC 8310

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

A-A-50199

2. SALIENT CHARACTERISTICS

2.1 General description. Each ply of the thread shall consist of a continuous, multifilament polyester end, spun with one or more ends of cotton, or high tenacity staple polyester roving to cover the multifilament polyester end. The direction of the final twist shall be "Z", unless otherwise specified.

2.2 Color. The color shall be as specified in the applicable end item specification or in the contract order. The dyed thread shall conform to the applicable approved shade standard. The shade of the polyester core shall approximate that of the cotton or staple polyester covering. Shade designations by letter (e.g., Olive Drab S-1) and related cable numbers (e.g., C.A. 66022), refer to Standard Shade for Sewing Threads (see 5.3.1).

2.3 Colorfastness. Unless otherwise specified in the end item specification or set forth in the contract or order, the thread shall show "good" fastness to laundering (after 3 cycles), dry heat, and light. The applicable test methods are as follows:

<u>Characteristic</u>	FED-STD-191 <u>Test Method</u>
Laundering (after 3 cycles)	5610 1/ 2/
Dry heat	5642 3/
Light	5660 4/
Wet drycleaning (when specified)	5622
Perspiration (when specified)	5680
Weathering (when specified)	5671 5/

- 1/ The test specimens shall be dried after each of the 3 laundering cycles.
- 2/ The color transfer cloth evaluation shall not apply. No appreciable change in shade or loss of color of the tested specimen shall be visible when compared to the untested thread.
- 3/ The heat at which the specimen is to be tested shall be $376^{\circ} \pm 6^{\circ}\text{F}$.
- 4/ The exposure time shall be 40 standard fading hours.
- 5/ The exposure time shall be 80 hours.

2.4 Finish removal procedure. Before evaluation for shade matching and testing for colorfastness, except for colorfastness to wet drycleaning, the thread shall be wet drycleaned in accordance with Method 5622 of FED-STD-191

A-A-50199

(disregarding reference to the standard sample). Excess solvent shall be removed by centrifuging or wringing. The sample shall then be rinsed in distilled water at 120° to 160°F and dried at a temperature not exceeding 180°F. The dried sample shall then be conditioned for a minimum of 4 hours prior to evaluation for shade matching or colorfastness.

2.5 Shade matching. The color of the finished thread, after removal of finish, shall match the standard sample when viewed under filtered tungsten lamps that approximate artificial daylight and that have a correlated color temperature of 7500 ± 200 K, with illumination of 100 ± 20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2300 ± 200 K.

2.6 Finishing materials. The finished thread shall have no chemical finishes or treatments other than those commonly used on commercial threads which have been demonstrated to have no deleterious effects on the polyester fiber, including effects of prolonged storage. Also, the use of dyes and compounds containing elementary sulfur capable of oxidation to sulfuric acid is prohibited.

2.7 Put-up. Unless otherwise specified, the thread shall be put-up on holders such as commercial spools, cones, or tubes as specified in the contract. The thread shall be wound around the specified holder in one continuous piece, so that each turn and layer is free of entanglement. The outside ending of the thread shall be secured to prevent unwinding, loosening, or slippage during handling, shipping, or storage.

2.8 Labeling. Each holder shall have a label, adhered securely so as to remain in place and be clearly legible until all thread has been removed. The label shall be printed and include information related to length in yards, direction of twist, color, size (ticket or TEX number), name of thread manufacturer, and nonmenclature specifying type.

2.9 Workmanship. The thread shall average not more than one full thread knot or splice per 1,000 yards.

3. QUALITY ASSURANCE

3.1 Certification. The contractor shall certify, and maintain substantiating evidence, that the product offered meets the salient characteristics and requirements of this Commercial Item Description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

A-A-50199

4. PACKAGING

4.1 Packaging. Tubes, cones, or spools of thread, of like description, weighing 8 ounces and less each, shall be packaged in set-up paperboard or folding paperboard boxes. Those weighing more than 8 ounces each shall be individually packaged in a snug-fitting clear plastic film bag. The bag shall be closed by means of a twist tie, or by tucking the open end into the end of the tube, cone, or spool.

4.2 Packing. Thread of like description, packaged as specified, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, type CF, class domestic, variety SW, grade 275 of PPP-B-636. The inside of each fiberboard container shall be fitted with a liner conforming to type CF, variety DW, class domestic, grade 275 of PPP-B-636. The fiberboard liner is not required when thread is packaged in a paperboard boxes. The shipping container shall be of a size that can be palletized in accordance with MIL-STD-147. The weight of a packed shipping container shall not exceed 50 pounds. Shipping containers shall be closed in accordance with the appendix of PPP-B-636.

4.3 Palletization. When specified (see 5.2), thread, packed as specified, shall be palletized on a 4-way entry pallet in accordance with load type Ia of MIL-STD-147. Pallet types shall be type I (4-way entry), type IV, or type V which shall be fabricated from wood groups I, II, III, or IV of MIL-STD-731. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means K and L or film bonding means O or P.

4.4 Marking. In addition to any special markings required by the contract or purchase order, unit packs, shipping containers, and palletized unit loads shall be marked in accordance with MIL-STD-129.

5. NOTES

5.1 Intended use. The thread is intended for machine sewing of clothing and other items.

5.2 Ordering data.

- a. Title, number and date of this document.
- b. Type, and size or ply of thread required (see 1.1).
- c. Color required (see 2.2).
- d. Colorfastness properties required (see 2.3).
- e. When palletization is required (see 4.3).

A-A-50199

5.3 Sources of documents.5.3.1 Source of nongovernment documents.

THE COLOR ASSOCIATION OF THE UNITED STATES, INC.

Standard Color Card of America

Department of Defense Standard Shades for Sewing Threads

(Color cards may be available from the Color Association of the United States, Inc., 343 Lexington Avenue, New York, NY 10016-0927. If color cards are not available from the Color Association, individual color samples may be obtained from the contracting activity or as directed by the contracting activity.)

5.3.2 Source of government documents. Copies of military and Federal documents are available from:

Naval Publications and Forms Center
ATTN: NPODS
5801 Tabor Avenue
Philadelphia, PA 19120-5099

MILITARY INTERESTS:

Custodians:

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