

INCH-POUND

A-A-52088

March 7, 1991

COMMERCIAL ITEM DESCRIPTION

ROPE, COTTON, OR COTTON/POLYESTER BLEND

The General Services Administration has authorized the use of this commercial item description in preference to classes I and II of Federal specification T-R-571.

1. CLASSIFICATION

1.1 Classification. This commercial item description covers cotton or cotton/polyester blend rope in the following classes and sizes as specified (see 5.2):

Class 1 - Natural

Class 2 - Mildew-resistant treated

Sizes (circumference, inches): 3/8, 5/8, 3/4, 1-1/8, 1-1/2, 2-1/4, 3

2. SALIENT CHARACTERISTICS

2.1 General description. The rope shall be fabricated of carded cotton fiber or a cotton and polyester blend of suitable staple length and grade. The polyester content shall not exceed 65 percent of the total blend. The rope shall be of three-strand construction and shall utilize the "ZSZ" twist pattern. The class 1 rope shall contain not more than 5.0 percent starch and protein content, including chloroform soluble and water soluble material. The class 2 rope shall be natural in color prior to treatment and shall be mildew-resistant treated in accordance with T-T-616. The shade imparted by this treatment shall be considered acceptable.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Commander, U.S. Army Natick Research, Development, and Engineering Center, ATTN: STRNC-IRT, Natick, MA 01760-5019.

AMSC N/A

FSC 4020

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

A-A-52088

2.2 Physical requirements. The class 1 and class 2 ropes shall conform to the physical requirements specified in table I, when tested as specified in 3.5 and 3.6.

TABLE I. End item physical requirements

Circumference			Approximate diameter 2/ Inches	Length per pound 3/ Minimum Feet	Breaking strength (min.)	
Nominal Inches	Minimum Inches	Maximum Inches			Class 1 Pounds	Class 2 Pounds
3/8	1/2	5/16	1/8	200.00	12	105
5/8	9/16	11/16	3/16	90.00	250	225
3/4	5/8	7/8	1/4	52.0	420	375
1-1/8	1	1-1/4	3/8	23.5	890	800
1-1/2	1-3/8	1-5/8	1/2	13.5	1,450	1,305
2-1/4	2-1/16	2-7/16	3/4	6.0	3,100	2,790
3	2-3/4	3-1/4	1	3.5	5,100	4,590

1/ Unless otherwise specified, a certificate of compliance is required and will be acceptable for the circumference requirements for the 3/8-inch rope.

2/ The diameter is included for information only and is not a requirement.

3/ A 10 percent minus tolerance is permitted for the class 2 rope only.

2.3 Put-up. Unless otherwise specified (see 5.2), the ropes shall be furnished on tubes for sizes up to and including 3/4 inch circumference and in coils for the remaining sizes and in the minimum lengths specified in table II. Tubes or coils shall contain not more than two pieces and no piece shall be less than 100 feet in length. The ends of the rope shall not be knotted or otherwise joined to make a continuous length and shall be served to prevent the ends from unlaying or untwisting. The rope shall be so wound that each turn and layer is free from entanglement.

TABLE II. Put-up

Circumference (nominal) inches	Weight per tube or coil (approximate) pounds	Length per tube or coil (minimum) feet
3/8	10	2,000
5/8	30	2,700
3/4	30	1,600
1-1/8	51	1,200
1-1/2	89	1,200
2-1/4	100	600
3	171	600

2.4 Identification. Each tube shall have a label attached in such a manner as to remain in place and be clearly legible until all rope has been removed.

2.4.1 Ticket. Each tube or coil shall have a ticket (identification tag) attached to it for identification purposes. The ticket shall conform to the requirements for type B, size 3 or 4 of UU-T-81. The ticket shall be made of not less than 15 point paper stock and shall have a minimum tearing strength in both directions (total) of 850 grams when tested in accordance with UU-T-81.

2.4.2 Marking. All entries on the ticket or label shall be legibly printed, stamped, or typed with water insoluble ink, and shall contain the following information:

- National stock number (NSN)
- Nomenclature
- Commercial Item Description number
- Length
- Date of manufacture (month and year)
- Contract number and date
- Contractor's name

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.

3.2 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

A-A-52088

3.3 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

3.4 End item visual examination. Each lot of rope shall be examined for consumer type defects, defined as follows:

Defects in design, construction, workmanship; Any cut, chafe, damage or splice; kink, darting yarn, knot, broken or loose end, bulged strand; color not as specified; any spot or stain clearly noticeable; put-up not as specified; identification tag or ticket omitted, incorrect, or not as specified.

The lot size shall be expressed in units of tubes or coils of rope. The sample unit shall be one tube or coil of rope. Ten percent of the length contained on each sample unit, but not less than 100 feet, shall be examined. The inspection level shall be I, and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 4.0.

3.5 End item circumference testing. Each lot of ropes shall be measured for circumference in accordance with Method 6003 of FED-STD-191. Any circumference not within the specified tolerances shall be classified as a defect. The lot size shall be expressed in units of tubes or coils of rope. The sample unit shall be one tube or coil of rope. The inspection level shall be S-3, and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

3.6 End item testing. The ropes shall be tested for minimum breaking strength and length per pound in accordance with Methods 6016 and 6004, respectively, of FED-STD-191. The lot size shall be expressed in units of tubes or coils of rope. The sample unit shall be 35 feet for ropes less than 1-1/8 inches in circumference, and shall be 55 feet for ropes 1-1/8 inches and over in circumference. The lot shall be rejected if one or more sample units fail to meet any requirement specified. The sample size shall be in accordance with table III.

TABLE III. Sampling for tests.

Lot size (tubes or coils)	Sample size (sample units)
800 or less	2
801 up to and including 22,000	3
22,001 and over	5

4. PACKAGING

4.1 Packaging. Tubes of rope require no packaging. Each coil of rope shall be secured with a minimum of four equally-spaced ties, passing through the coil center to the outside, and tied on the circumference of the coil.

A-A-52088

4.2 Packing. Each tube of rope shall be packed in a fiberboard box conforming to style RSC, type CF (variety SW) or SF, class domestic, grade 275 of PPP-B-636. Each box shall be closed in accordance with the appendix of PPP-B-636. Each coil of rope shall be wrapped with burlap or osnaburg cloth or polyethylene film.

4.3 Palletization. When specified (see 5.2), rope shall be palletized in accordance with MIL-STD-147.

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 rope is intended for general purpose use.

5.2 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this document.
- b. Class and size required (see 1.1).
- c. When put-up other than that specified is required (see 2.3).
- d. When palletization is required (see 4.3).

5.3 Sources of documents.

5.3.1 Source of government documents. Copies of Military and Federal documents are available from:

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

MILITARY INTERESTS:

Custodians

Army - GL
Air Force - 99

Review activities

Army - MD, SM
Air Force - 82
DLA - IS

User activities

Army - AV
Navy - MC

CIVIL AGENCY COORDINATING ACTIVITY:

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