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The following commercial specification is adopted from the original military document. Revision A includes all known accepted revisions, amendments, notices, and Department of Defense (DoD) engineering changes previously developed for this item. Revisions B and forward include changes adopted to reflect technology and design evolution.

CORD, NYLON, BRAIDED, TUBULAR, SPLICEABLE

The Parachute Industry Association makes this document available for use by Industry and Government organizations that wish to apply this specification to their products.

1. SCOPE

1.1 Scope. This specification covers tubular braided nylon cord designed specifically for telescopic splicing (see 6.3 for textile definitions).

1.2 Classification. The cord shall be of the types specified in TABLE I.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in Sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in Sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government publications.

2.2.1 Government publications. The following Government publications form a part of this document (see 2.4).

FEDERAL TRADE COMMISSION (FTC)

16 CFR 303

- Rules and Regulations Under the Textile Fiber Products
Identification Act

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(Copies are available online at: www.ftc.gov or from the Federal Trade Commission, 600 Pennsylvania Avenue, N.W. Washington, DC 20580-0001. Electronic copies may also be obtained from www.access.gpo.gov/.)

2.3 Non-government publications. The following documents form a part of this document (see 2.4).

AMERICAN SOCIETY FOR QUALITY (ASQ)

ANSI/ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Copies are available online at: www.asq.org or from the American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203.)

ASTM INTERNATIONAL (ASTM)

ASTM D 276 - Standard Test Methods for Identification of Fibers in Textiles
ASTM D 1423 - Standard Test Method for Twist In Yarns by Direct-Counting
ASTM D 1776 - Standard Practice for Conditioning and Testing Textiles
ASTM D 1907 - Standard Test Method for Linear Density of Yarn (Yarn Number) by the Skein Method

(Application for copies should be addressed to the ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19426-2959. Electronic copies may be obtained from www.astm.org.)

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC 20A - Fiber Analysis: Quantitative
AATCC 81 - pH of the Water-Extract from Wet Processed Textiles

Applications for copies should be addressed to: AATCC National Headquarters, P.O. Box 12215, Research Triangle Park, NC 27709-2215. Electronic copies may be obtained from www.aatcc.org.)

PARACHUTE INDUSTRY ASSOCIATION (PIA)

PIA-TEST METHOD-6004 - LENGTH PER UNIT WEIGHT; CORDAGE
PIA-TEST METHOD-6010 - SHRINKAGE OF CORDAGE, BOILING WATER METHOD; DETERMINATION OF
PIA-TEST METHOD-6016 - STRENGTH AND ELONGATION BREAKING OF CORDAGE; NON-SPLICED METHOD

(Electronic copies may be obtained from www.pia.com.)

2.4 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First Article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.3 Government and contractor purchases. The requirements specified in 3.10.1, 3.10.2 and 3.11 apply only to cord purchased directly by the Government. All other requirements apply to cord purchased by a contractor as a component for an end item and to cord purchased directly by the Government.

3.4 Material. The nylon yarn used in the manufacture of this cord shall be a bright, high tenacity, heat resistant nylon 6,6 and shall have a melting point of $250 \pm 6^{\circ}\text{C}$ when tested as specified in 4.3.1. Yarns obtained from any other reaction or process shall not be used. Testing shall be as specified in 4.6.2. The cord, including the yarn entering into the construction thereof, shall conform to the requirements when tested and examined in accordance with 4.7 and 4.8.

3.4.1 Yarn construction. The yarn construction (denier and twist) shall be in accordance with TABLE 1.

3.4.2 Color. Unless specified in the order (see 6.2), the color shall be natural. When a color is specified, the coloring shall be accomplished by dyeing the yarn before braiding or by dyeing the cord under uniform tension throughout. The use of sulfur dyes and the dyeing of cord in skeins is prohibited.

3.4.3 Twists and turns. All cord supplied under one order must be constructed of yarn having the same twist. The turns in the ends woven from the yarn shall be in the same direction as the twists in the yarn.

3.5 Standard. The cord shall match the standard for shade and shall be equal to or better than the standard with respect to all characteristics for which the standard is referenced (see 6.1).

3.6 Cord requirements.

3.6.1 Shrinkage. After braiding, the cord shall be heat set in continuous lengths so that the residual shrinkage shall not be greater than 3 percent.

3.6.2 Cord construction. The construction of the cord shall conform to the end, carriers, and picks per inch requirements specified in TABLE I (see 6.3 for definitions).

