



AEROSPACE MATERIAL SPECIFICATION

AMS3654™**REV. E**

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Superseding AMS3654D

Tubing, Electrical Insulation Light Wall,
Extruded Polytetrafluoroethylene (PTFE)

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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1. SCOPE

1.1 Form

This specification covers extruded polytetrafluoroethylene (PTFE) in the form of flexible tubing.

1.2 Application

This tubing has been used typically for electrical insulating sheath up to 500 °F (260 °C), but usage is not limited to such applications.

1.3 Safety - Hazardous Materials

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM D876 Testing Nonrigid Vinyl Chloride Polymer Tubing Used for Electrical Insulation

ASTM D1675 Testing Polytetrafluoroethylene Tubing

2.2 U.S. Government Publications

Copies of these documents are available online at <http://quicksearch.dla.mil>.

MIL-STD-104 Limit for Electrical Insulation Color

MIL-STD-2073-1 Standard Practice for Military Packaging

3. TECHNICAL REQUIREMENTS

3.1 Material

Shall be flexible tubing made from extruded virgin polytetrafluoroethylene, free from contamination and from foreign, reground, and scrap material.

3.2 Color

Tubing shall be natural in color, ranging from colorless translucent to semiopaque white. When ordered in colors, the colors shall be in accordance with MIL-STD-104 or as agreed upon by purchaser and vendor.

3.3 Properties

Tubing shall conform to the requirements shown in Table 1; tests shall be performed on the tubing supplied and in accordance with specified ASTM methods, insofar as practicable: