

MIL-I-3190/6A  
 4 September 1987  
 SUPERSEDING  
 MIL-I-3190/6  
 30 May 1986

MILITARY SPECIFICATION SHEET

INSULATION SLEEVING, ELECTRICAL, FLEXIBLE, COATED,  
 CLASS 200, TYPE D, CATEGORY c

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the insulation sleeving described herein shall consist of this document and the latest issue of MIL-I-3190.

The sleeving shall be of the following classification:

Class 200, type D, category c.

REQUIREMENTS:

The insulation sleeving shall be in accordance with tables I, II, and III.

TABLE I. Performance requirements.

Property	Conditioning prior to test	Test	Unit	Value required
Dielectric breakdown: Straight	96/23/50	4.7.2.2	Volts (minimum average)	8,000
Straight	96/23/50	4.7.2.2	Volts (minimum individual)	6,000
Straight	96/23/96	4.7.2.2	Percent of average value obtained on test after condition 96/23/50 (minimum)	80
Cold brittleness	96/23/50	4.7.4	Degrees Celsius (maximum)	minus 70
Flammability	96/23/50	4.7.5.2 method B	Seconds to burn 1 inch <u>l</u> / for each individual specimen (minimum)	45

See footnote at end of table.

AMSC N/A

FSC 5970

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TABLE I. Performance requirements. - Continued

Property	Conditioning prior to test	Test	Unit	Value required
Push-back after heat aging: Visual	168/250	4.7.8	Observation	No cracks or rupture in the silicone rubber compound on two or more specimens
Dielectric breakdown - straight	168/250	4.7.8	Volts (minimum average)	6,000
Thermal endurance	See 4.7.9	4.7.9	Temperature index (°C) at 15000 hours (minimum)	200
Thermal stability	96/250	4.7.10	Volts (minimum average)	5,500
* Hydrolytic stability	336 hours over water at 70°C	4.7.7	Volts: (Minimum average) Observation	5,000 volts No disintegration, reversion or tackiness

\* 1/ Specimens which burn less than 1 inch meet flame resistance requirements.

TABLE II. Qualification inspection requirements.

Examination or test	Requirement	Test	Minimum number of tests for each size and for each condition as specified in table I
Visual examination	3.3, 3.6	4.6	10
Dimensions	3.4	4.7.1	10
Dielectric breakdown: Straight - 96/23/50 and 96/23/96	Table I	4.7.2.2	10
Cold brittleness	Table I	4.7.4	As specified in 4.7.4
Flammability	Table I	4.7.5.2 method B	5
Push-back after heat aging	Table I	4.7.8	3
Thermal endurance	Table I	4.7.9	See 4.7.9
* Hydrolytic stability	Table I	4.7.7	5

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TABLE III. Quality conformance inspection requirements.

Examination or test	Requirement	Test	Conditioning prior to test	Minimum number of tests per sample unit
Visual examination	3.3, 3.6	4.6	96/23/50	As required per sampling
Dimensions	3.4	4.7.1	96/23/50	As required per sampling
Dielectric breakdown: Straight	Table I	4.7.2.2	96/23/50	10
			96/23/96	10
Flammability	Table I	4.7.5.2 method B	96/23/50	5
Push-back after heat aging	Table I	4.7.8	168/250	3
Thermal stability	Table I	4.7.10	96/250	5

Intended use. The temperature index for this class of sleeving is 200°C. This material is intended for applications in electrical equipment requiring primary insulation having good low temperature flexibility, high moisture resistance and providing adequate mechanical protection. It may be utilized where additional protection against environmental conditions or protection in localized areas is desired.

Changes from previous issue. The margins of this specification are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:

Army - ER  
Navy - SH  
Air Force - 20

Preparing activity:

Navy - SH  
(Project 5970-1009-04)

Review activities:

Army - AR, AV, EA, MI  
Navy - EC  
Air Force - 85, 99, 80

User activities:

Army - ME  
Navy - MC, OS