This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Designation: D1048 – 20

Standard Specification for Rubber Insulating Blankets[1]

This standard is issued under the fixed designation D1048; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This specification covers acceptance testing of rubber insulating blankets for protection of workers from accidental contact with live electrical conductors, apparatus, or circuits.

1.2 Two types of blankets are provided and are designated as Type I, not resistant to ozone, and Type II, resistant to ozone.

1.3 Five classes of blankets, differing in electrical characteristics, are provided and are designated as Class 0, Class 1, Class 2, Class 3, and Class 4.

1.4 Two styles of blankets, differing in construction characteristics, are provided and are designated as Style A and Style B.

1.5 The following safety hazards caveat pertains only to the test method portion, Sections 16 – 19, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D149 Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies

D297 Test Methods for Rubber Products—Chemical Analysis

D412 Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension

D518 Test Method for Rubber Deterioration—Surface Cracking (Withdrawn 2007)[3]

D570 Test Method for Water Absorption of Plastics

D573 Test Method for Rubber—Deterioration in an Air Oven

D624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers

D1388 Test Method for Stiffness of Fabrics

D2865 Practice for Calibration of Standards and Equipment for Electrical Insulating Materials Testing

F819 Terminology Relating to Electrical Protective Equipment for Workers

2.2 *American National Standards:*

ANSI/IEEE C 2 National Electrical Safety Code[4]

C84.1 Electric Power Systems and Equipment—Voltage Ratings (60 Hz)[5]

3. Terminology

3.1 *beaded edge*—a narrow border of thicker rubber which extends completely around the outer edges of the blanket.

3.2 *breakdown*—the electrical discharge or arc occurring between the electrodes and through the equipment being tested.

3.3 *designated person*—an individual who is qualified by experience or training to perform an assigned task.

3.4 *electrical testing facility*—a location with qualified personnel, testing equipment, and procedures for the inspection and electrical testing of electrical insulating protective equipment.

3.5 *electrode clearance*—the shortest path from the energized electrode to the ground electrode.

[1] This specification is under the jurisdiction of ASTM Committee F18 on Electrical Protective Equipment for Workers and is the direct responsibility of Subcommittee F18.25 on Insulating Cover-Up Equipment. This standard replaces ANSI Standard J 6.4, which is no longer available.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] The last approved version of this historical standard is referenced on www.astm.org.

[4] Available from Institute of Electrical and Electronics Engineers, Inc. (IEEE), 445 Hoes Ln., P.O. Box 1331, Piscataway, NJ 08854-1331, http://www.ieee.org.

[5] Available from National Electrical Manufacturers Association (NEMA), 1300 N. 17th St., Suite 900, Arlington, VA 22209, http://www.nema.org.

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