



Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure- Sensitive Electrical Insulating Tape¹

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1. Scope*

1.1 This specification covers an electrical insulating tape for use at low temperature down to approximately -18°C (0°F), -18°C (0°F). The tape consists of a backing of vinyl chloride plastic, coated on one side with a pressure-sensitive adhesive. Four types are included providing two thicknesses at two operating temperatures.

1.2 The values stated in SI units are the standard. The values given in parentheses are provided for information purposes only.

2. Referenced Documents

2.1 *ASTM Standards*:²

[D1000 Test Methods for Pressure-Sensitive Adhesive-Coated Tapes Used for Electrical and Electronic Applications](#)

[D1711 Terminology Relating to Electrical Insulation](#)

3. Terminology

3.1 *Definitions*—For definitions of terms in this specification refer to Terminology [D1711](#).

4. Classification

4.1 This specification covers two types of vinyl chloride plastic tape of different thicknesses, as follows:

4.1.1 *Type I*—0.0178-mm (0.007-in.) standard backing for use at low temperature down to -7°C (19.4°F), -7°C (19.4°F).

4.1.2 *Type II*—0.216-mm (0.0085-in.) standard backing for use at low temperature down to -7°C (19.4°F), -7°C (19.4°F).

4.1.3 *Type III*—0.0178-mm (0.007-in.) standard backing for use at low temperature down to -18°C (0°F), -18°C (0°F).

4.1.4 *Type IV*—0.216-mm (0.0085-in.) standard backing for use at low temperature down to -18°C (0°F), -18°C (0°F).

5. Materials

5.1 The backing shall be vinyl chloride plastic, suitably compounded to meet the requirements of this specification. The backing shall be smooth and uniform. The tape edges shall be straight and unbroken.

5.2 The pressure-sensitive adhesive coating shall be smooth and uniform, and essentially free of lumps and bare spots. “Fish eyes” shall not be cause for rejection. There shall be no adhesive transfer when the tape is unwound from the roll.

6. Physical Properties

6.1 The tape shall meet the requirements given in [Table 1](#).

6.2 Black plastic backing shall be considered standard. Backing of a different color than black shall be specified on the purchase order.

7. Standard Rolls

7.1 The standard widths and lengths shall be selected from the following:

7.1.1 *Widths*:

¹ This specification is under the jurisdiction of ASTM Committee [D09](#) on Electrical and Electronic Insulating Materials and is the direct responsibility of Subcommittee [D09.07](#) on Flexible and Rigid Electrical Insulating Materials.

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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.

*A Summary of Changes section appears at the end of this standard