



Standard Specification for General-Purpose, Heavy-Duty, and Extra-Heavy-Duty Crosslinked Chlorinated Polyethylene (CM) Jackets For Wire and Cable¹

This standard is issued under the fixed designation D4313; 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.

1. Scope

1.1 This specification covers crosslinked chlorinated polyethylene (CM) compounds suitable for use as outer coverings or jackets on electrical cables for general-purpose, heavy-duty, and extra-heavy-duty service.

1.2 These jacket materials are not recommended for use on cables which are to be installed at a temperature less than -25°C .

~~1.3 Whenever two sets of values are presented, in different units, the values in the first set are the standard, while those in parentheses are for information only.~~

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

2. Referenced Documents

2.1 *ASTM Standards:*²

D470 [Test Methods for Crosslinked Insulations and Jackets for Wire and Cable](#)

D1499 [Practice for Filtered Open-Flame Carbon-Arc Exposures of Plastics](#)

D1711 [Terminology Relating to Electrical Insulation](#)

G153 [Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials](#)

3. Terminology

3.1 *Definitions:* For definitions of terms used in this specification refer to Terminology D1711.

3.2 *Definition of Term Specific to This Standard:*

3.2.1 *aging (act of), n*—exposure of materials to air at a temperature of 121°C for 168 h and oil at 121°C for 18 h.

4. Physical Properties

4.1 Crosslinked jackets shall conform to the requirements for physical properties specified in Table 1. ~~1.~~ [astm-d4313-12](#)

5. Sunlight and Weather Resistance Requirements

5.1 If sunlight and weather resistance are required of the crosslinked jackets, the jackets shall conform to the requirements specified in Table 2.

6. Sampling

6.1 Sample the jacket in accordance with Test Methods D470.

7. Test Methods

7.1 Test the jacket in accordance with Test Methods D470. If the sunlight and weather resistance test is required, perform it in accordance with Practice D1499 and Practice G153.

8. Keywords

8.1 chlorinated polyethylene; crosslinked; oil immersion; sunlight resistance; tear; tensile strength; tensile stress; tension test;

¹ This specification is under the jurisdiction of ASTM Committee D09 on Electrical and Electronic Insulating Materials and is the direct responsibility of Subcommittee D09.18 on Solid Insulations, Non-Metallic Shieldings and Coverings for Electrical and Telecommunication Wires and Cables.

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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.