



Standard Specification for General-Purpose, Black Heavy-Duty, and Black Extra-Heavy-Duty Crosslinked Polychloroprene Jackets for Wire and Cable¹

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1. Scope

1.1 This specification covers crosslinked polychloroprene compounds suitable for use as outer coverings or jackets on electrical cables for general-purpose, black heavy-duty and black extra-heavy-duty service.

1.2 These jackets are not recommended for installation at a temperature lower 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.

2. Referenced Documents

2.1 ASTM Standards:

D 470 Test Methods for Crosslinked Insulations and Jackets for Wire and Cable²

D 1711 Terminology Relating to Electrical Insulation²

¹ This specification is under the jurisdiction of ASTM Committee D-9 on Electrical and Electronic Insulating Materials and is the direct responsibility of Subcommittee D09.18 on Solid Insulations, Nonmetallic Shieldings, and Coverings for Electrical and Telecommunications Wires and Cables.

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² *Annual Book of ASTM Standards*, Vol 10.01.

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification refer to Terminology D 1711.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *aging (act of), n*—exposure of materials to air at 100°C for 168 h or oil at 121°C for 18 h.

4. Physical Properties

4.1 The jacket shall conform to the requirements for physical properties prescribed in Table 1.

5. Sampling

5.1 Sample the jacket in accordance with Test Methods D 470.

6. Test Methods

6.1 Test the jacket in accordance with Test Methods D 470.

7. Keywords

7.1 crosslinked jacket; extra-heavy-duty jacket; general-purpose jacket; heavy-duty jacket; polychloroprene jacket; rubber jacket

TABLE 1 Physical Properties^A

Physical Property	General-Purpose	Heavy-Duty	Extra-Heavy-Duty
<i>Unaged Requirements:</i>			
Tensile strength, min, psi (MPa)	1500 (10.3)	1800 (12.4)	2400 (16.5)
Tensile stress at 200 % elongation, min, psi (MPa)	...	500 (3.4)	700 (4.8)
Elongation at rupture, min, %	250	300	300
Tension set ^B , max, %	30	30	30
Tear, min, lbf/in. (kN/m)	40 (7)
<i>Aged Requirements:</i>			
After air-oven test at 100 ± 1°C for 168 h:			
Tensile strength, min, % of unaged value	50	50	50
Elongation at rupture, min, % of unaged value	50	50	50
After oil-immersion test at 121 ± 1°C for 18 h:			
Tensile strength, min, % of unaged value	60	60	60
Elongation at rupture, min, % of unaged value	60	60	60

^A Values specified are applicable only to jackets having a nominal wall thickness of 0.030 in. (0.76 mm) or greater.

^B Set in 2-in. (50-mm) gage length.

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