



Designation: D 2656 – 9500

An American National Standard

Standard Specification for Crosslinked Polyethylene Insulation for Wire and Cable Rated 2001 to 35 000 V¹

This standard is issued under the fixed designation D 2656; 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 a crosslinked polyethylene insulation for electrical wires and cables ~~in~~ for conductor sizes 8 AWG (8.37 mm²) and larger. The base polymer of this insulation consists substantially of polyethylene.

1.2 This type of insulation is suitable for use on power cables in wet and dry locations at conductor temperatures not exceeding 90°C for continuous operation, 130°C for emergency overload conditions, and 250°C for short-circuit conditions. It is considered suitable for all sizes and voltage classifications of single- and multiple-conductor power cables at voltage ratings of 2001 to 35 000 V phase-to-phase at the 100 % insulation level and at voltage ratings of 2001 to 25 000 V at the 133 % insulation level as listed in Table 1C of Test Methods D 470.

1.3 Materials covered by this specification are not sunlight- and weather-resistant unless they are carbon black pigmented or contain an additive system designed for this protection.

1.4 ~~In many instances the insulation cannot be tested unless it has been formed around a conductor. Therefore, tests are done on insulated wire in this standard solely to determine the relevant property of the insulation and not to test the conductor or completed cable.~~

1.5 ~~Whenever two sets of values are presented, in different units, the standard, except values in cases where SI units the first set are more appropriate. The values stated the standard, while those in parentheses are for information only.~~

2. Referenced Documents

2.1 ASTM Standards:

¹ This specification is under the jurisdiction of ASTM Committee D-9 D09 on Electrical and Electronic Insulating Materials and is the direct responsibility of Subcommittee D 09.18 on Solid Insulations, Non-Metallic Shieldings, and Coverings for Electrical and Telecommunications Wires and Cables.

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