

Tentative Specifications for

GR-S SYNTHETIC RUBBER SHEATH COMPOUND FOR ELECTRICAL INSULATED CORDS AND CABLES WHERE EXTREME ABRASION RESISTANCE IS NOT REQUIRED¹



A.S.T.M. Designation: D 812 - 44 T

ISSUED, 1944.²

These Tentative Specifications have been approved by the sponsoring committee and accepted by the Society in accordance with established procedures, for use pending adoption as standard. Suggestions for revisions should be addressed to the Society at 1916 Race St., Philadelphia 3, Pa.

Scope

1. These specifications cover a vulcanized synthetic rubber compound, type GR-S, suitable for use as the outside covering, or sheath, on insulated electrical cords and cables which are not subject to severe mechanical use and where extreme abrasion resistance is not required.

Character of Sheath

2. The vulcanized sheath shall be homogeneous in character, tough and elastic, and shall be properly vulcanized to conform to the requirements prescribed in these specifications.

Methods of Testing

3. All measurements and tests necessary for determining the conformity of the sheath to these specifications shall be made in accordance with the Tentative Methods of Testing Rubber Insulated Wire and Cable (A.S.T.M. Designation:

D 470),³ except as otherwise prescribed in these specifications.

Physical Requirements

4. The vulcanized sheath shall conform to the following requirements as to physical properties:

Tensile strength, min., psi.....	1200
Elongation at rupture, min., per cent.....	250
Tensile strength after 48 hr. in 70 C., oxygen bomb test, min., psi.....	1000

NOTE.—Where these jackets are to be exposed to sunlight it is suggested a sunlight resisting wax be incorporated in the compound.

Sampling for Original Physical Tests

5. (a) Cord or cable having an outside diameter up to and including 1 in. shall be sampled in accordance with the following requirements:

	Number of Samples
2000 ft. and under.....	none
2001 to 10 000 ft.....	1 for each 2000 ft. or fraction thereof
10 001 to 100 000 ft.....	5 plus 1 for each 10 000 ft. additional over 10 000 ft.
100 001 to 500 000 ft.....	14 plus 1 for each 25 000 ft. over 100 000 ft.

¹ Under the standardization procedure of the Society, these specifications are under the jurisdiction of the A.S.T.M. Committee D-11 on Rubber and Rubber-Like Materials.

² Accepted by Committee E-10 on Standards, December 13, 1944.

³ Appears in this publication, see Contents in Numeric Sequence of A.S.T.M. Designations at front of book.