

Tentative Specifications for

RUBBER SHEATH COMPOUND FOR ELECTRICAL INSULATED CORDS AND CABLES¹



A.S.T.M. Designation: D 532 - 46 T

ISSUED, 1939; REVISED, 1946.²

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 durable, vulcanized rubber compound suitable for use as the outside covering or sheath on insulated electrical cords and cables.

Character of Sheath

2. The vulcanized rubber sheath shall be homogeneous in character, tough and elastic.

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) of the American Society for Testing Materials,³ except as otherwise prescribed in these specifications.

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 Revision accepted by the Administrative Committee on Standards, September 9, 1946.

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

Physical Requirements

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

Tensile strength, min., psi.....	3500
Tensile stress at 200 per cent elongation, min., psi.....	500
Elongation at rupture, min., per cent....	500
Set in 2-in. gage length, max., in.....	$\frac{1}{2}$
Tensile strength after 96 hr. in oxygen bomb test, min., psi.....	2500
Elongation at rupture after 96 hr. in oxygen bomb test, min., per cent.....	400
Tear resistance, min., lb. per in.....	40

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
2 000 ft. and under.....	none
2 001 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.

(b) For cable larger than 1 in. in outside diameter, one sample shall be selected from quantities between