



Scotchfil[®]

Electrical Insulation Putty

1. Product Description

Scotchfil[®] Electrical Insulation Putty is an electrical grade putty in a tape form. Scotchfil[®] putty is UL Recognized as a splice insulation for electrical conductors at temperatures up to 80°C when over-wrapped with either Scotch[®] Super 33+ or Super 88 Vinyl Electrical Tape.

- UL “Recognized” Category OCOT2, File No. E59951
- Noncorrosive, synthetic rubber
- High electrical properties
- High aging properties
- Will not dry out
- Applies cleanly without waste

2. Applications

- To insulate low voltage (600 volts and less) connections
- To build up cable splices and fill out major irregularities and voids in low voltage splices (2300 volts and less) in order to obtain a uniform base for further taping
- To round out high voltage connections
- To smooth bus bar irregularities
- To create a resin dam in resin pressure splices
- To create a moisture seal at ground wire exit in high voltage splices
- To moisture seal multiconductor cable connections

Insert Company
address
before issue

Reference: AABDD51143#EN_01

Issue date 15.11.2016

© 3M 2014 All Rights Reserved.

Template-EMD-EU-1Column Dec.2015

3. Typical Properties

Properties measured at room temperature 23°C unless otherwise stated.

Physical Properties	Typical Value
Color	Black
Thickness ASTM D1000	3,17 mm
Elongation ASTM D1000	1000%
Copper Corrosion	None
Electrical Property	Typical Value
Dielectric Strength ASTM D1000	22,6 kV/mm
Insulation Resistance ASTM D1000	>10 ⁶ megohms

4. User Information

4.1 Specifications

The insulating putty must be in tape form, the thickness of which must be a minimum of 2,54 mm. The tape must be a rubber based tape capable of being formed and molded with moderate finger tension at temperatures as low as 0°C. Neither the tape nor any of its components shall cause the corrosion of copper. The tape must be compatible with most synthetic cable insulation as well as other splicing tapes.

4.2 Engineering/Architectural Specification

All 2300 volt or less feeder connections, taps and splices, on wires larger than 6 AWG with irregular shaped connectors, shall be first built up with electrical insulating putty to eliminate both sharp corners and voids. Enough insulating putty shall be used until good overall padding is provided. Compress putty to fill all voids and generally smooth up before applying electrical splice protection. All 600 volt or less splices and terminations on wires larger than 6 AWG with irregular shaped connectors shall be insulated with a minimum of 6,3 mm of electrical insulating putty. The entire connection must be covered with the insulating putty. The insulating putty must then be over-wrapped with a vinyl tape applied with the same tension as it has when it comes from the roll. This vinyl tape shall provide a uniform covering of at least four layers, half lapped in two directions.

4.3 Installation Techniques

To round out irregular connections, mold and pack Scotchfil® Electrical Insulation Putty with moderate finger pressure, eliminating voids and air spaces. The layers of Scotchfil® will fuse into a homogeneous mass. Over-wrap with two half lapped layers of Scotch® Super 33+ or Super 88 Vinyl Electrical Tape.

To create a resin dam in resin pressure splices, wrap a layer of moderately stretched Scotchfil insulation putty around the cleaned cable jacket at a distance of 7,6 cm from the jacket cutback. Lay the ground wire along the cable jacket and through the Scotchfil® putty. Wrap several layers of highly elongated Scotchfil® putty around the cable and ground wire. Bind Scotchfil® putty tightly with several wraps of Scotch® Super 33+ or Super 88 Vinyl Electrical Tape. The putty and vinyl tape will make a seal through which resin cannot flow.

Insert Company
address
before issue

Reference: AABDD51143#EN_01

Issue date 15.11.2016

© 3M 2014 All Rights Reserved.

4.4 Agency Approvals & Self Certifications

- For RoHS information, please visit www.3M.com/RoHS

4.5 Shelf Life & Storage

This product has a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (10°C to 27°C and <75% relative humidity).

4.6 Availability

Please contact your local distributor.

5. Additional Information

To request additional product information see address below.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

All questions of warranty and liability relating to 3M products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

3M is a trademark of the 3M Company.

Insert Company
address
before issue

Reference: AABDD51143#EN_01

Issue date 15.11.2016

© 3M 2014 All Rights Reserved.