



Scotch® Rubber Splicing Tape 23

Data Sheet

July 2021

Product Description

3M Scotch® Rubber Splicing Tape 23 is a black, 30-mil (0.76 mm) thick, premium grade rubber splicing tape composed of a self-fusing Ethylene Propylene Rubber (EPR) backing supplied on a removable polyethylene liner.

- Commonly used as primary insulation for cable splice and termination applications up to 69kV (ASTM D4388, Type III)
- Compatible with common solid dielectric cable insulations
- Operating Temperature Rated to 194°F (90°C), Emergency Overload Rating to 266°F (130°C)
- Halogen free per International Electrotechnical Commission (IEC) 61249-2-21 standard
- Country of Origin: Brazil

Properties

Physical Properties	Value Imperial (Metric)	Mechanical Properties	Value Imperial (Metric)
Color - Visual	Black	Thickness ¹	30 +/- 3.0 mils (0.76 +/- 0.076 mm)
Backing	Ethylene Propylene Rubber (EPR)	Tensile Strength ¹ – Minimum	250 psi (1.7 MPa)
Operating Temperature Rating ² Emergency Overload Rating ²	194°F (90°C) 266°F (130°C)	Elongation ¹ – Minimum	700%
Thermal Conductivity ³ – Nominal	0.15 W/m-K	Electrical Properties	Value Imperial (Metric)
Fusion @ 300% Strain ¹	Pass	Dielectric Strength ¹ – Minimum Standard After 96 hrs @ 23°C 96% RH	700 V/mil (27.6 kV/mm) ≥90% Standard Value
Heat Resistance ¹ (7 days @ 130°C)	Pass	Volume Resistivity ¹ – Minimum After 96 hrs @ 23°C / 50% RH After 96 hrs @ 23°C / 96% RH	10 ¹⁴ ohm.cm 10 ¹³ ohm.cm
Ozone Resistance ¹	Pass	Permittivity in Air ¹ – Maximum After 24 hrs @ 23°C (H ₂ O Immersion) After 24 hrs @ 70°C (H ₂ O Immersion)	4.0 4.0
UV Resistance ¹	Pass	Dissipation Factor in Air ¹ – Maximum After 24 hrs @ 23°C (H ₂ O Immersion) After 24 hrs @ 70°C (H ₂ O Immersion)	5% 5%

Notes:

1. ASTM D4325 Test Method - properties measured at room temperature 73°F (23°C) unless otherwise stated
2. ASTM D4388 Standard Specification, Type III
3. ASTM C518 Test Method - properties measured at room temperature 73°F (23°C) unless otherwise stated

Agency Approvals & Self Certifications

- Self-certified to ASTM D4388, Type III up to 69 kV (Test Report available)
- For Regulatory information including RoHS, REACH, please visit www.3M.com/regs

Installation Techniques

3M Scotch® Rubber Splicing Tape 23 should be applied in successive half-lapped layers by highly stretching tape (for most applications this stretch will reduce the tape width to a minimum of ¾ original width) throughout the entire application until the required build-up is reached to produce a uniform winding.

Shelf Life & Storage

This product has a 5-year shelf life (from date of manufacture) when stored in a humidity-controlled storage (50°F/10°C to 80°F/27°C and <75% relative humidity).

Availability

3M Scotch® Rubber Splicing Tape 23 available from 3M authorized distributors

Also available from 3M.com/electrical or call 1.800.245.3573.

Scotch® Rubber Splicing Tape 23

TECHNICAL STATEMENT

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product in accordance with all applicable instructions and with appropriate safety equipment, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement or repair of the 3M product or refund of the purchase price. Warranty claims must be made within one (1) year from the date of 3M's shipment.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by applicable law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com

3M and Scotch are trademarks of 3M Company.

3M

Electrical Markets Division
13011 McCallen Pass, Bldg. C
Austin, TX 78753
Phone: 800.245.3573
www.3M.com/electrical

Please Recycle. Printed in USA.
© 3M 2021. All Rights Reserved.
78-8129-9332-3 Rev C