



# 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 <sup>1</sup>	30 +/- 3.0 mils (0.76 +/- 0.076 mm)
Backing	Ethylene Propylene Rubber (EPR)	Tensile Strength <sup>1</sup> - Minimum	250 psi (1.7 MPa)
Operating Temperature Rating <sup>2</sup> Emergency Overload Rating <sup>2</sup>	194°F (90°C) 266°F (130°C)	Elongation <sup>1</sup> - Minimum	700%
Thermal Conductivity <sup>3</sup> - Nominal	0.15 W/m-K	Electrical Properties	Value Imperial (Metric)
Fusion @ 300% Strain <sup>1</sup>	Pass	Dielectric Strength <sup>1</sup> - Minimum Standard After 96 hrs @ 23°C 96% RH	700 V/mil (27.6 kV/mm) ≥90% Standard Value
Heat Resistance <sup>1</sup> (7 days @ 130°C)	Pass	Volume Resistivity <sup>1</sup> - Minimum After 96 hrs @ 23°C / 50% RH After 96 hrs @ 23°C / 96% RH	10 <sup>14</sup> ohm.cm 10 <sup>13</sup> ohm.cm
Ozone Resistance <sup>1</sup>	Pass	Permittivity in Air <sup>1</sup> - Maximum After 24 hrs @ 23°C (H <sub>2</sub> O Immersion) After 24 hrs @ 70°C (H <sub>2</sub> O Immersion)	4.0 4.0
UV Resistance <sup>1</sup>	Pass	Dissipation Factor in Air <sup>1</sup> - Maximum After 24 hrs @ 23°C (H <sub>2</sub> O Immersion) After 24 hrs @ 70°C (H <sub>2</sub> 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](http://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](http://3M.com/electrical) or call 1.800.245.3573.

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# 3M

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

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