# Scotch<sup>®</sup> Cable Jacket Repair Tape 2234

Data Sheet September 2013

### Description

Scotch<sup>®</sup> Cable Jacket Repair Tape 2234 provides a cost effective and efficient means of covering and protecting damaged sections of cable jacket, thereby extending the life of the cable and reducing down time. The outer layer of the tape is composed of vulcanized CSM rubber to provide outstanding chemical and environmental resistance. The inner layer is composed of flame-retardant mastic and acts as a moisture barrier which provides excellent adhesion to a variety of jacket materials.

#### **Features**

- Insulates and protects damaged cable jackets
- Flame retardant
- Good adhesion to cable jacket materials
- Excellent abrasion resistance
- Resistant to heat, oil, ozone, UV and other environmental effects
- Maintains flexibility to -22°F (-30°C)

### Agency Approvals & Self Certifications

UL Recognized 220°F (105°C) Temperature Rating.

RoHS 2011/65/EU

"RoHS 2011/65/EU" means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

### **Typical Properties**

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (~23°C) unless otherwise stated.

Physical Properties (Test Method)	Typical Value US units (metric)	ASTM Test Method (unless noted)
Color	Black	
Adhesive	Flame retardant	
Tensile Strength*	2400 psi (16,5 Mpa)	D412
Elongation* (% at break)	500%	D412
Tear Resistance*	200 pli (35 kg/cm)	D624
Hardness-Shore A	55	D2240
Adhesion to Steel	160 oz/in (17,5 N/cm)	D1000
Adhesion to PVC	85 oz/in (9,3 N/cm)	D1000
Adhesion to Neoprene	14 oz/in (1,5 N/cm)	D1000
Adhesion to CSM	107 oz/in (11,7 N/cm)	D1000
Adhesion to PE	112 oz/in (12,2 N/cm)	D1000

<sup>\*</sup>Test result for backing only



### Scotch® Cable Jacket Repair Tape 2234

### Typical Properties, continued

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (~23°C) unless otherwise stated.

Electrical Properties (Test Method)	Typical Value US units (metric)	ASTM Test Method (Unless Noted)
Volume Resistivity	10 <sup>14</sup> ohm/cm	D257
Breakdown Voltage	400 V/mil (15,7 kV/mm)	D149
Environmental Resistance Properties (Test Method)	Typical Value US units (metric)	ASTM Test Method (Unless Noted)
Heat Resistance* (70h/125°C)	Pass	D2000-Type CE
Temperature Rating (105°C)	Pass	UL 510
Flammability**	Pass	MSHA CFR 30 Part 7
Oil Resistance* (70h/125°C/IRM 903)	Pass	D2000-Type CE
Ozone Resistance	Pass	D4325
Abrasion Resistance Tabor H22 wheel, 250g, 1000 cycles	0.05g (0.05g)	
MVTR (37.8°C, 100% RH)	0.025g/100sq.in.24h (0,38 g/sq.m.24h)	D1249
Water Absorption	0.50%	D570
Copper Corrosion Resistance	Pass	D69

<sup>\*</sup>Test result for backing only

## **Engineering Specification**

Scotch<sup>®</sup> Cable Jacket Repair Tape 2234 should be half-lapped over the damaged jacket area so as to cover the entire area. Each end should be overwrapped with Scotch<sup>®</sup> Super 33+<sup>TM</sup> Vinyl Electrical Tape or Scotch<sup>®</sup> Vinyl Electrical Tape Super 88. The lowest application temperature is 23°F (-5°C). Continuous operating temperature range is -22°F (-30°C) to 220°F (105°C).

### Shelf Life & Storage

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

### Availability

Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

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<sup>\*\*</sup>This product passes the flame test specified in CFR 30 Part 7, but is not approved by MSHA.