# Scotch® 2234

Cable Jacket Repair Tape

# 1. Product description

Scotch® Cable Jacket Repair Tape 2234 provides a cost effective and efficient means of covering and protecting damaged sections of cable jacket to extend the life of the cable and reduce down time. The outer layer of the tape is composed of vulcanised 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.

# 2. Applications

- 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 -30°C (-22°F)

## 3. Typical properties

Physical Properties (Test Method)	Typical value metric (US units)	ASTM Test Method (unless noted)
Colour	Black	
Adhesive	Flame retardant	
Tensile Strength*	16.5 Mpa (2400 psi)	D412
Elongation* (% at break)	500%	D412
Tear Resistance*	35 kg/cm (200 pli)	D624
Hardness-Shore A	55	D2240
Adhesion to Steel	17.5 N/cm (160 oz/in)	D1000
Adhesion to PVC	9.3 N/cm (85 oz/in)	D1000
Adhesion to Neoprene	1.5 N/cm (14 oz/in)	D1000
Adhesion to CSM	11.7 N/cm (107 oz/in)	D1000
Adhesion to PE	12.2 N/cm (112 oz/in)	D1000

Electrical properties		
Volume Resistivity	1014 ohm.cm	D257
Breakdown Voltage	15.7 kV/mm (400 V/mil)	D149

Environmental Resistance		
Heat Resistance* (70h/125°C)	Pass	D2000-Type CE
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, 250 g, 1000 cycles	0.05 g (0.05 g)	
MVTR (37.8°C, 100% RH)	0,38 g/m² in 24h (0.025 g/100sq.in.24h)	D1249
Water Absorption	0.50%	D570
Copper Corrosion Resistance	Pass	D69

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

Note: These are typical values and should not be used for specification purposes. Properties measured at room temperature 23°C unless otherwise stated.

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

## 4. User information

#### 4.1 Specifications

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

## 4.2 Agency Approvals

UL Recognised 105°C (220°F) Temperature Rating, UL File No. E17385

#### 4.3 Shelf Life

Scotch® 2234 has a 5-year shelf life from date of manufacture when stored in a humidity controlled area (10°C/50°F to 27°C/80°F and <75% relative humidity). Good stock rotation is recommended.

## 4.4 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.

**Electrical Markets Division** 

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