

**3M** Science.  
Applied to Life.™

3M™ Scotchcast™ Flexible Resin

# Flexible and convenient cable jointing solutions.

**Use the right stuff.**

# Flame-Retardant Electrical Insulating Resin 2131

3M™ Scotchcast™ Flame-Retardant Compound 2131 is a two-part polyurethane resin designed to replace the cable jacket when splicing or repairing mine and portable cables. It can withstand the rugged conditions under which mine and portable cables operate.



RoHS 2011/65/EU

## Features

- ▶ Also used as the insulating material for cable splices operating at up to 1000 volts and designed for 90°C continuous use/130°C overload.
- ▶ Flame-retardant
- ▶ Bonds to most modern cable jackets
- ▶ Bonds to itself
- ▶ Tough, yet flexible (semi-flexible)
- ▶ Available in two-part closed mixing pouch for easy mixing and pouring.
- ▶ Excellent multi-purpose moisture sealing resin

Voltage	1000 Volts or less
Cure Time	16 to 24 hours at 21°C
Energise Time	Immediately
Max. Operating Temperature	90°C Continuous



- ▶ No torch
- ▶ No external heat source needed
- ▶ Abrasion resistant
- ▶ Self-curing resin

Product	3M Order Code	Packaging Description	Weight (g)	Volume (cm³)
2131B	80611468259	2-part pouch	213	175
2131C	80611468267	2-part pouch	612	502

## Applications

- ▶ To replace or repair the jacket on both single and multi-core power cables
- ▶ To insulate between conductors of multi-core splices operating at up to 1000 volts
- ▶ To seal the crotch or sheath when terminating multi-core cables
- ▶ Potting cable or wire encasements, splices, printed circuit boards and junction boxes
- ▶ Filling back shell connectors
- ▶ Potting for motor repairs



# Flexible Power Cable Splice Kits 82-F Series

3M™ Scotchcast™ Flexible Power Cable Splicing Kits 82-F Series are flexible inline and tap splices for use on non-shielded portable power cables and cords. These splices are designed to be used on single or multiple conductor cables, depending on the voltage rating.



**MSHA Approved and RoHS 2011/65/EU Compliant**

## Applications

- ▶ For use in weather-exposed, direct burial or submerged locations.
- ▶ Inline single-conductor cables rated up to 5kV
- ▶ Tap single-conductor cables rated up to 1kV
- ▶ Inline and tap multi-conductor cables rated up to 1kV
- ▶ For mine portable cable rated 600/2000 Volts



## Kit Contents

82-F1	82-F2	
1	1	Removable Mould
1 Size "B"	1 Size "C"	Bag, 3M™ Scotchcast™ Flame- Retardant Compound 2131
2	1	Strips, Scotch® Rubber Splicing Tape 23
1	1	Strip, 3M™ Three-M-Ite™ Elek-Tro-Cut™ Abrasive Cloth

## Selection Guide

Kit No.	3M Order Code	Cable O.D. Range (mm)	Number of Conductors	Connection Max O.D. (mm)	Voltage Rating (Max. Volts)	Conductor Size Range (mm <sup>2</sup> )
82-F1	80611468358	6.4 - 20.3	1	15.7 (Connector)	5000	16 - 50 mm <sup>2</sup>
			Multi	22.8 (Connector Bundle O.D.)		
82-F2	80611468366	20.4 - 30.4	1	20.8 (Connector)	5000	70 - 120 mm <sup>2</sup>
			Multi	33 (Connector Bundle O.D.)		

\*Mine Portable Cable Rating \*\*Base selection on cable O.D. ranges above

# Flexible Cable Jointing and Repair Systems

- ▶ Flexible cold pour resin systems for the permanent jointing and repair of single and multi-core flexible power cables.
- ▶ The flexible Scotchcast resin bonds securely to the cable sheath, providing a permanent joint or repair with water tight seal.
- ▶ Can be used to joint or repair frequently coiled power cables.
- ▶ Only 3M™ Scotchcast™ Flame-Retardant Electrical Insulating Resin 2131 is suitable for use with these kits.



Kit No.	3M Order Code	Min Cable Size (Dia) (mm)	Max Cable Size (Dia) (mm)	Max Length of Joint/ Repair (mm)	Mould Length (mm)	Quantity of Resin needed for Joint
M20	80611468820	41	63	330-381	508	1200g (2 x Size C packs)^
M30	80611468838	47	102	508	737	2220g (3 x Size C and 2 x Size B Packs)^
M40	80611468846	47	152	813	1118	3600g (6 x Size C Packs)^

^2131 Resin Packs are sold separately.

## Kit Contents

- Funnels
- Wrap-around Splice Mould
- Rubber Mould Straps
- Funnel Supports
- 3M™ Cable Repair Spacer Web

## M20, M30 & M40 Repair Kits

- ▶ Simple installation
- ▶ No heat required – safer system
- ▶ High performance – repaired/jointed section can be reeled without sagging
- ▶ Abrasion and weather resistant
- ▶ Flame retardant
- ▶ Drastic reduction in repair time
- ▶ Features a versatile and flexible wraparound mold which maintains excellent physical and electrical properties in harsh conditions
- ▶ Reusable – up to 10x

**Are you insulating, sealing, protecting or connecting?**

Call the 3M Electrical Helpline

**1800 3M ELEC**

**3M Electrical Products. Use the right stuff.**



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