

## 3M Scotchcast™ 2131 Flame-Retardant Compound

**Category:** Other Engineering Material

## **Material Notes:**

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 formulation makes it particularly suited to withstand the rugged conditions under which mine and portable cables must operate. Flame-Retardant Compound 2131 is 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. When used in accordance with the appropriate kit configuration, Compound 2131 meets Part 7, Title 30 CFR and carries the following MSHA approvals. Information provided by 3M

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_3M-Scotchcast-2131-Flame-Retardant-Compound.php

Physical Properties	Metric	English	Comments
Density	1.217 g/cc	0.04397 lb/in <sup>3</sup>	
Moisture Absorption	4.90 %	4.90 %	ASTM D471

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	82	82	ASTM D2240
Tensile Strength at Break	7.16 MPa	1040 psi	ASTM D412
Elongation at Break	339 %	339 %	ASTM D412

Thermal Properties	Metric	English	Comments	
Glass Transition Temp, Tg	-75.0 °C	-103 °F		

Electrical Properties	Metric	English	Comments
	5.22	5.22	
Dielectric Constant	@Frequency 60.0 Hz, Temperature 23.0 °C	@Frequency 60.0 Hz, Temperature 73.4 °F	ASTM D150
	6.33	6.33	
	@Frequency 60.0 Hz, Temperature 60.0 °C	@Frequency 60.0 Hz, Temperature 140 °F	ASTM D150
	6.56	6.56	
	@Frequency 60.0 Hz, Temperature 90.0 °C	@Frequency 60.0 Hz, Temperature 194 °F	ASTM D150
Dielectric Strength	13.5 kV/mm	343 kV/in	ASTM D149



Processing Properties	Metric	English	Comments
Cure Time	960 - 1440 min	16.0 - 24.0 hour	De-Mold Time: 1.5-2 hrs
	@Temperature 21.0 °C	@Temperature 69.8 °F	
	1440 - 1800 min	24.0 - 30.0 hour	De-Mold Time: 3.5-4 hrs
	@Temperature 10.0 °C	@Temperature 50.0 °F	De-Moid Tittle. 5.5-4 fils
	>= 2160 min	>= 36.0 hour	De-Mold Time: 6-8 hrs
	@Temperature 0.000 °C	@Temperature 32.0 °F	
Gel Time	17.0 min	17.0 min	3M Method TM-87

Descriptive Properties	Value	Comments
Appearance	Black	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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