



Scotchcast™ 3570G

Connector Sealing Packs

Data Sheet

Product Description

3M™ Scotchcast™ 3570G Connector Sealing Packs insulate and provide protection for electrical spring connectors against dust, soil, water, and other environmental elements. Each sealing pack contains a specific amount of Scotchcast™ 3570G epoxy resin and will accommodate one Scotchcast O/B, R/Y, Y, R, G, B, 3M 212, 312 or 512 electrical spring connector. Scotchcast 3570G electrical insulating resin is a two-part epoxy insulating and encapsulating resin. This resin, mixed in its unique container bag, generates its own heat to cure. Its compatibility with spring connectors makes 3570G resin an excellent insulator and sealer for electrical spring connections.

Applications

- To insulate electrical spring connectors
- For potting and protecting a wide variety of electrical spring connections
- For sealing against dust, soil, water and other environmental elements

Typical Properties

Physical Properties-Resin

Color	Red
Hardness ASTM D-2240	75 Shore D
Tensile Strength ASTM D-412	3500 psi
Elongation ASTM D 412	20%
Glass Transition Temperature (by DTA) 3M test method	68°F (20°C)
Heat Aging - Weight Loss	
1 week @ 250°F (121°C)	1.9%
2 weeks @ 250°F (121°C)	2.9%
Hydrolytic Stability - Weight Gain	
1 week boiling water	4.6%

Electrical Properties- Resin

Dielectric Strength	500 v/mil
ASTM D-149	
Dielectric Constant (60 Hz)	
ASTM D-150	
73° F (23°C)	3.9
140°F (60°C)	4.8
194°F (90°C)	5.9
221°F (105°C)	6.6
Dissipation Factor (60 Hz)	
ASTM D-150	
73° F (23°C)	2.5%
140°F (60°C)	5.7%
194°F (90°C)	9.2%
221°F (105°C)	>20%

Note: This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

Resin Features

- Thermosetting, therefore will not melt or run once it cures
- Generates its own heat to cure
- Oil resistant
- Bonds to itself
- Tough
- Stable in applications at elevated temperatures up to 121°C
- Unipak container bag for mixing the resin and encapsulating the appropriate spring connectors
- Excellent multi-purpose moisture sealing resin

Specifications

The material must be supplied in a two-part polyethylene bag with a barrier separating the epoxy from the polyol. The barrier must be capable of being broken to permit mixing the two parts without opening the bag.

Engineering/ Architectural

The material must be Scotchcast™ 3570G epoxy resin. It must be packaged in the 3M Unipak™ two-part polyethylene bag. The resin must be mixed within the Unipak™ container simply by separating the barrier between the two parts of the bag and working the contents back and forth within the bag.

Installation

CAUTION:

Turn power off before installing connector, then make connection per manufacturer's instructions. All electrical work should be done according to appropriate electrical codes.

NOTE:

When temperature is below 50° F (10°C), keep resin in a warm place prior to mixing (for example, in an inside pocket next to the body).

1. Thoroughly clean and dry the surface of the substrate to which the material is desired to bond.
2. Remove guard bag, using caution not to damage inner bag.
3. Grip both edges of bag at the center barrier (FIG. 1) and wrinkle and flex the bag across the barrier. This will weaken the barrier.

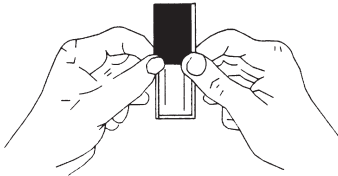


FIG. 1

4. Squeeze the clear side of the resin, forcing the resin through the center barrier.
5. Mix thoroughly to a uniform color by squeezing contents back and forth 25-30 times.
6. Squeeze resin to one end of bag, and cut off other end. (FIG. 2)

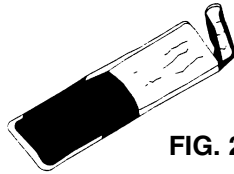


FIG. 2

7. Slowly insert connection into sealing pack until it fits snugly against the opposite end. (FIG. 3)

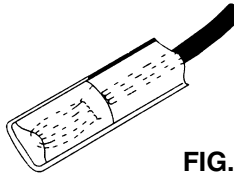


FIG. 3

8. Wrap open end of bag with Scotch® Super 33+ Vinyl Electrical Tape and position the taped end up until resin gels. (FIG. 4)

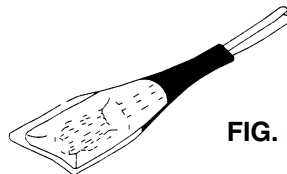


FIG. 4

Refer to Material Safety Data Sheet for health, safety and precautionary information, or call 800-364-3577.

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IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

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3M

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Maintenance

Scotchcast™ 3570G Connector Sealing Packs must be stored at temperatures below 120°F.

Scotchcast 3570G Connector Sealing Packs are usable for a period of one year from date of manufacture providing the Guard Bag (the white aluminized bag) is not opened when stored under the following recommended storage conditions: Store behind present stock in a clean dry place at a temperature of 70°F (21°C) and 40 to 50% relative humidity. Good stock rotation is also recommended. If the guard bag is removed the shelf life could be reduced under conditions of high humidity. For best results, use within one hour of opening guard bag. A Scotchcast 3570G Connector Sealing Pack is not impaired by freezing; however it should be warmed to at least 32°F (0°C) before being mixed or poured.

Availability

3M Scotchcast 3570G Connector Sealing Packs are available from your local 3M authorized distributor in the following size:

Size G (6.7 grams) 10/box