



SR17M

SR17M Silicone Electrical Insulating / Impregnating Varnish

Product Description

SR17M silicone resin is an improved flexible insulating resin that has been used in applications requiring resistance to extreme heat or cold (-30 to 250C/-22 to 482F). It provides a combination of heat resistance, low temperature flexibility and bonding properties for application at high coating speeds.

SR17M silicone resin has also been used for coating glass cloth and sleeving, and as a bonding resin for flexible mica products. It has also been used as a saturant for glass served wire. In addition, it can be used for surface coatings and in other applications where a flexible, heat resistant resin is required. After exposure at 250C (482F) for over 30 days, glass cloth coated with SR17M has shown no significant decrease in dielectric properties.

Properly cured SR17M resin coated cloth has been bent over a 1/8 inch mandrel at temperatures as low as -30C (-22F) without significant change in dielectric strength. It has also been used as an impregnating and insulating varnish for motor and transformer components.

SR17M resin is compatible with many other silicone resins. This compatibility has suggested the use of SR17M silicone resin as a plasticizer for hard, relatively inflexible silicone resins in specific electrical applications and in the formulation of protective coatings.

Key Performance Properties

- Thermal shock and cycling resistance from -30(-22F) to 260C(500F)
- Protection for 5-10 minute surges up to 372C(700F)
- Adhesion to many substrates
- Outstanding coating characteristics
- Outstanding strength
- Low temperature flexibility

Typical Product Data

Property	Value
Silicone Content, %	50
Solvent	Xylene
Specific Gravity, 25C (77F)	1
Density, lbs/gal	8.3
Viscosity @ 25C (77F), pcs Brookfield RVF*	100-200
Color	Straw
Gardner	0-2
Flash Point - Pensky-Martens Closed Cup °C (°F)	27 (80)

* Using #1 spindle at 20 rpm sample contained in a 600 mil beaker

TYPICAL CURED PROPERTIES

When the SR17M resin (varnish) is cured properly the following properties, characteristic of this electrical resin, may be attained.

Dielectric Strength	1200-2000 volts/ mil
Moisture absorption	0.05
Mandrel flexibility	1/8' to 1/4'
Thermal shock resistance	-30C (-22F) to 260C (500F)

Specifications

Typical product data values should not be used as specifications. Assistance and specifications are available by contacting GE Silicones at 800/255-8886.

Instructions for Use**Application and Cure Suggestions**

A. As coating on glass cloth

SR17M silicone coating varnish may be applied as is or diluted to a lower silicone content. Following coating (or impregnating), 5 to 10 minutes, at 120-135C (247-275F) should be allowed for dry time or solvent flash-off time. Thereafter, cure should be completed in 30 to 60 minutes at 250C (482F).

Cure times and temperatures are dependent on the thickness of application, the efficiency of drying and curing equipment and the degree of smoothness desired of the coating.

B. As a motor and transformer varnish

Generally, motor and transformer components are easily varnished with SR17M. However, because of the complexity of the various types

configurations, and sizes of such equipment, it is better to discuss suggested cure times and temperatures with a GE resin specialist for specific applications.

Handling and Safety

Material Safety Data Sheets are available upon request from GE Silicones. Similar information for solvents and other chemicals used with GE products should be obtained from your suppliers. When solvents are used, proper safety precautions must be observed.

Storage and Warranty Period

The warranty period is 6 months from date of shipment from GE Silicones if stored in the original unopened container at 25°C (77°F).

Availability

SR17M may be ordered from GE Silicones, Waterford, NY 12188, the silicone sales office nearest you or an authorized GE Silicone product distributor.

Government Requirement

Prior to considering use of a GE Silicones' product in fulfilling any government requirement, please contact the Government and Trade Compliance office at 413-448-4624.

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LEGAL

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