GE Advanced Materials
Silicones

RTF5308

Neutral Cure, One-Part RTV

PRODUCT DESCRIPTION

RTF5308 sealant is a neutral cure, one-component, ready to use silicone adhesive sealant that cures to tough resilient silicone rubber on exposure to atmospheric moisture at room temperature.

This sealant is a standard curing paste consistency product that can be applied to horizontal, vertical and overhead surfaces.

TYPICAL PERFORMANCE PROPERTIES

- Primerless adhesion to most commonly used metals and plastics
- Non-corrosive to most commonly known substrates
- Low odor cure
- One-component product - No mixing required
- Retains elastomeric properties at temperatures of -60C (-75F) to 204C (400F) for long periods and to 260C (500F) for short periods
- Room temperature cure
- Efficient electrical insulation properties
- Excellent UV, chemical and weather resistance

TYPICAL PRODUCT DATA

Property	Value	Test Method
Specific Gravity	1.04	WPSTM P-15
Color	Translucent	
Application Rate, g/min	290	WPSTM E-56
Flow, inches	.1	WPSTM E-48
Tack Free Time, minutes	18	WPSTM E-63
Hardness, Shore A	22	WPSTM E-3
Tensile Strength, psi	305	WPSTM E-1
Elongation, %	485	WPSTM E-1

INSTRUCTIONS FOR USE

RTF5308* sealant will bond to many clean surfaces without the aid of primers. These surfaces include most commonly known metals, glass, ceramic, silicone rubber and some rigid plastics.

Surfaces should be thoroughly cleaned with a suitable solvent to remove dirt, oil, grease and surface contaminants. The surface should be wiped dry before applying the adhesive sealant.

Due to substrate variability, an evaluation should be made to determine whether acceptable bond strength develops for each specific application. For difficult to bond substrates, use of a primer is suggested. SS4004P*, SS4044P* and SS4179* primers from GE Silicones may be suitable for use with these sealants. Complete information and usage instructions for these primers are contained in a separate product data sheet

APPLICATION AND CURE TIME CYCLE

RTF5308 may be applied directly to clean or primed substrates. Where broad surfaces are to be mated, the sealant should be applied in a thin, less than 6mm (1/4 in.) diameter bead or ribbon around the edge of the surface to be bonded.

The cure process begins with the formation of a skin on the exposed surface of the sealant and progresses inward through the material. At 25C (77F) and 50% relative humidity, RTF5308 will form a surface skin that is tack free to the touch in about 15-25 minutes. Once the tack free skin has begun to form, further tooling of the adhesive sealant is not recommended.

Methyl alcohol and residual ammonia vapors are released from the sealant surface during application and cure.

Because this adhesive sealant cures by reacting with atmospheric moisture, higher temperatures and humidity are expected to accelerate the cure process, and lower temperatures and humidity will slow the cure rate.

Exact cure time will depend on temperature, humidity, sample thickness and sealant configuration. Since cure time increases with thickness, use of these adhesive sealants should be limited to section thickness of 6mm (1/4 in.).

PHYSICAL PROPERT DEVELOPMENT

In addition to the effects of temperature and relative humidity, development of maximum bond strength will depend on joint configuration, degree of confinement, sealant thickness and substrate porosity. Normally, sufficient bond strength is likely to develop in 12-24 hours for RTF5308 to permit handling of parts. Stress should not be applied to the bonded joint until full adhesive strength has developed. Eventually the adhesive strength of the bond is expected to exceed the cohesive strength of the silicone rubber adhesive sealant itself. Always allow maximum cure time available for best results.

HANDLING AND SAFETY

Material Safety Data Sheets are available upon request from GE Silicones or at **www.gesilicones.com**. 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.

AVAILABILITY

Products may be ordered from GE Silicones, in Waterford, NY, at **www.gesilicones.com**, or, where appropriate, an authorized GE Silicones product distributor.
GE Silicones Customer Service: (800) 332-3390

PATENT STATUS

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