



Premium RTV Silicone Adhesive Sealant 1035 Technical Data Sheet

ISO 9001:2008 Registered Quality System. Burlington, Ontario, CANADA SAI Global File: 004008

1035

Description

The 1035 *Premium RTV Silicone Adhesive Sealant* is a one-part, spreadable, non-corrosive, translucent paste. It is a fast curing and designed to provide quick initial adhesion build. The adhesive sealant retains elastomeric properties for long periods at temperatures from -60 to 204 °C (-76 to 399 °F).

The 1035 is excellent for the sealing and bonding of electronic components onto printed circuit boards and protecting copper connections on electronic part assemblies. It also provides excellent weather proofing where power cords enter motors. It can be used as a gasket for leak resistant sealing and insulating.

Benefits and Features

- **UL HB Recognition** (File # [E36952](#))
- **Fast cure**—modified alkoxy (neutral) cure
- **Primerless adhesion to many plastics, metals, wood, glass, and ceramics**
- **Provides electrical insulation**
- **Excellent chemical and weather resistance**
- **High strength**
- **Suited for marine applications**

Usage Parameters

<i>Properties</i>	<i>Value</i>
Tack Free	15 min
Full Cure @22 °C [72 °F]	24 h
Shelf Life	2 y
Application Rate	360 gm/min

Temperature Ranges

<i>Properties</i>	<i>Value</i>
Storage Temperature	16 to 27 °C [60 to 80 °F]

Cured 1035 Properties

<i>Physical Properties</i>	<i>Value</i>
Color	Translucent
Flexibility	Excellent
Flammability	HB
<i>Mechanical Properties</i> ^{a)}	<i>Value</i>
Hardness, Shore A	24A
Tensile Strength	21 kg/cm ² [300 lb/in ²]
Elongation	435%
Tear Strength	7.1 kg/cm [40 lb/in]
Peel Strength	
Glass	7.5 kg/cm [42 lb/in]
Aluminum	8.6 kg/cm [48 lb/in]
Lexan Polycarbonate	7.1 kg/cm [40 lb/in]
PVC	8.0 kg/cm [45 lb/in]

a) Cured at 25 °C [77 °F] and 50% relative humidity for 7 days

Cured 1035 Properties

<i>Electrical Properties</i> ^{b)}	<i>Value</i>
Volume Resistivity	2 x 10 ¹⁵ Ω·cm
Dielectric Strength	17 kV/mm [425 V/mil]
Dielectric Constant @100 Hz	2.8
Dissipation Factor @100 Hz	0.002
<i>Thermal Properties</i> ^{b)}	<i>Value</i>
Coefficient of Thermal Expansion	300 ppm/°C
Thermal Conductivity	0.06 W/(m·K) [0.10 Btu·ft/ft ² ·h·°F]
Brittle Point	-60 °C [-75 °F]

b) Information is provided for customer convenience. The properties are not tested on a routine basis.

Uncured 1035 Properties

<i>Physical Properties</i>	<i>Value</i>
Odor	Ammonia-like
Viscosity	Paste
Specific Gravity	1.04 g/mL
Flash Point	100 °C [230 °F]

Compatibility

A primer is not required; however, for difficult to bond substrates, a primer is recommended.

NOTE: Not recommended for use on polycarbonates and acrylics. Will discolor sensitive metals (copper and brass) only when in direct contact.

The 1035 is compatible with most materials found on printed circuit assemblies; however, in an uncured state it is not compatible with contaminants like water, oil, and greasy flux residues. Therefore, it is extremely important to clean the printed circuit assembly thoroughly with a suitable electronic cleaner before applying the coating (see recommended cleaners on page 4).

ATTENTION! Perform a compatibility test in a representative environment prior to use to determine if other incompatibilities may be present.

Storage

Store between 16 and 27 °C [60 and 80 °F] in dry area away from sunlight.

Application Instructions

The 1035 can be dispensed via caulking cartridges by manual caulking or air operated guns. The adhesive sealant should be applied in a less than 6 mm (1/4 in) diameter bead or ribbon around the edge of the surface to be bonded.

To apply the adhesive sealant

1. Clean and dry the surface of the substrate to remove oil, dust, water, solvents, and other contaminants.
2. Apply the adhesive sealant, ensuring adequate coverage and desired thickness.
3. Allow a full cure at room temperature for at least 24 hours.

ATTENTION! Exact cure time will vary depending on temperature, humidity, and thickness.

NOTE: Adequate bond strength will develop in 4-6 hours to permit handling of parts.

Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Weight</i>	<i>Net Volume</i>
1035-85ML	Tube	88.1 g	85 mL

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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