



Technical Data Sheet



GT-3100 One Part RTV Silicone

GT Products 3100 is a non-slump one-part silicone that cures to a tough elastomer when exposed to atmospheric moisture at room temperature. GT Products 3100 may be applied to horizontal, vertical and overhead surfaces without sagging. GT Products 3100 will adhere without a primer to many clean substrates such as aluminum, steel, glass, wood, silicone rubber, and many plastics. GT Products 3100 is a neutral cure (oxime) system and has no offensive odor. Because no corrosive by-products are evolved, GT Products 3100 will not corrode metals and can be used in contact with mortar and cement.

GT Products 3100 features excellent resistance to heat, cold, water, ozone, and ultra-violet rays. It remains flexible and does not crack or harden. GT Products 3100 contains no solvents and has negligible shrinkage during cure. GT Products 3100 is useful over a temperature range of -75°F to 450°F for extended operation and for intermittent periods up to 500°F .

TYPICAL PROPERTIES

As Supplied:

Color	white and clear
Specific Gravity	1.05
Extrusion Rate (1/8 in. orifice, 90 psi)	250 gm/min.
Tack-free time (77°F ./ 50% RH)	10 – 20 min.
Cure time 1/8 thickness (77°F / 50%RH)	24 hr.

As Cured:

Durometer (Shore A)	30
Tensile, psi:	270
Elongation, %	310
Brittle Point	-100°F
Volume Coefficient of Thermal Expansion, ($32-212^{\circ}\text{F}$)	9.3×10^{-4}
Thermal Conductivity CAL (cm) (C)(sec)	4.5×10^{-5}
BTU (ft) (F) (hr)	0.11
Volume Resistivity, ohm-cm	1.5×10^{15}
Dielectric Strength, volt/mil	500
Dielectric Constant,	
60 Hz	2.6
100 KHz	2.6
Dissipation Factor	
60 Hz	0.001
100 KHz	0.001

Instructions for use

GT Products 3100 will adhere to most clean surfaces without additional preparation. Mild abrasion of rubber surfaces will usually improve adhesion. A preliminary test should be made on each new substrate.

Surfaces should be thoroughly cleaned with a suitable hydrocarbon solvent such as mineral spirits, naphtha, MEK, etc. Solvents must be wiped from the surface before GT Products 3100 is applied.

GT Products 3100 cures on exposure to the moisture in air. Cure time increases with confinement and cross sectional thickness and decreases with increased humidity and temperature. Curing above 150°F will reduce physical properties. At 77°F and 50% RH GT Products 3100 will skin over and become tack-free in 10-20 minutes. Tooling and removal of masking tapes should take place prior to this time.

GT Products 3100 should be applied in a less than ¼ inch diameter bead to assure a complete cross section cure. Metal to metal bonds should not overlap more than 1 inch.

The odor given off during the cure of GT Products 3100 is acetic and disappears when fully cured.

Caution

GT Products 3100 is not recommended for use on calcareous surfaces or on materials that bleed oils or plasticisers.

Storage and Shelf Life

GT Products 3100 has a shelf life of 12 months when stored in the original unopened containers at or below 90°F.

Health and Safety

GT Products 3100 is sold for industrial use only. Uncured product will irritate the eyes. In case of contact with the eye, flush with running water for 15 minutes and call physician.

Uncured GT Products 3100 may also irritate the skin. Removal by wiping with dry cloth or paper followed by washing with soap and water is recommended.

GT Products 3100 releases acetic acid vapor during cure. Adequate ventilation is required. Wearing contact lenses should be avoided because vapor may be trapped behind the lenses.

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