



GE 2000
General Purpose Glazing
Silicone Sealant

PRODUCT DESCRIPTION

GE 2000 is a fast curing, one part silicone adhesive sealant that cures to silicone rubber when exposed to atmospheric moisture at room temperature to form a high strength rubber seal with excellent adhesion to glass, glazed surfaces, metals, most plastics and painted / coated surfaces. GE 2000 sealants utilise a moisture vapour cure system and release acetic acid vapours from the sealant surface as a by-product of cure. GE 2000 is unaffected by high or low temperatures and its superior physical properties are designed to give outstanding durability and performance.

KEY PERFORMANCE PROPERTIES

- One component, ready to use product
- Capability to cure at room temperature and ambient humidity conditions
- Primerless adhesion to many substrates including glass, glazed surfaces, metals, plastics and painted / coated surfaces
- Excellent UV ozone, and chemical resistance

TYPICAL APPLICATIONS

- Standard glazing
- Cap beading
- General sealing and assembly
- General bonding and insulation
- Metal to metal joints
- Sign manufacturing / assembly

TYPICAL PRODUCT DATA

| Uncured Properties | |
|---|-----------------------------------|
| Form | Paste |
| Color | Translucent / White / Black |
| Specific Gravity | 1.0 |
| Application rate, g/min | 350 |
| Tooling time, min | 5-8 |
| Tack free time, min | 20 |
| Full cure, days (depending on temp., RH and bead thickness) | 1-5 |
| Application temperature, °C | -30 to +60 |
| Cured Properties | |
| Hardness shore A | 30 |
| Tensile strength, Mpa | 2.5 |
| Elongation at break, % | 450 |
| Movement accommodation | ±25% |
| Temperature resistance, °C | -40 to +100 |

SPECIFICATIONS

Typical product data values should not be used as specifications. Assistance and recommendations are available by contacting Momentive Performance Materials India (MOMENTIVE)

INSTRUCTIONS FOR USE

Surface Preparation

Application surface should be clean, dry, sound and free from all contaminants such as dust, rust, grease etc. For optimum adhesion, surfaces should be thoroughly cleaned with a suitable solvent such as methyl ethyl ketone (MEK) or isopropyl alcohol (IPA) to remove dirt, oil and grease. The surface should be wiped dry before applying the Silicone sealant. When solvents are used, proper safety precautions must be

observed. All solvents must be considered toxic and must be used only in well ventilated areas. GE 2000 sealants will bond to many clean surfaces. An evaluation should be made to determine bond strength for each specific application. For difficult-to-bond substrates use of a primer is suggested. Momentive primers such as SS 4004, SS 4179 are recommended to use with these adhesive sealants.

Application and Cure Time Cycle

GE 2000 may be applied directly to the clean substrate. Where broad surface are to be mated, the sealant should be applied in a thin, less than 6 mm diameter bead or ribbon around the edge of the surface to be bonded. The cure process begins with the formation of skin on the exposed surface of the adhesive sealant and progress inwards through the material. At 25 °C and 50 % relative humidity, these products will form a surface skin which is typically tack-free to touch in about 20 min. Once the skin had begun to form, further tooling of the sealant is advisable. Increased temperature up to 60 °C and high humidity will accelerate the cure process. Low temperature and low humidity will slow the cure rate. As the GE 2000 sealants cure, acetic acid vapours are released from the sealant surface. The odour of acetic acid will completely disappear when the cure is completed. In addition to the effects of the temperature and relative humidity, development of maximum physical properties will depend on joint configuration, degree of confinement, sealant thickness, and substrate porosity. A 3mm section of GE 2000 sealant will cure through in approximately 24 hours at 25 °C and 50% RH.

Use of GE 2000 sealant should be limited to thickness of 6 mm. Normally, sufficient strength will develop in 12 to 24 hours to permit handling. Minimum stress should be applied to the sealant until full physical properties are developed.

CLEAN UP AND REMOVAL

Before cure, solvents such as naphtha, or toluene are most effective. Refer to solvent use warnings in the section on surface preparation. After cure, select chemical strippers which will remove the silicone rubber are available from other manufacturers. Specific product information may be obtained on request.

HANDLING AND SAFETY

These products are manufactured for industrial use only. Uncured product contact irritates eyes. In case of contact with eyes, immediately flush with water for 15 minutes. If irritation persists, get medical attention. Uncured product may irritate the skin. To clean from the skin, wipe very thoroughly with a dry cloth or paper towel, before washing with soap and water. By-product released during application and during may irritate the skin and eyes.

PACKAGING AND STORAGE

GE 2000 is available in 300 ml plastic cartridges. Shelf life is 12 months from the date of manufacture, if stored in the original unopened container at normal room temperature.

LIMITED WARRANTY

Momentive Performance Materials India warrants that its product will conform to Momentive Performance Materials India specifications at the time of application or use. The product must be stored in accordance with Momentive Performance Materials India recommendations, and used or applied before the earliest of (1) the indicated "Use Before Date", (2) one year from date of purchase, or (3) expiration of such other period or recommended storage time started in the Momentive Performance Materials India product literature. If notified, in writing, of a claim within one month of the product's use or application, Momentive Performance Materials India will, at its option, replace or refund the purchase price of any Momentive Performance Materials India product which does not satisfy the foregoing warranty.

CONTACT DETAILS

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