

## Sil-flex® 308

### HEAT CURING SILICONE ADHESIVE SYSTEM

Sil-flex® 308 is a one part silicone adhesive that cures rapidly with heat to produce tough, flexible adhesive bonds. The cured polymer provides excellent mechanical and electrical properties and is resistant to moisture and many chemicals. The Sil-flex 308 demonstrates excellent adhesion to most materials including metals, circuit boards, rubber, glass, and many plastics. This high performance formulation has a medium viscosity and is self-levelling. It also has been designed to be very resistance to voiding during curing and contains a UV indicator for optical inspection after application.

For hard-to-bond material or where cure inhibit could occur our Primax S and SF primers are suggested to improve adhesion and prevent cure inhibition. Many custom variations of the Sil-flex 308 adhesive are available to meet your requirements including higher or lower viscosities and faster gel-times. Please contact us to discuss your application a custom variant might be desirable for your application.

#### SUGGESTED APPLICATIONS:

- Sealing modules, condensers, connectors, ECUs & power modules
- Fixing electronics parts to circuit boards
- Reinforce solder joints, filleting components & dampen vibration
- Gasketing of lids and housings
- Fixing flyback transformers and other components. condensers and electronics components; fixing flyback

<b>HANDLING PROPERTIES</b>	<b>VALUE</b>	<b>TEST METHOD</b>
<u>Sil-flex 308)</u>		
Visual Appearance	Black flowable liquid	
Density	1.31 g/cm <sup>3</sup>	ASTM E-201
Viscosity, Part A, @ 25°C	92,000 cps	ASTM D-2393
Flash Point	>200°C	ASTM D-92
Shelf-life:	6 months from Date of shipment at 5°C or less	
Cure Schedules:	180 min @ 100°C or 30 minutes @ 125°C or 15 minutes @ @ 150°C	
Shore A Durometer	57A	
Tensile Strength	700 psi	
Tensile Elongation	260 %	
Tensile Shear Strength (Al to Al, unprimed)	750 psi	
Coefficient of Thermal Expansion (CTE)	275 ppm/C	
Dielectric Strength	500 V/mil	
Dielectric Constant @ 100 Hz / @ 100 kHz	3.09 / 3.03	
Dissipation Factor @ 100 Hz / @ 100 kHz	0.006 / 0.0003	
Volume Resistivity @ 25C	5 x 10 <sup>14</sup> ohm-cm	

## **PROCESSING AND APPLICATION INSTRUCTIONS :**

The Sil-flex 308 is typically supplied in syringes for dispensing either directly from the syringe or using a leuer lock or similar dispensing tip that attaches to the syringe. However the product can also be supplied in pint or other size containers for application by brush, spatula, or similar mechanical applicator.

No mixing is required prior to use, but if the product has been stored cold, allow it to thaw to room temperature prior to use or the viscosity may be significantly higher than expected.

Apply to clean, dry surfaces. For best adhesion, first abrade the surface with a wire brush, scouring pad, steel wool or coarse sand paper. After abrasion, clean the surface of any loose material and degrease with solvent or detergent to remove any contaminants. For improved adhesion to hard-to-bond surfaces use Primax S or SF primers to prepare the surface prior to application. Follow the application instructions in the Primax technical datasheet. For surfaces that may inhibit curing of the adhesive, prepare by coating the surface with Primax SF which will improve adhesion and also places a seal coat over the surface to reduce the possibility for cure inhibition.

## **PACKAGING AVAILABLE:**

This product is available in a wide range of syringe and cartridges sizes. It is also available in pint, quart, and larger containers.

Please call use with any special packaging requests or for information on custom kitting.

## **STORAGE GUIDELINES:**

Store these materials in a clean, cool and dry environment in their tightly closed original containers. Protect from extended exposure to temperatures below 15°C (59°F). Crystallization may occur if the material is exposed to cold for extend periods. If this occurs, heat the entire container for 4 hours at 70°C to re-liquefy the material. Allow to cool to ambient temperature prior to using. Also protect the Sil-flex 104A&B from exposure to moisture or high humidity. Tightly re-seal containers after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

## **HANDLING PRECAUTIONS:**

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

## **PERSONAL HYGIENE:**

### **Sil-flex 308**

**CAUTION!** May cause eye & skin irritation. Prolonged or repeated skin contact or inhalation of vapors may cause allergic skin or respiratory reactions. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally.

## **FIRST AID**

In case of contact:

**Skin** – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

**Eyes** – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

**Inhalation** - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

**Ingestion** - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

## **DISCLAIMER:**

**IMPORTANT:** The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

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