

Room 9,11 Floor, Chuangxin Building Block 1#, No.1, Technology Road, Technology
Chuangxin Park, West of Dayabay, Huizhou City, Guangdong, P.R. China
TEL (86 752) 5533798 FAX (86 752) 5533798-811

Description:

Tacusil™ 810049 is a fluorescent indicating version. The product was taken in response to the EU's introduction of DBT (dibutyltin compounds). This product has good adhesion and flexibility to a wide range of plastics (PC PMMA PVC PET NYLON), metal and glass. The use of a dealcoholized neutral resin may minimize erosion of the material. Environmentally friendly, mild and odorless, easy to use and widely used, it is a kind of elastic modified silicone which can be widely used.

Features:

- This product does not contain tin compounds.
- This resin has flexible properties and fracture energy.
- This product has stable properties in a wide range of temperature.
- This product does not volatilize low molecular weight siloxane compounds. It will not pollute the electronic devices.
- This resin is one component product without mixing. It is easy to use.
- This product has stable properties and is able to store in the room temperature.
- This resin will fast cure in the air. It can have surface dryness in a short time.
- This product complies to the 2011/65/EU RoHS regulations.
- This product complies to chlorine < 900ppm, bromine < 900ppm, chlorine + bromine < 1500ppm.

Typical Properties:

All properties given are at 25°C unless otherwise noted.

| Property: | Value: | Unit: |
|---|-----------------|--------------|
| Color | Black | |
| Appearance | Liquid | |
| Viscosity 25 °C, S14 20rpm | 45,000 - 55,000 | cps |
| Specific Gravity | 1.5 | |
| Hardness | 52 | Shore A |
| Surface Dry Time, 25°C | 8 | min |
| Initial Cured Time, 25°C | 30 | min |
| Through Cured Time, 25°C 50%RH 3.2mm | 2 | days |

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| | | |
|---|------------------------|-----------------------|
| Glass Transition Temperature (DSC) | <-35 | °C |
| Coefficient of Thermal Expansion < Tg | 168 | ppm |
| Coefficient of Thermal Expansion > Tg | 204 | ppm |
| Water Absorption Ratio (25 °C /24hr) | 1.15 | % |
| Elongation | 97 | % |
| Volume Shrinkage | 3.40 | % |
| Thermal Conductivity | 0.2 | W/mK |
| Shear Strength | | |
| PC vs. PC | 35 | kgf/cm ² |
| ABS vs. ABS | 10 | kgf/cm ² |
| PMMA vs. PMMA | 27 | kgf/cm ² |
| PET vs. PET | 17 | kgf/cm ² |
| PVC vs. PVC | 25 | kgf/cm ² |
| Copper vs. Copper | 44 | kgf/cm ² |
| SUS vs. SUS | 29 | kgf/cm ² |
| Glass vs. Glass | 27 | kgf/cm ² |
| Al vs. Al | 14 | kgf/cm ² |
| Peel Strength | | |
| NBR | 2.5 | kgf/25.4mm |
| SBR | 2.6 | kgf/25.4mm |
| EPDM | 1.8 | kgf/25.4mm |
| Silicone Rubber | 0.3 | kgf/25.4mm |
| Volume Resistivity | 1.03* 10 ¹¹ | ohm-cm |
| Surface Resistivity | 1.02* 10 ¹² | ohm |
| Dielectric Constant | 3.8 3.4 3.0 | 100Hz 1KHz 1MHz |
| Dielectric Strength | 14 | KV/mm |
| Temperature Range | -40 - 100 | °C |

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Thermal Strength/ Thermal Aging:

| Strength, Al vs. Al after curing, 25°C*50%RH*7 days | kgf/cm ² |
|---|---------------------|
| Temperature | Shear Strength |
| 25°C | 14 |
| 50°C | 13 |
| 80°C | 11 |
| 100°C | 10 |
| 120°C | 10 |

| Aging, -40°C (1hr)~ 100°C (1hr) | kgf/cm ² |
|---------------------------------|---------------------|
| Cycles | Shear Strength |
| 0 | 14 |
| 100 | 12 |
| 200 | 11 |
| 300 | 10 |
| 400 | 10 |
| 500 | 9 |

| High Temp & Humidity, 80°C * 90%RH | kgf/cm ² |
|------------------------------------|---------------------|
| Time, Hour | Shear Strength |
| 0 | 14 |
| 24 | 13 |
| 72 | 11 |
| 168 | 10 |
| 500 | 10 |
| 1000 | 10 |

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INSTRUCTIONS:

1. It should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.
2. Pour or brush this product onto the substrates, it does not recommend to stir to avoid interfusing the air. This product will be cured with the air. The curing properties depend on its thickness, curing temperature and relative humidity.
3. The bottom of the resin might not be cured in thicker application, such as casting, because the bottom of the resin contacts with moisture rarely. It is recommended to prolong the curing time in order to let the moisture spread from the surface to the bottom. It can also cast the resin two times. Cast the resin to the half height at the first time. When the surface is tacky, cast the resin for the second time.
4. Use this product as soon as possible after opening the original packages. When not using, please replace the lid tightly and store in a cool and dry place.
5. Cure time on the really part will depend upon factors such as part geometry, materials to be bonded, bondline thickness and humidity. Cure schedule should be confirmed with actual production parts and equipment.
6. The cured resin is not harmful to human when touching the skin.

STORAGE & SHELF-LIFE:

This product should be kept without any possibility of moisture exposure. Replace the lid immediately after use. This product has a six-month minimum shelf life when stored in dark place below 14~34°C in original, unopened containers.