

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™ 810038 is a tin free version because the EU starts to restrict DBT, we need to find a substitute material. This resin has good adhesion and flexibility to metals, glass and plastics, such as PMMA, PVC, PET, Nylon. This product is alkoxy and neutral resin, and it has minimum erosion to substrates. This resin is environmental, mild, odor-free and easy to use. This product has better adhesion strength than silicone type products. This product is a flexible silicone that is used widely in various areas.

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.

<i>Property:</i>	<i>Value:</i>	<i>Unit:</i>
Color	Opaque	
Appearance	Liquid	
Viscosity 25 °C, S14 20rpm	80,000 - 160,000	cps
Specific Gravity	1.07	
Hardness	43	Shore A
Surface Dry Time, 25°C	10	min
Initial Cured Time, 25°C	25	min
Through Cured Time, 25°C 50%RH 3.6mm	3	days

TACUSIL™ MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE with respect to its products. In addition, while the information contained herein is believed to be reliable, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. All recommendations or suggestions for use are made without guarantee inasmuch as conditions of use are beyond our control. The properties given are typical values and are not intended for use in preparing specifications. Users should make their own test to determine the suitability of this product for their own purposes.

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

Glass Transition Temperature (DSC)	<-40	°C
Coefficient of Thermal Expansion < Tg	317	ppm
Coefficient of Thermal Expansion > Tg	370	ppm
Water Absorption Ratio (25 °C /24hr)	0.96	%
Elongation	134	%
Volume Shrinkage	4.58	%
Thermal Conductivity	0.3	W/mK
Shear Strength		
PC vs. PC	14	kgf/cm ²
ABS vs. ABS	10	kgf/cm ²
PMMA vs. PMMA	19	kgf/cm ²
PET vs. PET	28	kgf/cm ²
PVC vs. PVC	25	kgf/cm ²
Copper vs. Copper	37	kgf/cm ²
SUS vs. SUS	30	kgf/cm ²
Glass vs. Glass	11	kgf/cm ²
Al vs. Al	23	kgf/cm ²
Peel Strength		
NBR	2.0	kgf/25.4mm
SBR	2.0	kgf/25.4mm
EPDM	1.1	kgf/25.4mm
Silicone Rubber	0.3	kgf/25.4mm
Volume Resistivity	5.1×10^{11}	ohm-cm
Surface Resistivity	6.3×10^{13}	ohm
Dielectric Constant	3.9 3.6 3.2	1KHz 100KHz 1MHz
Dielectric Strength	14	KV/mm
Temperature Range	-40 - 100	°C

TACUSIL™ MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE with respect to its products. In addition, while the information contained herein is believed to be reliable, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. All recommendations or suggestions for use are made without guarantee inasmuch as conditions of use are beyond our control. The properties given are typical values and are not intended for use in preparing specifications. Users should make their own test to determine the suitability of this product for their own purposes.

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

Thermal Strength/ Thermal Aging :

Strength, Al vs. Al after curing, 25°C*50%RH*7 days	kgf/cm ²
Temperature	Shear Strength
25°C	23
50°C	19
80°C	14
100°C	12
120°C	10

Aging, -40°C (1hr)~ 100°C (1hr)	kgf/cm ²
Cycles	Shear Strength
0	23
100	18
200	15
300	14
400	13
500	12

High Temp & Humidity, 80°C * 90%RH, 粘结强度	kgf/cm ²
Time, Hour	Shear Strength
0	22
24	19
72	15
168	14
500	13
1000	12

TACUSIL™ MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE with respect to its products. In addition, while the information contained herein is believed to be reliable, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. All recommendations or suggestions for use are made without guarantee inasmuch as conditions of use are beyond our control. The properties given are typical values and are not intended for use in preparing specifications. Users should make their own test to determine the suitability of this product for their own purposes.



TECHNICAL DATA SHEET 810038

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

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.

TACUSIL™ MAKES NO EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY, FITNESS OR OTHERWISE with respect to its products. In addition, while the information contained herein is believed to be reliable, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. All recommendations or suggestions for use are made without guarantee inasmuch as conditions of use are beyond our control. The properties given are typical values and are not intended for use in preparing specifications. Users should make their own test to determine the suitability of this product for their own purposes.