

DESCRIPTION:

Tacusil™ EPA0168 a single component epoxy with long room temperature pot life. It can cure at relatively low temperatures such as 65 °C (20-30 minutes typically) and can cure very quickly at high temperatures such as 90 °C (3-4 minutes typically). This epoxy adhesive is flexible and toughened to minimize stresses at the bond-line of CTE mismatched materials and has excellent performance under high mechanical impact.

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Light Black	Visual
Cure Schedule	20-30 mins @65°C or 3-4 mins @90°C	
Work Time	> 4 hours @ 25°C	
Viscosity	60,000 cps @1/s	Haake Mars 40, 25mm plate,
Specific Gravity	1.23	Calculated
Hardness	50 Shore D	ASTM D2240
Water Absorption	0.02% after 24 hours	R050-35/ASTM D570
Tensile Properties		Type IV ASTM D638
Strength	15 MPa	Crosshead rate 5mm /min.
Elongation	204%	Tested at 25 °C / 50%RH
Lap Shear Strength		ASTM D1002
0.005" bond line Al to Al	2,050 psi	Etched 2024T3, Crosshead rate 5mm/min

* Asterisk denotes values considered typical to associated resin systems or extrapolated from other test results.

** Temperature Rating is based on average design requirements and is not intended as a guarantee of suitability for all applications operating at that temperature.

Approximate time to 95% cure at various temperatures by DSC

Temperature	95% cure
150°C	40 minutes
180°C	20 minutes

NOTE: This chart reflects the thermal response of a very small sample run in a DSC, actual assemblies will require longer times to cure due to heat transfer, mass and method of heating. The cure schedule provided on page 1 provides times and temperatures more in line with use in a typical application.

INSTRUCTIONS:

1. Bring to room temperature for unfreezing prior to dispensing.
2. Apply heat to cure.
3. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.
4. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

SHELF LIFE AND STORAGE:

6 months at -40 °C

Usable shelf life is dependent upon method of application, storage conditions and user requirements.

Note: *Tacusil*TM EPA0168 is sensitive to excursions above room temperature. Exposure to higher temperature, or cycling of product temperature, will shorten product shelf life.