

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

DESCRIPTION:

Tacusil EPA 0212 series is one-part heat cure 100% solids epoxy adhesive. It has medium viscosity with thixotrophy and long work time under room temperature. It's designed for bonding applications and small potting applications with high temperature resistance and impact resistance requirement.

It can reach full cure under 90°C for 30mins and also has excellent dielectric strength and adhesion to various substrates, such as metal, ceramic and some engineering plastic.

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Black/ Red/ Dark Brown	Visual
Recommended Cure Schedule	30mins@90°C Or 20mins@110°C	
Work time	>8hours @ 25°C	
Viscosity EPA 0212 EPA 0212 HV	10000cps 30000cps	Haake Mars 40, 25mm plate, 1/S
Specific Gravity	1.19	
Glass Transition Temperature/Tg	140°C (see below for additional information)	R050-61 by DSC
Hardness	85Shore D	R050-17/ASTM D2240
Water Absorption	0.02% after 24 hours	R050-35/ASTM D570
Tensile Properties:		R050-36/ASTM D638
Strength	8500 psi	
Elongation	0-1%	
Modulus	700,000 psi	
Lap Shear Strength 0.010" bond line Al to Al	3200 psi (0.1' thickness)	R050-37/ASTM D1002
Compressive Properties:		R050-38/ASTM D695
Strength	12,000 psis	
Modulus	650,000 psi	
Volume Resistivity	6×10^{13} ohm-cm*	
Dielectric Constant	4*	
Dielectric Strength	500V/mil* 20 kV/mm*	
Coefficient of Thermal Expansion by TMA	40ppm/ °C below Tg 115ppm/ °C above Tg	455300005340 /ASTM E831 TMA, 5 °C/min
Temperature Rating	-40 to 230 °C	



TECHNICAL DATA SHEET EPA 0212 series

11/02/2020

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* 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
120°C	10 mins
150°C	3minutes

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 -20 °C

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

Note: Tacusil EPA 0212 series product is sensitive to excursions above room temperature. Exposure to higher temperature, or cycling of product temperature, will shorten product shelf life.