



TECHNICAL DATA SHEET Tacusil EPA1291

9/4/2023

DESCRIPTION:

EPA1291 is a two-part unfilled epoxy adhesive designed for bonding metals and plastics. It cures at room temperature to a tough, semi-flexible material. It has good wetting to most surfaces and is free flowing to penetrate cavities, self-level and release trapped air. This product can withstand vibration and impact. It also has good resistance to water, salt spray, inorganic acids and bases and most organic solvents.

SPECIAL FEATURES:

- Hybrid resin
- Long work time
- Good adhesion to plastic material and Don't attack PC material.
- High flexibility and resistance to mechanical impact

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Clear /black	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	100 to 85	
By volume	1: 1	
Viscosity – Part A	22000 cps @1/s	Rheometer parallel plate 25mm@1/s
Viscosity – Part B	15000 cps @1/s	
Viscosity - Mixed	20000cps @1/s	
Specific Gravity – Part A	1.15	Calculated
Specific Gravity – Part B	0.99	
Specific Gravity - Mixed	1.08	
Pot Life,	90mins	Rheometer parallel plate 25mm@1/s
Gel Time	300minutes/20cc sample	Gardco Hot Pot Gel Timer
Full cure time	2hrs@70C or 72hours@ RT	
Glass Transition Temperature/Tg	47 °C	by DSC
Hardness	70 Shore D	ASTM D2240
Tensile Properties:		ASTM D638/MTS
Strength	2800 psi	
Elongation	15%	
Lap shear strength		ASTM D1002
Al/Al(2042T3)	16Mpa	
PC/PC	7Mpa	
Volume Resistivity	2 x 10E14ohm-cm (@ 25 °C)	ASTM D257

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**Dielectric Constant / Dissipation Factor
@ 100 Hz**

3.8

ASTM D150

This TDS contains values that have been updated. The values reported in this technical data sheet are typical values of the product, and are highly dependent on test conditions and methodology. We actively seek the most precise and accurate ways to measure and interpret performance of our products, and to update estimated values with measured values. The formula has not been revised or changed in any way. Although the values on paper have changed, you can expect the same performance of the product.

INSTRUCTIONS:

1. Mixer should be attached keeping the cartridge vertical and any air pocket purged this way. Attach a new static mixer with each cartridge, then pre-bleed the first 3 inches of dispensed material or until a uniform color is obtained. Maintain adequate velocity during dispensing to ensure complete mixing.
2. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.
3. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

SHELF LIFE AND STORAGE:

12 months at 25 °C
Specialty packaging may be less.

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). Products in this state will not usually cure to normal and expected properties. In extreme cases it may appear solid and cured. Fluctuating temperatures (within 5 to 50 °C) aggravate this phenomenon. Heating the individual component to 50 to 60 °C while stirring can usually restore products to original state. Storage at 25 +/- 10 °C is optimum for most products.