

**DESCRIPTION:**

Tacusil™ EPA0139-2 is a two-part, low viscosity epoxy casting resin. It's a general purpose, 4:1 by weight mix ratio formulated resin with medium exotherm. It's updated version of EPA0139 in longer work time and cures under room temperature within 24hours, it exhibits good bonding strength to lots of substrates and excellent chemical resistance to many kinds of solvents.

**TYPICAL PROPERTIES:**

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

<b>Property:</b>	<b>Value:</b>	<b>Test Method or Source:</b>
<b>Color</b>	Light Yellow	Visual
<b>Mix Ratio</b> By weight	Part A to Part B 4 to 1	
<b>Cure Schedule</b>	48 hours @RT	
<b>Viscosity:</b> Part A Part B Mixed	2,500 cps 1,500 cps 2,100 cps	Rheometer parallel plate 25mm@1/s 45530006291
<b>Specific Gravity</b> Part A Part B Mixed	1.10 1.05 1.08	Calculated
<b>Pot Life</b> <small>(defined as the time it takes for initial mixed viscosity to double)</small>	60 mins	Rheometer parallel plate 25mm@1/s 45530006291
<b>Gel Time</b>	90 mins/ 100 cc sample	455300005339/Gardco Hot Pot Gel Timer
<b>Glass Transition Temperature/Tg</b>	70 °C	453560822409 by DSC
<b>Hardness</b>	82 Shore D	455300006287/ASTM D2240
<b>Water Absorption</b>	0.4% after 24 hours	457561824543/ASTM D570
<b>Tensile Properties</b> Strength Elongation Modulus	2,800 psi 1% 75,000 psi	455300006285/ASTM D638/ MTS 4535601224470/ASTM D638/Instron
<b>Volume Resistivity</b>	6.18 x 10 <sup>15</sup> ohm-cm	
<b>Dielectric Constant/ Dissipation Factor</b> @ 100 Hz	3.2	455300006513/ASTM D150
<b>Bulk Resistivity</b>	15 ohm-cm	455300004460/Jandel 4 point probe
<b>Non-volatile content</b>	100%	455300005646

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.

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*TECHNICAL  
DATA SHEET  
EPA0139-2*

25/02/2020

**INSTRUCTIONS:**

1. Bulk format: stir until homogeneous weigh and mix parts A and B accurately and thoroughly, scraping sides of container often. A power mixer is suggested such as a 500-1000 rpm device with a mix paddle sufficient to turn material and disperse any filler. Do not pour from mixing container, transfer to a new container as residual unmixed material may cause a tacky spot on the surface of the casting. 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.

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