

# TIM-811HP

**One Part-Fast Cure, High temperature Structural Epoxy Adhesive**

## DESCRIPTIONS

**TIM-811HP** is a **highly chemicals resistance, fast cure**, thermally conductive, one part thixotropic epoxy adhesive. With a relatively low heat cure, it develops excellent bond strength to most substrates including metals, wood, engineering thermoplastics, composite matrix and ceramics. It offers high heat transfer, low shrinkage and low coefficient of thermal expansion. **High Temperature Rated up to 230°C**

**Applications:** This adhesive is principally used in aerospace and high temperature applications. Excellent performance where solvent, water and chemicals or chemical vapors resistance required.

## INSTRUCTION FOR USE

- Use dispensing equipment for best results.
- For small applications, apply the product using a syringe or clean spatula.
- Avoid air entrapment to obtain optimum cured properties.
- Proceed with the bonding application and cure as recommended.
- Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

**Note:** Refer to Safety Data Sheet (**SDS**) for additional health and safety information.

## AVAILABILITY

Syringes (10cc, 30cc). Jars/Can (16 oz & 1qt). Cartridges (300cc). 1 gallon & 5 gallon pail

Typical Property	Test Method	Value
Type		One Part/Heat Cure
<b>Special Feature</b>		<b>Water, solvent &amp; chemical Resistance High temperature Stable up to 230°C</b>
Color	Visual	Grey
Viscosity	Brookfield	Paste
Specific Gravity	ASTM D792	1.4
Pot Life @ 80°C. Minutes		>180
Recommended Cure Alternate Cure		45 minutes @ 125°C 10 minutes @ 150°C
Operating Temperature Range.°C		-55°C to 230°C
Shelf Life		4 months(25°C) 6 months (5°C)
<b>Cured Properties</b>		
Hardness, Shore D	ASTM D2240	84
Glass Transition Temperature.°C	DSC	130°C
Lap Shear Strength to Aluminum. PSI	ASTM D1002	4500 (25°C) 600(150°C)
Coefficient Of Thermal Expansion (CTE), 10 <sup>-6</sup> /°C. Below Tg	ASTM E831	47
Thermal Conductivity (W/m-K)	ASTM D5470	<b>1.5</b>
Dielectric Strength (V/mil)	ASTM D149	350
Dissipation Factor (1KHz)	ASTM D150	0.126
Volume Resistivity (Ohm-cm)	ASTM D257	10 <sup>13</sup>

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