# **TECKNIT 8116** TWO COMPONENT ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE



### **Customer Value Proposition:**

TECKNIT 8116 is a two-component, silver filled conductive epoxy adhesive designed for applications where a strong, highly conductive electrical bond must be achieved. The silver filled epoxy provides a highly conductive bond and electrical pathway between mating surfaces and may be used in microelectronics, circuit repair, EMI shielding, and grounding applications. TECKNIT 8116 does contain volatile organic compounds (VOCs) so design considerations must be made for appropriate ventilation during application and material shrinkage as the compound cures.

Curing of TECKNIT 8116 can be achieved in as little as 30 minutes with heat to minimize equipment downtime and increase manufacturing throughput. TECKNIT 8116 has a 1:1 by weight and volume mix ratio which make the material easy to handle and use. Typical applications include bonding and grounding of electrical components, cold soldering, and bonding and sealing machined enclosures.

## **Contact Information:**

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## Features and Benefits:

- Two component
- Silver filler
- Epoxy
- 1:1 Weight &Volume mix ratio
- Medium paste

- Fast heat cure, increases throughput, minimizes equipment downtime.
- Low cost (\$/cc), excellent conductivity 0.002 ohm-cm.
- 45 minute working life, works well over wide temperature range, good chemical resistance >1400 psi lap shear, good for permanently bonding surfaces.
- Easy to partition out and mix
- May be dispensed out of needles, fill small cracks and voids.



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## **TECKNIT 8116 - Product Information**

#### **Table 1 Typical Properties**

TECKNIT 8116							
Typical Properties	Typical Values	Test Method					
Polymer	Ероху	N/A					
Filler	Silver	N/A					
Mix Ratio, A : B (by weight)	1 : 1	N/A					
Color	Silver	N/A	(Q)				
Consistency	Medium Paste	N/A	(Q)				
Maximum DC Volume Resistivity	0.002 ohm-cm	QAP-1017*	(Q/C)				
Minimum Lap Shear Strength	1400 psi (9653 kPa)	CHO-95-40-5300*	(Q/C)				
Specific Gravity	2.5	QAP-1101F*	(Q/C)				
Hardness	80 Shore D	ASTM-D2240	(Q)				
Continuous Use Temperature	- 62°C to 100°C (-80 °F to 212 °F)	N/A	(Q)				
Elevated Temperature Cure Cycle	Cure Cycle Option 1:   0.5 hour @ 100°C (212°F)   Cure Cycle Option 2:   Contact Chomerics						
Room Temperature Cure	24 hours	N/A	(Q)				
Working Life	0.75 hour	0.75 hour N/A					
Shelf Life, unopened	15 months @ 25°C (77°F)	F) N/A (Q)					
Minimum thickness recommended	0.001 in (0.03 mm)	N/A					
Maximum thickness recommended	None	N/A					
Volatile Organic Content (VOC)	81 g/l	Calculated					
Theoretical Coverage Area at 0.010" Thick per Pound (454 grams)	11,000 in² (70,968 cm²)	N/A					

Note: N/A – Not Applicable, (Q/C) - Qualification and Conformance Test, (Q) - Qualification Test \* This test Method is available from Parker Chomerics.

#### **Table 2 Ordering Information**

Product	Weight (grams)	Packaging	Part Number	Primer Included
TECKNIT 8116	57	2 component, 2 fluid ounce polypropylene kit	72-08116	Not Required

Please refer to Parker Chomerics Surface Preparation and CHO-BOND Application documents for information regarding the proper surface preparation, primer application (if required), and use of these compounds.

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