

# ANE-47927

P/N6-57505A P/N6-57508B

### **DEFINITION**

ANE-47927 <sup>TM</sup> epoxy adhesive is highly resistant to all aqueous, semi aqueous and solvent washing systems used in electronics. It is resistant to mild acids and alkalis. ANE-47927 <sup>TM</sup> bonds well to metals, glass, ceramic and plastics, such as polyester. ANE-47927 <sup>TM</sup> is the adhesive of choice in the assembly of stencils and screen for circuit board manufacturing. Low shrinkage during cure makes it excellent for bonding alignment sensitive parts.

### **PRODUCT DESCRIPTION**

Appearance	Paste consistency
Odor	Faint
Color (May be modified to meet your requirements)	White, or Gray

Property	Result	Methods
Viscosity	50,000 mPa·s	Brookfield RVT, Spindle 27, Small Sample Adaptor, 10 rpm, 25°C

Other information			
Work life time @ 25 ± 2°C	20 minutes (viscosity doubles)		
Gel Time @ 25°C	40 minutes (depending on mass and substrates)		
Full Cure Time @ 25°C	2.5 hours		
Fixture/Handling Time @ 25°C	60 minutes		
Fixture/Handling Time @ 65°C	15 minutes		
Mix Ratio:	By weight:	Part A 100	Part B 49
	By Volume:	Part A 100	Part B 50
Possible curing cycles	2.5 hours at 25°C 15 minutes @ 65°C (150°F)		
Specific gravity @ 25°C (g/cm³)	1.5		
Storage stability (unmixed)	1 year at room temperature		

### **APPLICATION PROPERTIES**

- ANE-47927 TM, when fully cured, is highly resistant to moisture, hot water, steam, hot antifreeze solutions, automotive fluids, detergents, gasoline, hydraulic fluids, plasticizers, cleaning agents, acids, and bases.
- **ANE-47927** TM can be thermal cycled between -40 and 135°C.

#### **APPLICATION RECOMMENDATIONS**

• **ANE-47927** TM will most likely not crystallize but, as with many resin products, crystallization of the resin can happen while in storage. **ANE-47927** TM can be returned to its original state --without any performance and or quality loss-- by heating to 60°C for 1-2 hours.

# TYPICAL PROPERTIES OF CURED ANE-47927TM

The properties set out below were determined following measurements carried out in the laboratory over a small number of tests. They are values given by way of guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out their own tests to determine whether the **ANE-47927** TM resin can be used for the particular application the user has in mind.

# **PHYSICO-CHEMICAL PROPERTIES**

Properties	Methods	Units	Typical values
Cure time at 25°C (20 gram mass)	90 minutes at 25c 15 min. at 65c		
Shore D hardness (24 hours)	ASTM D2240		85
Lap shear to Al (72 hours)	ASTM D3163	psi	3000

# **ELECTRICAL PROPERTIES**

Properties	Methods	Units	Typical values
Volume Resistivity			
• 100 V	ASTM D257	Ω-cm	• $8.0 \times 10^{14}$
• 500 V			• 6.3 x 10 <sup>14</sup>
Dielectric Constant			
• 120 Hz	ASTM D150		• 4.3
• 1000 Hz			• 4.3
Dissipation Factor			
• 120 Hz	ASTM D150		• 0.002
• 1000 Hz			• 0.002

### PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

# **PACKAGING**

**ANE-47927** <sup>™</sup> is available in two component kits, syringe cartridges like Mixpac <sup>™</sup>. For sizes and part numbers, contact Protavic America, Inc.

The information contained in this data sheet corresponds to the present state of our knowledge; it is intended for your guidance but we are not bound by it since we are not in a position to exercise control over the manner in which our products are used. Moreover; the attention of the user is drawn to the risks that could possibly occur should a product be used for an application other than that for which it is intended.