ANE-47204 ™

C6-57577A
C6-57578B

DEFINITION

ANE-47204™ is a toughened two part adhesive. It is specifically developed for bonding difficult substrates such as glass, ceramics, metals and engineered plastics. Proven applications are bonding fiber optic cables into aluminum end caps, bonding piezoelectric stacked devices, and excellent for electronic potting. It bonds well to glass, rubber, metals, and ceramic.

- *Meets FDA Title 21*
- One to one mix ratio
- 1 hour handling time
- Toughened for high strength
- Excellent chemical resistance

ANE-47204 epoxy resin system was also developed for adhesive and coating applications in accordance with title 21. U.S. code of Federal Regulations, Food and Drug Administration (FDA) chapter1, Sub. Part b, sections 175,105 and 175,300. This 1/1 ratio, two-part adhesive is an effective electrical insulator and it provides low permeability to gases and vapors and good resistance to water, weather, galvanic actions, to petroleum solvents, lubricants and fuels, to mild acids and alkalis and to many other organic and inorganic compounds

PRODUCT DESCRIPTION

Appearance	Liquid
Odor	Faint
Color (May be modified to meet your requirements)	Clear to amber

Property	**Result**	**Methods**
Viscosity	45,000 mPa·s	Brookfield RVT, Spindle 14, Small Sample Adaptor, 10 rpm, 25°C

Other information			
Work life time @ 25 ± 2ºC	120 minutes (viscosity doubles)		
Full Cure Time @ 25°C	24 hours		
Fixture/Handling Time @ 65°C	60 minutes		
Mix Ratio:	By weight:	Part A 100	Part B 90
	By Volume:	Part A 100	Part B 100
Possible curing cycles	24 hours at 25°C 60 minutes @ 65ºC (150°F)		
Specific gravity @ 25ºC (g/cm³)	1.17		
Storage stability (unmixed)	1 year at room temperature		

APPLICATION PROPERTIES

- **ANE-47204™**, when fully cured, is highly resistant to moisture, antifreeze solutions, automotive fluids, detergents, gasoline, hydraulic fluids, plasticizers, cleaning agents, acids, and bases.

- **ANE-47204™** is highly resistant to vibration and can be thermal cycled between –40 and 200°F.

TYPICAL PROPERTIES OF CURED ANE-47204™

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-47204®** resin can be used for the particular application the user has in mind.

PHYSICO-CHEMICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
Cure 1 hours @ 65°C			
Shore D hardness	ASTM D2240	-----	75
Lap shear to Al	ASTM D3163	psi	2,500
Lap shear ABS®	N/A	psi	533 (substrate failure)

ELECTRICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
Volume Resistivity • 100 V • 500 V	ASTM D257	Ω-cm	• 8.0×10^{14} • 6.3×10^{14}
Dielectric Constant • 120 Hz • 1000 Hz	ASTM D150	--	• 4.3 • 4.3
Dissipation Factor • 120 Hz • 1000 Hz	ASTM D150	--	• 0.002 • 0.002

PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

ANE-47204 is available in two component kits, and twin syringe cartridges like Mixpac™. For sizes and part numbers, contact Protavic America, Inc.