ANE-36142

REV 3.4
C6-56950
C6-56951

DEFINITION

ANE-36142 is an electronics grade, unfilled two-component epoxy adhesive with high strength and high temperature resistance. **ANE-36142** is designed for the bonding of ferrite parts. **ANE-36142** is an excellent adhesive for many high temperature thermoplastics such as polyetherimide, polyethersulfone, polysulfone as well as ceramics, metals, composite materials and films such as polyamide.

PRODUCT DESCRIPTION

Appearance	Liquid
Odor	Faint
Color	Amber

Property	**Result**	**Methods**
Viscosity	1,200 mPa·s	Brookfield RVT, Spindle 27, Small Sample Adaptor, 10 rpm, 25°C

Other information			
Work life time @ 25 ± 2ºC	4 hours		
Specific gravity @ 25ºC (g/cm³)	Part A: 1.16 Part B: 1.02 A/B Mixed: 1.13		
Possible curing cycles	3 hours @ 100°C (212°F) 2 hours at 125ºC (257°F) 1 hour @ 150C (302°F)		
Mix Ratio:	By weight:	Part A 100	Part B 28
	By Volume:	Part A 100	Part B 33.6
Storage stability (unmixed)	1 year at room temperature		

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APPLICATION PROPERTIES

ANE-36142 provides:

- Low shrinkage during cure.
- Excellent resistance to harsh environments.
- Excellent strength at low and high temperatures.
- Excellent flow before and during cure.
- Smooth, clear, high gloss surface after cure.
- Excellent heat resistance.
- Excellent adhesion to most surfaces.

- The consistency of the **ANE-36142** is well suited for the bonding of ferrites. The rheology allows for good wetting of surfaces in contact with the resin. It also provides good adhesion to substrates.

- **ANE-36142** wicks into the interfaces of clamped ferrite parts and subsequently cures to form a permanent bond. The bond results in no loss of inductance after severe conditioning such as 325°C vapor phase soldering, 180°C aging, and –65°C thermal shock.

APPLICATION RECOMMENDATIONS

- **ANE-36142** or the ferrite surfaces to be bonded do not need any special preparation or primers. The only requirement is that the ferrite surfaces be clean and tight fitting.

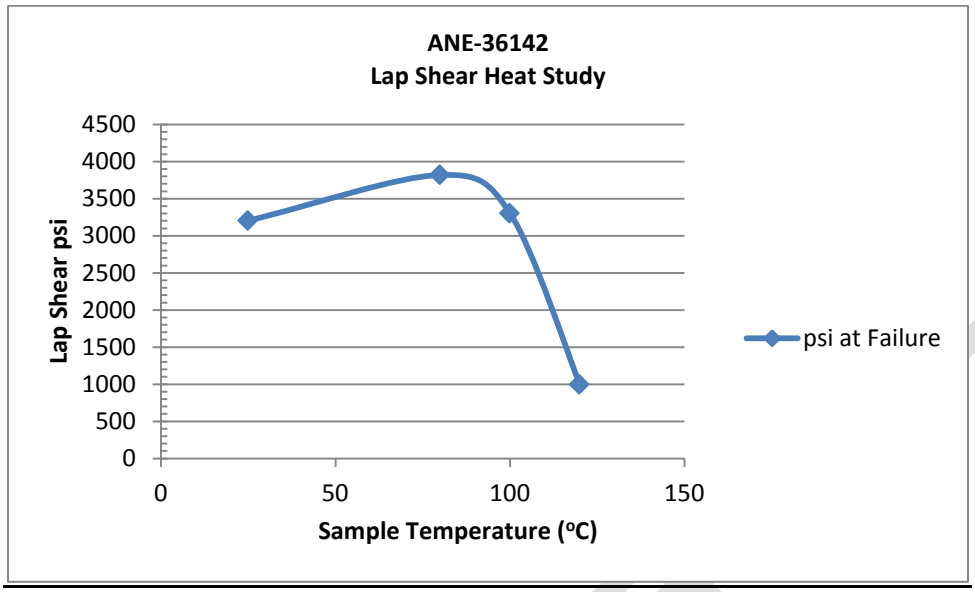
- **ANE-36142** is supplied as a two-component system, as with many resin products, crystallization of the resin can happen while in storage. **ANE-36142** can be returned to its original state --without any performance and or quality loss-- by heating to 60ºC for 1-2 hours. When all the crystals have melted the material should not re-crystallize for 1-2 weeks. To prevent re-crystallization, store in a freezer until ready to use.

TYPICAL PROPERTIES OF CURED ANE-36142

The properties set out below were obtained after curing for one hour at 150ºC. They 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-36142** resin can be used for the particular application the user has in mind.

PHYSICAL-CHEMICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
Shore D hardness	ASTM D2240	-----	D/83/1, D/83/10
Lap shear to AL @ 25°C *Heat vs. Tensile Strength Chart below*	ASTM D3163	psi	3,800
Linear shrinkage on cure		%	0.3
NASA Outgassing	ASTM 595	--	0.74 %TML 0.01% CVCM 0.23% WVR



THERMAL PROPERTIES

Properties	Methods	Units	Typical values
Glass transition temperature Tg	DSC 1	°C	112.8

ELECTRICAL PROPERTIES

Properties	Methods	Units	Typical values
Volume Resistivity • 100 V • 500 V	ASTM D257	Ω-cm	• 8.0×10^{16} • 1.2×10^{17}
Dielectric Constant • 120 Hz • 1000 Hz	ASTM D150	--	• 3.41 • 3.41
Dissipation Factor • 120 Hz • 1000 Hz	ASTM D150	--	• 0.0004 • 0.0026

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PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

ANE-36142 is available as a two-part system only. For larger amounts please contact Protavic America.

Product Name	**Description**
ANE-36142-BC-005	5 gram **Burst Pac™**

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.

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