REV 3.1

ANE-46507™

6-57043/6-56970(Clear)
6-57044/6-56970(Black)

DEFINITION

ANE-46507™ is a 100% solids (no VOC) general-purpose epoxy for use as a flexible adhesive/sealant and potting compound. **ANE-46507™** is specifically developed for bonding to difficult substrates such as glass, ceramics, all plastics, rubbers, and metals. The rheology of **ANE-46507™** is designed to provide controlled flow properties to enable the user precise application.

PRODUCT DESCRIPTION

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

Property	**Result**	**Methods**
Viscosity	13,000 mPa·s	Brookfield RVT, Spindle 27, Small Sample Adaptor, 10 rpm, 25°C

Other information			
Work life time @ 25 ± 2ºC	45 minutes (viscosity doubles)		
Gel Time @ 25°C	2-5 hours (depending on mass and substrates)		
Full Cure Time @ 25°C	24–120 hours		
Mix Ratio:	By weight:	Part A 100	Part B 82
	By Volume:	Part A 1	Part B 1
Possible alternate curing cycles	2 hours @ 65°C (149°F) 1 hour @ 100ºC (212°F)		
Specific gravity @ 25ºC (g/cm³)	1.1		
Storage stability (unmixed)	1 year at room temperature		

APPLICATION PROPERTIES

- **ANE-46507™**, 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-46507™** is highly resistant to vibration and can be thermal cycled between –40 and 150°C.

APPLICATION RECOMMENDATIONS

- As with many resin products, crystallization of the resin can happen while in storage. **ANE-46507™** 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 at –10°C until ready to use.

TYPICAL PROPERTIES OF CURED ANE-46507™

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-46505™** resin can be used for the particular application the user has in mind.

PHYSICO-CHEMICAL PROPERTIES

Properties	**Methods**	**Units**	**Typical values**
(Cure 24-120 hours at 25°C)			
Shore D hardness (24 hours)	ASTM D2240	-----	70
Lap shear to Al (24 hours)	ASTM D3163	psi	700
Lap shear to Al (48 hours)	ASTM D3163	psi	1,800
Lap shear to Al (72 hours)	ASTM D3163	psi	2,900
Lap shear to Al (96 hours)	ASTM D3163	psi	3,300
Lap shear to Al (120 hours)	ASTM D3163	psi	3,800
Cure 2 hours @ 65°C (149°F)			
Shore D hardness	ASTM D2240	-----	70
Lap shear to Al	ASTM D3163	psi	4,000
Cure 1 hour @ 100ºC (212°F)			
Shore D hardness	ASTM D2240	-----	70
Lap shear to Al	ASTM D3163	psi	4,600

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}
Properties (cont.)	**Methods**	**Units**	**Typical values**
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-46505™ is available as two-part kits or **Mixpac™**.