



Rev. 3.0

ANE-16120

C6-57158

DEFINITION

ANE-16120 is a solvent-free, single-component, electrically insulating adhesive for mounting components on a substrate when the bond does not need to be electrically conductive. This is a low viscosity version of ATE-10120.

PRODUCT DESCRIPTION

Nature	1-component electrically insulating epoxy adhesive
Appearance	liquid
Odor	slight
Color	amber

Guaranteed Specification	Standard	Method
Plane cone viscosity at 25°C (mPa.s)	3000	NFT 51211

Other information	
Density	1.2
A 50% increase of the viscosity at 20± 5°C	1 week
Possible curing cycles	60-90 minutes at 75°C 7-15 minutes at 100°C 3-5 minutes at 125°C 1-2 minutes at 140°C Post-curing for 30 min. at 150°C is recommended in all cases
Storage	3 months at +4°C 1 year at -20°C 1 year at -40°C

APPLICATION PROPERTIES

The rheology of the **ANE-16120** adhesive has been designed for application by microdispenser, pad or screen printing.

In all these applications, the long pot life and absence of solvent ensure that the product remains at a reasonably constant viscosity and facilitates machine adjustments.

However, curing remains very quick just little as a few minutes at 140-150°C.

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After curing, the **ANE-16120** adhesive sticks well on all types of substrate as well as showing thermal stability up to around 350°C for a few seconds.

METHOD OF USE

In order to obtain a non-porous adhesive joint, treatment under a vacuum of 1 mm of mercury for 15 mn is desirable when the product is not supplied in a syringe which can be fitted directly onto the dispenser.

In the absence of stirring, provide a container which is at least six times higher than the initial height of the mixture.

– Surfaces to be stuck should be clean and free from dust or grease. Use a flame or solvent vapours if possible. Avoid chlorinated solvents which encourage corrosion.

– Apply the adhesive with :

- a microdispenser
- a metal screen printing screen with a mesh size between 140 and 325
- a pad
- a spatula.

- Cure according to one of the curing cycles which is compatible with the component, the substrate and the manufacturing conditions. In practice, cycles of 20 minutes at 100°C and 1-2 minutes at 140°C are widely used.

The following post-curings are recommended :

- .2-3 hours at 100°C
- .1-2 hours at 125°C
- .30 min.-1 hour at 150°C

TYPICAL PROPERTIES OF THE CURED SYSTEM

The properties mentioned below were obtained after curing for 1h at 150°C.

They were determined following measurements carried out in the laboratory in 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 his/her own tests to determine whether the **ANE-16120** adhesive can be used for the particular application which he/she has in mind.

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1.) PHYSICO-CHEMICAL PROPERTIES

Properties	Methods	Units	Values
Color	--	Amber	
Density at 20°C	NFT 51201	g/cm ³	1.2
Shear strength	NFT 76107	daN/cm ² MPa	> 50 > 5.0
Ionic chlorine content	S 86005	µg/g	< 10
Sodium content	MIL 883-5011	µg/g	< 50
Glass transition temperature Tg	DSC	°C	75

The very high reactivity enables curing to take place on-line within a few tens of seconds at temperatures of over 150°C.

This reactivity also enables bonding to take place in the presence of heat-sensitive materials (polyester, PVC, etc.).

PRECAUTIONS IN USE

Refer to the attached material safety data sheet.

PACKAGING

ANE-16120 is available in one component kits, 10 ml, 30 ml, and 50 ml syringe.

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.

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