

DEFINITION

Electrically insulating mono-component die attach. The rheology of the **PROTAVIC® ANE 30100** has been developed for application by micro-dispenser or silk printing using automatic machines. It presents a very long pot life at 20-25°C (several days) and a high reactivity at high temperature.

PRODUCT DESCRIPTION

Appearance	opaque liquid	
Odor	faint	
Color	black	
Guaranteed specifications	Standard	Method
Cone and plate viscosity (5 rpm – 25°C)	7 000 ± 1 000 mPa.s	NFT 51211
Other information		
Work life* at 20 ± 2°C	7 days	
Pot life** at 20 ± 2°C	3 weeks	
Density	1.2 approx.	
Possible curing cycles	30 – 60 minutes at 120°C less than 5 minutes at 150°C	
Storage stability	6 months at T < -20°C	

* defined as 25% viscosity increase.

** defined as 100% viscosity increase.

APPLICATION PROPERTIES

The **PROTAVIC® ANE 30100** adhesive combines an excellent reactivity at moderate and high temperature with a high stability at room temperature : its good latency enables it to be kept at 20 ± 2°C for several days, so the viscosity remains virtually unchanged throughout the working day. The long pot life and the absence of solvent ensure that the product remains at a reasonably constant viscosity and facilitate machine adjustments.

It possesses excellent properties in terms of adhesion and protection against harmful environmental factors, due to its high purity epoxy base.

It is 100% cross-linkable by heat at moderate temperature (75 - 150°C).

METHOD OF USE

1. Take the package out of the freezer at least 30 minutes before use in order to prevent any re-absorption of moisture.
2. Work on clean surfaces or clean all surfaces in order to remove any dirt or grease. Do not deposit the adhesive on a substrate which has just been cleaned with chlorinated solvents.
3. Apply the adhesive :
 - with a micro-dispenser.
 - with a screen printing machine. Use polyester or stainless steel screen with a 140 to 325 mesh size.
 - by stamping.
4. Cure using one of the curing cycles which are compatible with the components, the substrate and the manufacturing conditions.

FIELDS OF USE

The **PROTAVIC® ANE 30100** adhesive excellent properties make it especially suitable for use in the microelectronics fields.

1. PHYSICO-CHEMICAL PROPERTIES

Properties	Methods	Units	Results
Color			black
Density at 20°C	NFT 51201 ISO 1675		about 1.2
shear strength	- 60'/150°C	daN/cm ²	> 100
Ionic chlorine content	S 86005	ppm	< 10
Sodium content	MIL STD 883	ppm	< 50

2. THERMAL PROPERTIES

Properties	Methods	Units	Results
Coefficient of thermal expansion - from -50°C to +80°C - from 150°C to 250°C	TMA 1	ppm/°C ppm/°C	50 - 60 160 - 180
Glass transition temperature	TMA 1	°C	110-120
Decomposition temperature in air	TGA 1	°C	> 400
loss of weight between 25 and - 100°C - 150°C	TGA 1	% %	< 0.05 < 0.10

PRECAUTION IN USE

Refer to the attached material safety data sheet

PACKAGING

The **PROTAVIC® ANE 30100** adhesive is supplied in 30 g syringes.

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.