



PROTAVIC[®] ANE 10700

28117-08 A

DEFINITION

Skip cure non conductive epoxy adhesive used for the bonding of microchips on RFID antennas. The rheology of **PROTAVIC[®] ANE 10700** has been developed for application by micro-dispenser using automatic machines.

It presents a one day pot life at 20-25°C, a high reactivity at medium temperature and a high purity. It exhibits an excellent thermal stability and a low humidity uptake.

PRODUCT DESCRIPTION

Appearance	liquid	
Odor	faint	
Color	yellow-orange	
Guaranteed specifications	Standards	Method
Cone and plate viscosity (5 rpm – 25°C)	8 000 ± 1 500 mPa.s	NFT 51211
Other information		
Pot life* at 20 ± 2°C	1 day	
Density	1.1 approx.	
Possible curing cycles	less than 10 seconds at 150°C	
Storage stability	6 months at T < -40°C	

* defined as 100% viscosity increase.

APPLICATION PROPERTIES

The **PROTAVIC[®] ANE 10700** adhesive exhibits excellent adhesive properties.

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.

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 temperature of between 125 and 200°C.

Its particular rheology is fully adapted for the sticking of large pieces, without spraying phenomenon.

It exhibits an excellent thermal stability up to 300°C and a low humidity uptake, which allow the product to maintain its bonding properties in a large scale of temperature/humidity conditions.

Its fineness makes the use of very small internal diameter needles possible.

METHOD OF USE

1. Take the container out of the freezer not more than 20 to 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. The product is perfectly compatible with small internal diameter needles.
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 10700** adhesive excellent properties make it especially suitable for use in the microelectronics fields.

1. PHYSICO-CHEMICAL PROPERTIES

Properties	Methods	Units	Results
Color			Yellow orange
Density at 20°C	NFT 51201 ISO 1675		about 1.1
Shear thinning Index 0.5/5 rpm	NFT 51211		3-4

2. THERMAL PROPERTIES

Properties	Methods	Units	Results
Coefficient of thermal expansion from 30°C to 120°C	TMA 1	ppm/°C	65 -70
Glass transition temperature	TMA 1	°C	145-150
Decomposition temperature in air	TGA 1	°C	about 390
Loss of weight between 25 and 300°C	TGA 1	%	< 0.5

PRECAUTION IN USE

Refer to the attached material safety data sheet

PACKAGING

The **PROTAVIC® ANE 10700** adhesive is supplied in 10 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.

KJF