

DEFINITION

PROTAVIC® ANE 10713 is an insulating mono component adhesive with thermoset resin.

Key properties of **PROTAVIC® ANE 10713** are its high adhesion strength, its very fast cure speed at moderate temperatures, and its long work life.

PROTAVIC® ANE 10713 is RoHS and REACH compliant.

PRODUCT DESCRIPTION

Appearance	Viscous liquid	
Odor	Faint	
Color	Opalescent	
Guaranteed specification	Standard	Method
Cone and plate viscosity (5 rpm at 25°C)	11000 ± 3000 mPa.s	NFT 51211
Other informations – typical values		
Viscosity increase at 20°C after 100 h.	None	
Viscosity increase at 20°C after 50 days	+ 25%	
Density	1.1 (approx)	
Shear thinning index	> 2.5	
Possible curing cycles	10s at 170°C 40s at 150°C 110s at 130°C	
Weight losses during cure	< 0.1%	
Storage stability in syringes	<ul style="list-style-type: none"> ▪ 6 months at +5 °C ▪ 1 year at -20°C 	

APPLICATION PROPERTIES

PROTAVIC® ANE 10713 viscosity remains unmodified throughout 5 days at room temperature.

PROTAVIC® ANE 10713 viscosity is specially designed for easy dispensing with standard application equipments.

INSTRUCTIONS OF USE

- Do not store syringes at temperature below -20°C.
- Do not put syringes in contact with dry-ice
- Manipulate freeze syringes with insulating gloves (do not handle freeze syringes with bare hands).

1- Process of PROTAVIC® ANE 10713 storage.

- Store the syringes in fridge (<+5°C) in less than 1 hour after release from container.

2- Thawing process of PROTAVIC® ANE 10713 to ambient temperature.

- Thaw syringes at room temperature in vertical position one hour before use (1 hour minimum).

3- Surfaces.

- 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.

FIELDS OF USE

PROTAVIC® ANE 10713 has been designed for the connection of die on lead frames and flexible substrates.

Its low curing temperature enables its use on PET substrates.

PACKAGING

10cc syringes or 5cc syringes.

PHYSICO-CHEMICAL PROPERTIES OF CURED MATERIAL (TYPICAL VALUES) -

PROPERTIES	METHODS	RESULTS	UNITS
Die shear strength at <u>Room Temperature</u>	3.5 x 3.5 mm ² Si die Cure = 150°C 40s Tested substrates = ① Ag plated Cu Lead Frame ② PET	220 200	Kg/cm ²
Glass transition temperature	TMA	110°C	
CTE	TMA	95 (below Tg) 140 (above Tg)	ppm/K
Hardness	Shore D	86	
Weight losses at 250°C at 300°C at 350°C	TGA 20°C/mn	<0.6% <2% <6%	
Young Modulus	Cure 150°C 40s DMA 1Hz	6.0 (at 25°C) 2.5 (at 100°C) 1.0 (at 150°C) 0.3 (at 250°C)	GPa

PRECAUTION IN USE

Refer to the attached material safety data sheet.

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