



PROTAVIC® PNE 44822-A PROTAVIC® PNE 44822-B

Formerly PROTAVIC® BHT NE 44822

A 016584-08-08 A
6-28042 - 6-29898

DEFINITION

The **PROTAVIC® PNE 44822-A** & **PROTAVIC® PNE 44822-B** is a two-component system, solvent free, electrically insulating epoxy adhesive, which is specially designed for protecting the devices from

heat, humidity and mechanical damages. The **PROTAVIC® PNE 44822-A** & **PROTAVIC® PNE 44822-B** is recommended as Set-Top Box (STB) makers to prevent chip detaching.

PRODUCT DESCRIPTION

- PROTAVIC® PNE 44822-A

Nature	silica filled epoxy resin	
Appearance	viscous liquid	
Odour	slight	
Colour	white	
Guaranteed specifications	Standards	Methods
Residue at 900°C (%)	38 ± 2	TGA 1
Cone and plate viscosity at 25°C (mPa.s)	28 000 ± 4 000	NFT 51211

- PROTAVIC® PNE 44822-B

Nature	silica filled amine resin	
Appearance	viscous liquid	
Odour	amine like	
Colour	white	
Guaranteed specifications	Standards	Methods
Residue at 900°C (%)	65 ± 2	TGA 1
Cone and plate viscosity at 25°C (mPa.s)	26 000 ± 4 000	NFT 51211

- PROTAVIC® PNE 44822-A and PROTAVIC® PNE 44822-B

Significant values on mix product					
Appearance	viscous liquid				
Odour	slight amine like				
Colour	white				
Density of mixed product	1.6 approximately				
Plate cone viscosity at 25°C (mPa.s)	27 000 approx.				
Thixotropic index	> 3				
Residue at 900°C (%)	44 approx.				
Peak temperature by DSC (10°C/min)	100°C approx.				
Curing schedules	120 minutes at 65°C 2 - 7 days at 25°C				
Mix ratio by weight	<table> <tr> <td>PROTAVIC® PNE 44822-A</td><td>3.35</td></tr> <tr> <td>PROTAVIC® PNE 44822-B</td><td>1</td></tr> </table>	PROTAVIC® PNE 44822-A	3.35	PROTAVIC® PNE 44822-B	1
PROTAVIC® PNE 44822-A	3.35				
PROTAVIC® PNE 44822-B	1				
Mix ratio by volume	<table> <tr> <td>PROTAVIC® PNE 44822-A</td><td>4</td></tr> <tr> <td>PROTAVIC® PNE 44822-B</td><td>1</td></tr> </table>	PROTAVIC® PNE 44822-A	4	PROTAVIC® PNE 44822-B	1
PROTAVIC® PNE 44822-A	4				
PROTAVIC® PNE 44822-B	1				
Storage of each component	6 months at < +10°C 3 months at 20°C				
Pot life* after mixing part A + B (20 ± 2°C)	20 - 30 minutes				

* : Pot life defined as time corresponding to a 100% increase of viscosity at 20°C.

APPLICATION PROPERTIES

The rheology and twin-tube package with mixer nozzle make the **PROTAVIC® PNE 44822-A** & **PROTAVIC® PNE 44822-B** easy to mix and apply in one step.

The high ionic purity of the **PROTAVIC® PNE 44822-A** & **PROTAVIC® PNE 44822-B** also avoids problems of corrosion, which would otherwise reduce the working life of the system.

CONDITIONS OF USE

Degrease very carefully substrates or components before bonding with non chlorinated solvents (which may encourage corrosion) and finish, if possible by degreasing in a solvent vapour at the end, to achieve optimal adhesion.

Typical curing schedule is 120 minutes at 65°C or 7 days at 25°C.

TYPICAL PROPERTIES OF POLYMERIZED SYSTEM

The properties given below and summarised in the following tables were obtained after polymerisation for 120 minutes at 65°C in a ventilated oven.

These values given are typical and do not correspond to a guarantee. The user must, in all cases, by his own studies, determine the optimal polymerisation conditions for his own particular application of the **PROTAVIC® PNE 44822-A** & **PROTAVIC® PNE 44822-B**.

1) PHYSICO-CHEMICAL PROPERTIES

PROPERTIES	METHODS	UNITS	VALUES
Density	NFT 51063	None	1.6 approx.
Shore D hardness	NFT 51109	None	90 - 95
Lap shear strength at 20°C	NFT 76107	MPa DaN/cm ²	> to 5.0 > to 50

2) THERMAL PROPERTIES

PROPERTIES	METHODS	UNITS	VALUES
Coefficient of thermal expansion (from -20°C to 90°C)	TMA 1	ppm/°C	50-60
Coefficient of thermal expansion (110 - 250°C)	TMA 1	ppm/°C	150-160
Glass transition temperature	TMA 1	°C	100°C
Decomposition temperature	TGA 1	°C	About 350
Weight loss at 250°C	TGA 1	%	0.5%

STORAGE CONDITIONS

Store **PROTAVIC® PNE 44822-A & PROTAVIC® PNE 44822-B** in its syringe at temperature < + 10°C.

Under these conditions, the maximum period of storage is about 6 months.

PRECAUTIONS IN USE

Refer to the enclosed safety data sheet.

PACKAGING

The **PROTAVIC® PNE 44822-A & PROTAVIC® PNE 44822-B** are supplied in twin-tube syringes with mixer nozzle.

55 g twin-tube syringes :

PROTAVIC® PNE 44822 TS 55 (6-28047-706).

220 g twin-tube syringes :

PROTAVIC® PNE 44822 TS 220 (6-28047-707).

440 g twin-tube syringes :

PROTAVIC® PNE 44822 TS 440 (6-28047-708).

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.