



PROTAVIC[®] PNE 40824-A PROTAVIC[®] PNE 40824-B

28124-08-A
28122-A
28123-B

DEFINITION

The **PROTAVIC[®] PNE 40824-A** and **PROTAVIC[®] PNE 40824-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 40824-A** and **PROTAVIC[®] PNE 40824-B** is recommended as Set-Top Box (STB) makers to prevent chip detaching.

Used alone, the **PROTAVIC[®] PNE 40824-A** and **PROTAVIC[®] PNE 40824-B** exhibits excellent mechanical properties up to 300°C.

It also may be used in combination with **epoxy or fiberglass covers** in order to obtain an almost indestructible protective layer.

PRODUCT DESCRIPTION

PROTAVIC[®] PNE 40824 part A

Nature	silica filled epoxy resin	
Appearance	viscous liquid	
Odour	slight	
Colour	white	
Significant value	Result	Method
Cone and plate viscosity (mPa.s)	about 25 000	NFT 51211

PROTAVIC[®] PNE 40824 part B

Nature	silica filled epoxy resin	
Appearance	viscous liquid	
Odour	amine like	
Colour	white	
Significant value	Result	Method
Cone and plate viscosity (mPa.s)	about 13 000	NFT 51211

PROTAVIC[®] PNE 40824-A and PROTAVIC[®] PNE 40824-B mixed product

Guaranteed specifications on mixed product	Standard	Method
Reactivity at 65°C	20 ± 10 minutes	DSC 1
Significant values on mixed product		
Appearance	viscous liquid	
Odour	slight amine like	
Colour	white	
Density of mixed product	1.15 approximately	
Peak temperature by DSC (10°C/min)	110°C approx.	
Curing schedules	20 minutes at 65°C 2 – 7 days at > 25°C	
Mix ratio by volume	PROTAVIC [®] PNE 40824-A	2
	PROTAVIC [®] PNE 40824-B	1
Mix ratio by weight	PROTAVIC [®] PNE 40824-A	2.43
	PROTAVIC [®] PNE 40824-B	1
Storage of each component	6 months at T < +25°C	
Shelf life at room temperature	One year in original unopened containers	

- : pot life defined as time corresponding to 100% increase viscosity at 20°C

APPLICATION PROPERTIES

The rheology and twin-tube package with mixer nozzle make the **PROTAVIC® PNE 40824-A** and **PROTAVIC® PNE 40824-B** easy to mix and apply in one step.

The high ionic purity of the **P PROTAVIC® PNE 40824-A** and **PROTAVIC® PNE 40824-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 20 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 20 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 40824-A** and **PROTAVIC® PNE 40824-B**.

1) PHYSICO-CHEMICAL PROPERTIES

PROPERTIES	METHODS	UNITS	VALUES
Density	NFT 51063	none	1.15 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 (-20 - +90°C)	TMA 1	ppm/°C	70-80
Coefficient of thermal expansion (110 – 250°C)	TMA 1	ppm/°C	150-160
Glass transition temperature	TMA 1	°C	120°C
Decomposition temperature	TGA 1	°C	About 350
Weight loss at 300°C	TGA 1	%	<1 %

STORAGE CONDITIONS

Store **PROTAVIC® PNE 40824-A** and **PROTAVIC® PNE 40824-B** in its syringe at room temperature (T< +25°C).

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

In cold conditions (below 20°C), the **PROTAVIC® PNE 40824-A** and **PROTAVIC® PNE 40824-B** may develop a higher viscosity. In this case, allow the product to come back to its initial fluidity by standing at 20 - 25°C for about 1 hour.

PRECAUTIONS OF USE

Refer to enclosed safety data sheet.

PACKAGING

The **PROTAVIC® PNE 40824-A** and **PROTAVIC® PNE 40824-B** is supplied in 60 gr twin-tube syringes with mixer nozzle.

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.