



PROTAVIC[®] BNE 20210

28180-08-A

DEFINITION

The **PROTAVIC[®] BNE 20210** is a die attach adhesive, electrically insulating, carbon loaded, B-stageable epoxy adhesive.

Main features :

- Designed for screen printing application (wafer backside coating).
- Very good latency of paste at room temperature.
- Very good latency of B-staged products.
- Fast final curing.

PRODUCT DESCRIPTION

Appearance	paste	
Colour	black	
Significant value	Result	Method
Cone and plate viscosity (5 rpm – 25°C) (mPas)	27000 ± 3000	NFT 51211
Other informations		
Pot life at 20 ± 2°C	1 month	No increase in viscosity
Density	0.9	
Thixotropic index	1	Viscosity at 0.5 / Viscosity at 5 rpm

INSTRUCTIONS OF USE

Before use, **PROTAVIC[®] BNE 20210** has to be homogenized by stirring slowly with a spatula in its original container, or by rolling the container for 2 hours at a slow speed (50 to 150 rpm).

Step 1 : application

- Screen printing application.

Step 2 : B staging

- B staging
90°C 0.5h.
B staging temperature should be in the range 70°C – 110°C.
Solvent removal : use ventilated equipment.
- B staged life : 6 months at room temperature.

Step 3 : die bounding

- Die attach
Temperature : from 100°C to 110°C.
Time : from 1s to 10s.
Applied strength : 100N/cm².
- Typical B staged die shear stress 150 N/cm².

Step 4 : curing

- Curing : 180°C 30 mn.

APPLICATION PROPERTIES

PROPERTIES	METHODS	TYPICAL VALUES
Coefficient of thermal expansion	TMA 1	49 ppm/K below Tg 236 ppm/K above Tg
Glass transition temperature	TMA 1	65°C
Hardness Shore D	NFT 51109	80
Die shear stress at 25°C	4mm ² Silicon dies on Ag plated Cu frame	300 daN/cm ²

Values in this table are typical and do not constitute a specification. User has to adjust process conditions for its own particular application of the **PROTAVIC® BNE 20210**.

STORAGE

In its hermetically sealed container, protected at temperature below 0°C.

Its is necessary to store the product in its original sealed container in order to avoid the loss of solvent by evaporation.

PRECAUTION OF USE

Refer to the attached material safety data sheet

PACKAGING

The **PROTAVIC® BNE 20210** is supplied in 500 g plastic pots.

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.