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PROTAVIC[®] PNS 20100

6-29904

DEFINITION

PROTAVIC[®] PNS 20100 is a low viscosity, optically clear silicon resin designed for LED potting, encapsulation and sealing. **PROTAVIC[®] PNS 20100** presents great heat resistance and non-yellowing.

Its specific reactivity combines both latency at room temperature and fast curing cycle.

PRODUCT DESCRIPTION

Appearance	Clear liquid	
Odor	Characteristic	
Color	Colorless	
Guaranteed specifications	Standards	Method
Viscosity CP 51 at 25°C and 250 rpm	450 ± 50 mPa.s	NFT 51211
Gardner color	<1	
Other information		
Work life	> 5 days	
Density	1.0 approx	
Refractive index (liquid state)	1.41	
Dry matter	100%	
Possible curing cycles	- 30 minutes at 150°C	
Storage stability	- 1 year at T<-20°C	

APPLICATION PROPERTIES

The low viscosity of **PROTAVIC[®] PNS 20100** improves the filling and the wetting of cavity, and prevents from bubbles entrapping. Its good latency enables it to be kept at 20±2°C for 5 days with a little increase of viscosity, so the viscosity remains virtually unchanged throughout the working day. The long pot life and the absence of solvent ensure that the product remains at a reasonably constant viscosity and facilitate application.

METHOD OF USE

- 1) Take the package out of the freezer not more than 1 hour 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 (by dispensing)
- 4) Cure using one of the curing cycles compatible with the components, the substrate and the manufacturing conditions.

FIELDS OF USE

PROTAVIC® PNS 20100 shows excellent heat, moisture and UV resistance, and also non-yellowing at high temperature (up to 300°C) that make it especially suitable for LED potting. **PROTAVIC® PNS 20100** remains optically clear after several hours at 250-260°C.

The softness of **PROTAVIC® PNS 20100** affords good reliability against thermal cycling, and protects the chip and the bonding wires.

Properties	Methods	Results
SHORE A hardness	NFT 51109	25 A
Weight by loss TGA At 200°C At 300°C	TGA 1	0.25 % 0.50%
Thermal decomposition by TGA	TGA 1	> 400°C

STORAGE CONDITIONS

It is recommended to store **PROTAVIC® PNS 20100** in its hermetically sealed container, protected from moisture, at temperature below -20°C. Under these conditions, the maximum period of storage is about 1 year.

PRECAUTION IN USE

Refer to the attached material safety data sheet.

PACKAGING

PROTAVIC® PNS 20100 is delivered 25 g syringes and 350 g cartridges.

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.