PNS-26100

DEFINITION

PNS-26100 is a low viscosity, optically clear silicone encapsulant designed for LED potting and sealing. PNS-26100 has also been used in bonding, sealing of completed circuit boards, hybrid circuits, and power supplies, where flexibility, reparability, and high temperature resistance are required. PNS-26100 has been enhanced for adhesion to ferrite.

PRODUCT DESCRIPTION

Appearance	Clear liquid
Odor	Faint
Color	clear

Property	Result	Methods
Viscosity	400 mPa·s	Brookfield HBT Spindle 14, 10rpm @ 25°C

Other information	
Pot life time @ 25± 2ºC	see note under storage below
Specific gravity @ 20ºC (g/cm³)	0 .98
Possible curing cycles (70F)	• 30 minutes at 120C, or 2 hours at 100C. Faster cure at higher temperatures
Mix Ratio:	One part
Shelf Life	One year at 0-10C 6 + months at 25c

APPLICATION PROPERTIES

- Since **PNS-26100** has very good adhesion to most common circuit board materials, it does not require the use of primers, buffers, conformal coatings, or silicone gels that are needed for most applications.

- **PNS-26100** provides long-term circuit protection from about – 65°C to 150°C.

APPLICATION RECOMMENDATIONS

- **PNS-26100** is designed to be applied by convenient one part cartridges.

TYPICAL PROPERTIES OF CURED PNS-26100™

The properties listed below were determined from measurements carried out in a limited number of tests. These properties are given as guidance, and do not constitute a guarantee. It will be for the user, in all cases, to carry out their own tests to determine whether **PNS-26100** is suitable for the user's particular application.

Property	**Result**	**Methods**
Shrinkage on Cure	<1%	
Shore A Hardness	30	ASTM D2240
Thermal Conductivity	>0.15 W/M/K approx.	
Glass Transition Temperature	Tg 1: -64°C Tg 2: -48°C	TGA1
Weight Loss, (1 week at 150°C)	0.25%	
(Saturated) Steam Resistance, (72 hours, 15 psi steam, %weight gain)	1%	
Thermal decomposition by TGA	>400°C	TGA 1
Coefficient of Thermal Expansion	55 x 10^{-4}/°C	TMA1

Property	**Result**	**Methods**
Volume Resistivity • 100 V • 500 V • 1000 V	 2.5 x 10^{15} Ω-cm 1.9 x 10^{15} Ω-cm 1.4 x 10^{15} Ω-cm	ASTM D257
Dielectric Constant/Dissipation Factor • 120 Hz • 1000 Hz	 4.7/0.0085 4.8/0.0085	ASTM D150
Dielectric Strength (1.6 mm thickness)	25 kV/mm	ASTM D149
NASA Out gassing	0.27 %TML 0.13% CVCM 0.00% WVR	ASTM 595

STORAGE AND HANDLING

- Store **PNS-26100** at 0-10C. Short term storage at 25c is possible
- Avoid contact with other materials containing sulfur, tin, nitrogen compounds, including rubber, epoxies, polyurethanes, polysulfides, polyamides, and other silicone RTV's which may inhibit cure.
- Blanket opened containers of **PNS-26100** with dry nitrogen and closed tightly.

PRECAUTIONS IN USE

Refer to the material safety data sheet.

PACKAGING

For specific packaging requirements, please contact Protavic America, Inc.