

# Plaskon SMT-B-1N

Epoxy; Epoxide

Cookson Electronics - Semiconductor Products

## Message:

This material is an epoxy molding compound optimized specifically for PBGA applications with no plasma cleaning required before molding. It has the same unique resin system as the SMT-B-1, which minimizes warpage and enables trouble-free molding onto rigid and flexible laminate substrates. Minimal dimensional change after molding, post bake and subsequent solder treatment make this compound an excellent choice for PBGA and CSP applications.

General Information			
Features	Semi-conductive		
	Good dimensional stability		
	Low warpage		
	Low viscosity		
	Fast curing		
Forms	Liquid		
Processing Method	Resin transfer molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.88	g/cm <sup>3</sup>	ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus			ASTM D790
22°C	1.48	MPa	ASTM D790
215°C	0.804	MPa	ASTM D790
Flexural Strength			ASTM D790
22°C	0.0102	MPa	ASTM D790
215°C	0.00490	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature	224	°C	ASTM E1356
CLTE - Flow	1.6E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.86	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	5.6E+16	ohms · cm	ASTM D257
Dielectric Strength	22	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	3.70		ASTM D150
Dissipation Factor (1 kHz)	3.0E-3		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating (3.18 mm)	V-0		UL 94
Oxygen Index	32	%	ASTM D2863
Additional Information			

Recommended Storage Temperature: <5°C Life @ 5°C, defined as not more than 40% loss of spiral flow based on original values.: 24 months Life @ 21°C, defined as not more than 40% loss of spiral flow based on original values.: 8 days Life @ 35°C, defined as not more than 40% loss of spiral flow based on original values.: 3 days Spiral Flow, 175°C, 1000 psi: 112 cm Automatic Orifice Viscosity, 175°C: 44 poise Ram Follower Gel Time, 175°C, 1000 psi: 11 sec Ash Content: 78 % Hydrolyzable Halides: <1 ppm Moisture Absorption, 85°C/85%RH, 168 hrs: 0.6% Cull Hot Hardness, Shore D: 85 Volume Resistivity, 22°C: 5.6e16 ohm-cm All test specimens are transfer molded and post cured for 4 hours at 175°C  
Linear Thermal Expansion, Alpha 1: 16 cm<sup>-6</sup>/cm/°C  
Linear Thermal Expansion, Alpha 2: 56 cm<sup>-6</sup>/cm/°C

#### Injection instructions

Resin Transfer Molding:

Molding Temperature: 175°C

Molding Pressure: 800 to 1200 psi

Cycle Time, 175°C: 60 to 150 sec

Post Mold Cure Time, 175°C: 0 to 4 hr

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#### Recommended distributors for this material

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