Epiall® 1961B

Epoxy; Epoxide

Vyncolit N.V.

Message:

Epiall 1961B is a mineral and short fiberglass filled epoxy compound, formulated for the encapsulation of passive electronic devices.

General Information	
Filler / Reinforcement	Glass \Mineral
Features	The degassing effect is low to no Low viscosity Solvent resistance Anti-salt water/fog Good thermal shock resistance Good chemical resistance alkali resistance acid resistance Non-corrosive
Uses	Electrical components Military application
Agency Ratings	FDA not rated USDA Unspecified Approval
Appearance	Black Blue Green
Forms	Particles
Processing Method	Resin transfer molding Compression molding Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.90	g/cm³	ASTM D792
Molding Shrinkage - Flow (Compression Molded)	0.20 - 0.40	%	ASTM D955
Hardness	**Nominal Value**	**Unit**	**Test Method**
Barcol Hardness	65		ASTM D2583
Mechanical	**Nominal Value**	**Unit**	**Test Method**

Tensile Strength (Break, Compression Molded)	59.0	MPa	ASTM D638
Flexural Modulus (Compression Molded)	14500	MPa	ASTM D790
Flexural Strength (Break)	124	MPa	ASTM D790
Compressive Strength	221	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (Compression Molded)	35	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed, Compression Molded)	260	°C	ASTM D648
CLTE - Flow	3.8E-5	cm/cm/°C	ASTM E831
Thermal Conductivity	0.67	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength [1]	13	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	3.60		ASTM D150
Dissipation Factor (1 MHz)	0.019		ASTM D150
Arc Resistance	180	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Oxygen Index	34	%	ASTM D2863
Injection	**Nominal Value**	**Unit**	
Middle Temperature	60.0 - 82.2	°C	
Nozzle Temperature	82.2 - 93.3	°C	
Processing (Melt) Temp	104 - 116	°C	
Mold Temperature	135 - 177	°C	
Injection Pressure	34.5 - 68.9	MPa	
Holding Pressure	13.8 - 34.5	MPa	
Back Pressure	0.345	MPa	

Injection instructions

Gauge: 0.3The value listed as Thermal Conductivity, ASTM C177, was tested in accordance with ASTM C518.Water Absorption, ASTM D570, 48 hrs, 50°C: 0.2%DTUL @264psi - Unannealed, ASTM D648, Post Baked, Compression Molded: 260°CDielectric Strength, ASTM D149, 60 Hz, Method B, wet: 12.8 kV/mmDielectric Constant, ASTM D150, 1000000 Hz, wet: 3.6Dissipation Factor, ASTM D150, 1000000 Hz, wet: 0.019Compression and Transfer Molding Conditions:
Preheat Temperature: 180 to 220 °F
Mold Temperature: 250 to 530 °F
Compression Mold Pressure: 200 to 1500 psi
Transfer Mold Pressure: 100 to 2000 psi
Cure Time, 0.125 in: 75 sec

NOTE

1.	Method B (step by step)

Recommended distributors for this material

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