Vyncolit® E 57425

Epoxy; Epoxide

Vyncolit N.V.

Message:

Vyncolit E 57425 is an epoxy; Epoxy resin material contains carbonyl iron powder. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific. The processing methods are: resin transfer molding, compression molding or injection molding.
The main features of Vyncolit E 57425 are:
chemical resistance
low viscosity
Heat resistance
Typical application areas include:
food contact applications
Electrical/electronic applications
military applications

General Information	
Filler / Reinforcement	Carbonyl iron dust
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
Forms	Particles
Processing Method	Resin transfer molding Compression molding Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	3.20	g/cm³	ASTM D792
Bulk Factor	2.3		ASTM D1895
Molding Shrinkage - Flow (Transfer Molded)	0.30 - 0.50	%	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	20.7	MPa	ASTM D638
Flexural Modulus	11000	MPa	ASTM D790
Flexural Strength	65.5	MPa	ASTM D790
Compressive Strength	197	MPa	ASTM D695
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	21	J/m	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	232	°C	ASTM D648
CLTE - Flow	3.4E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	1.1	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength [1]	9.8	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	10.6		ASTM D150
Dissipation Factor (1 MHz)	0.025		ASTM D150
Arc Resistance	10.0	sec	ASTM D495
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 F433.Water Absorption, ASTM D570, 48 hrs, 50°C: 0.2%Dielectric Strength, ASTM D149, 60 Hz, Method B, dry: 250 V/milDielectric Constant, ASTM D150, 1000000 Hz, dry: 10.6Dissipation Factor, ASTM D150, 1000000 Hz, dry: 0.025Bulk Factor, ASTM D1895: 2 to 2.5Compression 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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