Vyncolit® 2950W

Phenolic

Vyncolit N.V.

Message:

Vyncolit 2950W is a mineral and glass fiber filled phenolic molding compound with a very high strain to failure in flexure.

General Information	
Filler / Reinforcement	Glass \Mineral
Appearance	Black
Forms	Particle
Processing Method	Resin transfer molding Compression molding Injection molding

Physical	Nominal Value	Unit	Test Method
Density	1.70	g/cm³	ISO 1183
Molding Shrinkage - Flow	0.15 - 0.25	%	ISO 294-4
Water Absorption (23°C, 24 hr)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (Injection Molded)	10500	MPa	ISO 527-2
Tensile Stress (Break, Injection Molded)	70.0	MPa	ISO 527-2
Tensile Strain (Break, Injection Molded)	1.1	%	ISO 527-2
Flexural Modulus (Injection Molded)	8250	MPa	ISO 178
Flexural Stress (Injection Molded)	150	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (Injection Molded)	5.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength	14	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
1.8 MPa, not annealed	180	°C	ISO 75-2/A
8.0 MPa, not annealed	160	°C	ISO 75-2/C
Linear thermal expansion coefficient			ASTM E831
Flow	2.5E-5	cm/cm/°C	ASTM E831
Lateral	3.5E-5	cm/cm/°C	ASTM E831
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength	35	kV/mm	IEC 60243-1
Comparative Tracking Index	175	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94

1.60 mm	HB	UL 94
4.00 mm	V-0	UL 94

Injection	Nominal Value	Unit
Rear Temperature	60.0	°C
Middle Temperature	73.9	°C
Nozzle Temperature	87.8	°C
Processing (Melt) Temp	98.9 - 116	°C
Mold Temperature	166 - 188	°C
Injection Pressure	100 - 248	MPa
Holding Pressure	30.0 - 89.6	MPa
Back Pressure	4.83 - 15.2	MPa

Injection instructions

Plastication: 50rpmInjection Time: 2 to 8 secHold Time: 1 to 5 sec/mmCure Time, 0.125 in: 5 to 12 sec/mmAll ISO properties listed were tested in accordance with ISO 3167The value listed as Molding Shrinkage, ISO 294-4, was tested in accordance with ISO 2577.ISO Type: PF 2 C3Powder Density, ISO 60: 0.6 to 0.75 g/cm^{3}Post Shrinkage, ISO 2577: 0.1 to 0.2%HDT A (1.80 MPa) Unannealed, ISO 75A, Injection Molding: 170 to 190°CHDT A (8.0 MPa) Unannealed, ISO 75A, Injection Molding: 150 to 170°CCLTE, Flow (TMA), ASTM E831, Injection Molding: 20 to 30 cm^-6/cm°CCLTE, Transverse (TMA), ASTM E831, Injection Molding: 30 to 40 cm^-6/cm°CFlexural Strength, ISO 178, Injection Molding: 140 to 160 MPaFlexural Modulus, ISO 178, Injection Molding: 7.5 to 9 GPaStrain to failure in Flexure, ISO 178, Injection Molding: 1.6 to 1.8%Tensile Stress at Break, ISO 527-1,-2, Injection Molding: 65 to 75 MPaTensile Modulus, ISO 527-1,-2, Injection Molding: 9.5 to 11.5 GPaTensile Strain at Break, ISO 527-1,-2, Injection Molding: 1.05 to 1.15%Charpy Notched Impact Strength, ISO 179, Injection Molding: 4.5 to 5.5 kJ/m^{2}Charpy Unnotched Impact Strength, ISO 179, Injection Molding: 13 to 15 kJ/m^{2}Compressive Strength, ISO 604: 190 to 220 MPaInsulation Resistance dry, IEC 167: 1e10 to 1e12 ohm

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China