

Vyncolit® G865

Phenolic

Vyncolit N.V.

Message:

Vyncolit G865 is a glass fiber filled phenolic molding compound with high mechanical and good thermal properties.

General Information			
Filler / Reinforcement	Glass fiber reinforced material		
Appearance	Black		
Forms	Particle		
Processing Method	Resin transfer molding		
	Compression molding		
	Injection molding		

Physical	Nominal Value	Unit	Test Method
Density	1.88	g/cm ³	ISO 1183
Molding Shrinkage - Flow	0.10 - 0.20	%	ISO 294-4
Water Absorption (23°C, 24 hr)	0.10	%	ISO 62

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (Injection Molded)	21000	MPa	ISO 527-2
Tensile Stress (Break, Injection Molded)	60.0	MPa	ISO 527-2
Tensile Strain (Break, Injection Molded)	0.45	%	ISO 527-2
Flexural Modulus (Injection Molded)	17500	MPa	ISO 178
Flexural Stress (Injection Molded)	150	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (Injection Molded)	4.5	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	10	kJ/m ²	ISO 179

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
1.8 MPa, not annealed	210	°C	ISO 75-2/A
8.0 MPa, not annealed	190	°C	ISO 75-2/C
Linear thermal expansion coefficient			ASTM E831
Flow	2.5E-5	cm/cm/°C	ASTM E831
Lateral	3.0E-5	cm/cm/°C	ASTM E831

Electrical	Nominal Value	Unit	Test Method
Dielectric Strength	25	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	V-0	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: 50rpm Injection Time: 2 to 8 sec Hold Time: 1 to 5 sec/mm Cure Time, 0.125 in: 5 to 12 sec/mm All ISO properties listed were tested in accordance with ISO 3167 The value listed as Molding Shrinkage, ISO 294-4, was tested in accordance with ISO 2577. ISO Type: PF 2 C3 Powder Density, ISO 60: 0.65 to 0.85 g/cm³ Post Shrinkage, ISO 2577: 0.05 to 0.15% HDT A (1.80 MPa) Unannealed, ISO 75A, Injection Molding: 200 to 220°C HDT A (8.0 MPa) Unannealed, ISO 75A, Injection Molding: 180 to 200°C CCLTE, Flow (TMA), ASTM E831, Injection Molding: 20 to 30 cm⁻⁶/cm°C CCLTE, Transverse (TMA), ASTM E831, Injection Molding: 25 to 35 cm⁻⁶/cm°C Flexural Strength, ISO 178, Injection Molding: 140 to 160 MPa Flexural Modulus, ISO 178, Injection Molding: 16.5 to 18.5 GPa Strain to failure in Flexure, ISO 178, Injection Molding: 0.9 to 1% Tensile Stress at Break, ISO 527-1,-2, Injection Molding: 50 to 70 MPa Tensile Modulus, ISO 527-1,-2, Injection Molding: 20 to 22 GPa Tensile Strain at Break, ISO 527-1,-2, Injection Molding: 0.4 to 0.5% Charpy Notched Impact Strength, ISO 179, Injection Molding: 3.5 to 5.5 kJ/m² Charpy Unnotched Impact Strength, ISO 179, Injection Molding: 9 to 11 kJ/m² Compressive Strength, ISO 604: 190 to 220 MPa

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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



WECHAT