Enester® EM-180-GR9-J1-000

Ravago Manufacturing Europe - Polybutylene Terephthalate

General Information

Product Description

50% Glass Fibre Reinforced, Polybutylene Terephthalate Compound

Key Features: ENESTER EM-180-GR9-J1-000 is heat stabilized and lubricated PBT compound with good strength and stiffness properties

Process Method: Injection moulding

Uses: Recommended for general applications and purposes

General			
Material Status	• Commercial: Active		
Availability	• Europe		
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• General Purpose • Good Stiffness	• Good Strength • Heat Stabilized	• Lubricated
Uses	• General Purpose		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.70	g/cm³	ISO 1183/A
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	15300	MPa	ISO 527-1
Tensile Stress (Break)	160	MPa	ISO 527-2
Tensile Strain (Break)	1.8	%	ISO 527-2
Flexural Modulus	13800	MPa	ISO 178
Flexural Stress	220	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	12	kJ/m²	ISO 179/1A
Charpy Unnotched Impact Strength	43	kJ/m²	ISO 179/1U
Notched Izod Impact Strength (23°C)	11	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength	40	kJ/m²	ISO 180/1U
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	210	°C	
Vicat Softening Temperature			
--	215	°C	ISO 306/B50
--	220	°C	ISO 306/A120
Electrical	**Nominal Value**	**Unit**	**Test Method**
Comparative Tracking Index	> 450	V	IEC 60112

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.8 mm	HB		
1.6 mm	HB		
3.2 mm	HB		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	110 to 130	°C
Drying Time	2.0 to 4.0	hr
Rear Temperature	230 to 245	°C
Middle Temperature	235 to 250	°C
Front Temperature	240 to 260	°C
Nozzle Temperature	240 to 260	°C
Mold Temperature	50 to 90	°C

Notes

[1] Typical properties: these are not to be construed as specifications.