

LEMALLOY™ BX503A-1

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PA 6

General Information

Product Description

Filler-reinforced PPE/PA6 alloy; Rigidity, High

General

Filler / Reinforcement	• Filler
Features	• High Rigidity
Uses	• Automotive Applications • Automotive Electronics • Electrical/Electronic Applications • General Purpose

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.19	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)				ISO 1133
280°C/5.0 kg	40	--	cm ³ /10min	
Molding Shrinkage				Internal Method
Across Flow : 3.20 mm	0.90 to 1.1	--	%	
Flow : 3.20 mm	1.0 to 1.2	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3100	1700	MPa	ISO 527-1/1
Tensile Stress (Yield)	65.0	46.0	MPa	ISO 527-2/5
Tensile Strain				ISO 527-2/5
Yield	4.5	9.0	%	
Break	29	60	%	
Flexural Modulus ²	2900	1800	MPa	ISO 178
Flexural Stress ²	100	68.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
23°C	9.0	14	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	170	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	120	--	°C	ISO 75-2/A

Additional Information

Conditioned Conditioned to 50% RH

Processing Information

Injection	Dry Unit
Drying Temperature - Hot Air Dryer	110 to 120 °C
Drying Time - Hot Air Dryer	2.0 to 4.0 hr
Rear Temperature	250 to 290 °C

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Injection	Dry	Unit
Middle Temperature	260 to 300	°C
Front Temperature	260 to 300	°C
Nozzle Temperature	260 to 300	°C
Mold Temperature	70 to 110	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm

Notes

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

² 2.0 mm/min

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