

LEMALLOY™ BX505

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PA 6

General Information

Product Description

Un-reinforced PPE/PA6 alloy; Standard

General

Uses

- Automotive Applications
- Automotive Electronics
- Electrical/Electronic Applications
- General Purpose

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.09	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)				ISO 1133
280°C/5.0 kg	14	--	cm ³ /10min	
Molding Shrinkage				Internal Method
Across Flow : 3.20 mm	1.1 to 1.3	--	%	
Flow : 3.20 mm	1.2 to 1.4	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2200	1200	MPa	ISO 527-1/1
Tensile Stress (Yield)	54.0	38.0	MPa	ISO 527-2/50
Tensile Strain				ISO 527-2/50
Yield	4.2	19	%	
Break	41	120	%	
Flexural Modulus ²	2000	1200	MPa	ISO 178
Flexural Stress ²	80.0	47.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
23°C	22	88	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	155	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	70.0	--	°C	ISO 75-2/A
CLTE - Flow	9.0E-5	--	cm/cm/°C	ISO 11359-2

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	240 to 270	°C
Middle Temperature	250 to 290	°C



LEMALLOY™ BX505

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PA 6

Injection	Dry	Unit
Front Temperature	250 to 290	°C
Nozzle Temperature	250 to 290	°C
Mold Temperature	60 to 100	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm

