EPIMIX PBT NC 10

Polybutylene Terephthalate

EPSAN

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Technical Data

Product Description

EPIMIX PBT, heat stabilized and lubricated for injection moulding.

EPIMIX PBT is used in all sectors of industry, has and excellent surface finish, low warpage and all around excellent mechanical properties.

This material is available in natural and colours on request.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Heat Stabilizer	• Lubricant	
Features	• Heat Stabilized • Low Warpage	• Lubricated • Outstanding Surface Finish	
Appearance	• Colors Available	• Natural Color	
Processing Method	• Injection Molding		
Resin ID	• PBT UNFILLED		

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.31	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/5.0 kg)	28	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow : 2.00 mm	2.0	%	
Flow : 2.00 mm	1.8	%	
Water Absorption			ISO 62
Saturation, 23°C	0.50	%	
Equilibrium, 23°C, 50% RH	0.25	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2900	MPa	ISO 527-1/1
Tensile Stress (Break, 23°C)	60.0	MPa	ISO 527-2/50
Tensile Strain (Break, 23°C)	> 50	%	ISO 527-2/50
Flexural Modulus [2] (23°C)	2500	MPa	ISO 178
Flexural Stress [2] (23°C)	85.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	8.0	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179/1eU
Notched Izod Impact Strength (23°C)	8.0	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength (23°C)	No Break		ISO 180/1U

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	160	°C	ISO 75-2/B
1.8 MPa, Unannealed	60.0	°C	ISO 75-2/A
Melting Temperature [3]	225	°C	ISO 11357-3

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	ASTM D257
Comparative Tracking Index (Solution A)	600	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94 IEC 60695-11-10, -20

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	120 to 140	°C
Drying Time	2.0 to 4.0	hr

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Injection	Nominal Value	Unit
Suggested Max Moisture	0.10	%
Rear Temperature	230 to 240	°C
Middle Temperature	235 to 250	°C
Front Temperature	235 to 250	°C
Nozzle Temperature	240 to 260	°C
Processing (Melt) Temp	220 to 270	°C
Mold Temperature [4]	> 80	°C
Injection Pressure	70.0 to 100	MPa
Holding Pressure	80.0	MPa

Notes

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

[2] 2.0 mm/min

[3] 10°K/min

[4] For different grades values of 90-110°C are preferred.

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Where to Buy

Supplier

EPSAN
Bursa, Bursa Turkey
Telephone: +90-224-261-2020
Web: https://epsan.com/

Distributor

Omya Specialty Materials Inc.
Telephone: Customer Service: (800) 937-3877; Sales & Product Management: +1-470-677-8945
Web: https://specialty-materials-us.omya.com/
Availability: North America

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