

Lotte Chemical Corporation - Methyl Methacrylate / ABS

Wednesday, March 9, 2022

	General Information					
General						
Material Status	Commercial: Active					
Availability	Africa & Middle EastAsia Pacific	EuropeLatin America	North America			

ASTM & ISO Properties 1			
Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.10	g/cm³	ASTM D792
Density (Natural)	1.10	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	14	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	14	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	37.3	MPa	ASTM D638
Tensile Stress (Yield)	36.0	MPa	ISO 527-2/50
Flexural Modulus ³	1600	MPa	ISO 178
Flexural Stress ³	58.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ⁴ (23°C)	14	kJ/m²	ISO 179/1eA
Notched Izod Impact (23°C, 3.18 mm)	180	J/m	ASTM D256
Notched Izod Impact Strength ⁴ (23°C)	14	kJ/m²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	102		ASTM D785
Rockwell Hardness (R-Scale)	102		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
0.45 MPa, Unannealed, 4.00 mm	81.0	°C	
Deflection Temperature Under Load	VIIOAL		ISO 75-2/B
0.45 MPa, Annealed, 4.00 mm	85.0	°C	
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed, 4.00 mm	70.0	°C	
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Annealed, 4.00 mm	79.0	°C	
Vicat Softening Temperature			
	88.0	°C	ISO 306/B120
	• 87.0 • 86.0	°C	ISO 306/B50

Processing Information		
Injection	Nominal Value Unit	
Drying Temperature		
Desiccant Dryer	80 °C	
Hot Air Dryer	80 °C	



Starex TX-0530T

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Injection	Nominal Value Unit
Drying Time	
Desiccant Dryer	2.0 to 4.0 hr
Hot Air Dryer	4.0 to 6.0 hr
Suggested Max Moisture	< 0.050 %
Rear Temperature	180 to 190 °C
Middle Temperature	200 to 210 °C
Front Temperature	220 to 230 °C
Nozzle Temperature	230 °C
Mold Temperature	50 to 70 °C
Injection Pressure	49.0 to 196 MPa
Back Pressure	0.490 to 1.96 MPa
Screw Speed	50 to 150 rpm

Hot Runner Temperature: 220°C

Notes

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

² 5.0 mm/min

³ 2.0 mm/min

⁴ 4mm



