



Celanex® 1401A

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex 1401A is a high flow general purpose polybutylene terephthalate with a good balance of mechanical properties and processability

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• Good Processability	• High Flow
Uses	• General Purpose		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	54	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.6	%	
Flow	1.7	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	367000	psi	ISO 527-2/1A
Tensile Stress (Yield)	8410	psi	ISO 527-2/1A/50
Nominal Tensile Strain at Break	25	%	ISO 527-2/1A/50
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.4	ft-lb/in ²	
73°F	1.5	ft-lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	80		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	262	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	131	°F	ISO 75-2/A
Melting Temperature (DSC) ²	435	°F	ISO 3146

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248 to 266	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	68 to 122	°F
Rear Temperature	446 to 464	°F
Middle Temperature	455 to 482	°F
Front Temperature	455 to 482	°F
Processing (Melt) Temp	455 to 500	°F
Mold Temperature	149 to 199	°F
Injection Rate	Moderate-Fast	

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Injection	Nominal Value	Unit
Back Pressure	50.8	psi

Injection Notes

Feed Temperature: 230 to 240°C
Zone 4 Temperature: 240 to 260°C

Notes

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

² 10°C/min