



Celanex® MT2008

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

General Information

Product Description

Celanex MT2008 Natural is an unreinforced, low molecular weight PBT for melt blown applications that complies with the requirements of CFR 21 177.1660 of the Food and Drug Administration (FDA) and is listed in the Drug Master File (DMF) 10047 (US) / 10033 (EU) and the Device Master File (MAF) 443 (US) / 1078 (EU). MT2008 also complies with the corresponding EU and national registry regulatory requirements. 2401 MT has displayed excellent biocompatibility in tests corresponding to USP 23 class VI. Celanex MT2008 contains no animal derived materials.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Biocompatible	• Low Molecular Weight	• No Animal Derived Components
Uses	• Meltblown Nonwovens		
Agency Ratings	• DMF 10033 • DMF 10047	• FDA 21 CFR 177.1660 • MAF 1078	• MAF 443 • USP XXIII, Class VI
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Meltblown Nonwovens		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.31	g/cm ³	ISO 1183
Molding Shrinkage - Flow	1.8 to 2.0	%	ISO 294-4
Water Absorption (Saturation, 73°F)	0.080	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break)	8700	psi	ISO 527-2/1A/5
Tensile Strain (Break)	5.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	319000	psi	ISO 178
Flexural Stress (73°F)	11600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	1.5	ft-lb/in ²	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (M-Scale)	72		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	311	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	135	°F	ISO 75-2/A
Glass Transition Temperature ²	140	°F	ISO 11357-2
Melting Temperature ²	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms-cm	IEC 60093
Electric Strength	380	V/mil	IEC 60243-1
Relative Permittivity (1 MHz)	3.20		IEC 60250
Dissipation Factor (1 MHz)	0.020		IEC 60250

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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
Nozzle Temperature	482 to 500	°F
Processing (Melt) Temp	455 to 500	°F
Mold Temperature	149 to 199	°F
Injection Rate	Moderate-Fast	

Injection Notes

Die Temperature: 250 to 260°C
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