Hostaform® MT8U05

Celanese Corporation - Acetal (POM) Copolymer

Sunday, November 3, 2019

General Information

Product Description

Hostaform® MT8U05 is an injection molding grade with a molecular weight for excellent moldability and optimum properties in demanding applications. The material can be identified by UV detectors.

Hostaform® MT8U05 is a special grade developed for medical industry applications and complies with:

- CFR 21 (177.2470) of the Food and Drug Administration (FDA) and is listed in the Drug Master File (DMF 11559) and the Device
- Master File (MAF 1079)
- the corresponding EU and national registry regulatory requirements
- biocompatibility in tests corresponding to USP <88> Class VI/ISO 10993
- low residual monomers
- no animal-derived constituents

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible	• Good Moldability	• No Animal Derived Components
Uses	• Medical/Healthcare Applications		
Agency Ratings	• DMF 11559 • FDA 21 CFR 177.2470	• ISO 10993 • MAF 1079	• USP Class VI
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.00	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	2.0	%	
Water Absorption (Saturation, 73°F)	0.65	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	413000	psi	ISO 527-2/1A
Tensile Stress (Yield)	9280	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	9.0	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	30	%	ISO 527-2/1A/50
Tensile Creep Modulus (1 hr)	363000	psi	ISO 899-1
Tensile Creep Modulus (1000 hr)	189000	psi	ISO 899-1
Flexural Modulus (73°F)	392000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in²	
73°F	3.1	ft·lb/in²	

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Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	100	ft·lb/in²	
73°F, Partial Break	100	ft·lb/in²	

Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	219	°F	ISO 75-2/A
Vicat Softening Temperature	302	°F	ISO 306/B50
Melting Temperature [2]	331	°F	ISO 11357-3
CLTE - Flow	6.1E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	212 to 248	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.15	%
Hopper Temperature	68 to 86	°F
Rear Temperature	338 to 356	°F
Middle Temperature	356 to 374	°F
Front Temperature	374 to 392	°F
Nozzle Temperature	374 to 410	°F
Processing (Melt) Temp	374 to 410	°F
Mold Temperature	176 to 248	°F

Injection Notes

Feeding zone temperature: 60 to 80°C

Zone4 temperature: 190 to 210°C

Hot runner temperature: 190 to 210°C

Notes

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

[2] 10°C/min