

BASF Ultraform N 2320 003 UNC Q600 POM

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Unreinforced

Material Notes:

Ultraform N 2320 003 UNC Q600 is a rapidly solidifying grade of POM for injection molding. Contains a mold release agent.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultraform-N-2320-003-UNC-Q600-POM.php

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 lb/in ³	ISO 1183
Water Absorption	0.80 %	0.80 %	ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C/50% R.H.; ISO 62
Melt Flow	8.8 g/10 min @Load 2.16 kg, Temperature 190 °C	8.8 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	145 MPa	21000 psi	358/30; ISO 2039-1
Tensile Strength	60.0 MPa @Time 864000 sec	8700 psi @Time 240 hour	Hot water storage of tensile bars at 130°C in an autoclave
	61.0 MPa @Time 450000 sec	8850 psi @Time 125 hour	Hot water storage of tensile bars at 130°C in an autoclave
	66.0 MPa @Time 0.000 sec	9570 psi @Time 0.000 hour	Hot water storage of tensile bars at 130°C in an autoclave
Tensile Stress	5.00 MPa @Strain 0.500 %, Time 3.60e+7 sec	725 psi @Strain 0.500 %, Time 10000 hour	ISO 899-1
	7.00 MPa @Strain 0.500 %, Time 360000 sec	1020 psi @Strain 0.500 %, Time 100 hour	ISO 899-1
	10.0 MPa @Strain 0.500 %, Time 3600 sec	1450 psi @Strain 0.500 %, Time 1.00 hour	ISO 899-1
	15.0 MPa @Strain 2.00 %, Time 3.60e+7 sec	2180 psi @Strain 2.00 %, Time 10000 hour	ISO 899-1

Mechanical Properties	Metric ^{Pa}	English ^l	Comments
	@Strain 1.50 %, Time 360000 sec	@Strain 1.50 %, Time 100 hour	ISO 899-1
	19.0 MPa	2760 psi	
	@Time 3600 sec, Strain 1.00 %	@Time 1.00 hour, Strain 1.00 %	ISO 899-1
	25.0 MPa	3630 psi	
	@Strain 4.00 %, Time 3.60e+7 sec	@Strain 4.00 %, Time 10000 hour	ISO 899-1
	29.0 MPa	4210 psi	
	@Strain 3.00 %, Time 360000 sec	@Strain 3.00 %, Time 100 hour	ISO 899-1
	31.0 MPa	4500 psi	
	@Time 3600 sec, Strain 2.00 %	@Time 1.00 hour, Strain 2.00 %	ISO 899-1
Tensile Strength, Yield	65.0 MPa	9430 psi	50mm/min; ISO 527
	25.0 MPa	3630 psi	
	@Temperature 120 °C	@Temperature 248 °F	ISO 527
	35.0 MPa	5080 psi	
	@Temperature 80.0 °C	@Temperature 176 °F	ISO 527
	60.0 MPa	8700 psi	
	@Temperature 40.0 °C	@Temperature 104 °F	ISO 527
Elongation at Break	27 %	27 %	50mm/min; ISO 527
Elongation at Yield	9.4 %	9.4 %	50mm/min; ISO 527
Modulus of Elasticity	2.70 GPa	392 ksi	ISO 527
	1.00 GPa	145 ksi	
	@Temperature 80.0 °C	@Temperature 176 °F	ISO 899-1
	1.90 GPa	276 ksi	
	@Temperature 60.0 °C	@Temperature 140 °F	ISO 899-1
	3.00 GPa	435 ksi	
	@Temperature 20.0 °C	@Temperature 68.0 °F	ISO 899-1
Tensile Modulus	2.41 GPa	350 ksi	
	@Thickness 1.50 mm, Temperature 30.0 °C	@Thickness 0.0591 in, Temperature 86.0 °F	

Mechanical Properties	Metric	English	Comments
	@Thickness 4.00 mm, Temperature 30.0 °C	@Thickness 0.157 in, Temperature 86.0 °F	
	2.60 GPa	377 ksi	
	@Thickness 1.50 mm, Temperature 90.0 °C	@Thickness 0.0591 in, Temperature 194 °F	
	2.71 GPa	393 ksi	
	@Thickness 4.00 mm, Temperature 90.0 °C	@Thickness 0.157 in, Temperature 194 °F	
	2.79 GPa	405 ksi	
	@Thickness 1.50 mm, Temperature 120 °C	@Thickness 0.0591 in, Temperature 248 °F	
	2.81 GPa	408 ksi	
	@Thickness 4.00 mm, Temperature 120 °C	@Thickness 0.157 in, Temperature 248 °F	
Izod Impact, Notched (ISO)	5.50 kJ/m ²	2.62 ft-lb/in ²	ISO 180/A
	6.00 kJ/m ²	2.86 ft-lb/in ²	ISO 180/A
Charpy Impact Unnotched	21.0 J/cm ²	99.9 ft-lb/in ²	ISO 179
	19.0 J/cm ²	90.4 ft-lb/in ²	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179
	0.550 J/cm ²	2.62 ft-lb/in ²	ISO 179
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Tensile Creep Modulus, 1000 hours	1400 MPa	203000 psi	ISO 899

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	11.0 µm/m-°C	6.11 µin/in-°F	DIN 53752
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
Melting Point	167 °C	333 °F	
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75
Vicat Softening Point	150 °C	302 °F	(50 °C/h / 50N) - B/50; ISO 306

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Constant	3.8	3.8	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	3.8	3.8	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	40.0 kV/mm	1020 kV/in	IEC 60243-1
Dissipation Factor	0.0010	0.0010	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dissipation Factor	0.0050	0.0050	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	Test Solution A; IEC 60112
	600 V	600 V	Test Solution B; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	190 - 230 °C	374 - 446 °F	Injection-molding
Mold Temperature	60.0 - 120 °C	140 - 248 °F	

Descriptive Properties	Value	Comments
Color	Natural	
Commercial Status	Active America	
FDA	21 CFR 177.2470	
Impact Modified	No	
NSF Std. 51	Yes	
NSF Std. 61	Yes	
Primary Processing Technique	Injection Molding	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China