

BASF Ultraform® W2320 003 PRO POM

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

Material Notes:

Description: Is a POM, is a very easy flowing grade for thin-walled components with long flow paths. Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultraform-W2320-003-PRO-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 %	Saturation; ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C; 50% RH; ISO 62
Linear Mold Shrinkage, Flow	0.020 cm/cm	0.020 in/in	ISO 2527
Linear Mold Shrinkage, Transverse	0.021 cm/cm	0.021 in/in	ISO 2527
Melt Flow	35 g/10 min @Load 2.16 kg, Temperature 190 °C	35 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	145 MPa @Load 36.5 kg, Time 30.0 sec	21000 psi @Load 80.5 lb, Time 0.00833 hour	ISO 2039-1
Tensile Strength, Yield	65.0 MPa	9430 psi	50 mm/min; ISO 527
Elongation at Break	24 %	24 %	Nominal, 50 mm/min; ISO 527-2
Elongation at Yield	7.5 %	7.5 %	50 mm/min; ISO 527
Modulus of Elasticity	2.80 GPa	406 ksi	ISO 527-2
Izod Impact, Notched (ISO)	5.00 kJ/m ² @Temperature -30.0 °C	2.38 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
	5.00 kJ/m ² @Temperature 23.0 °C	2.38 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact Unnotched	15.0 J/cm ² @Temperature -30.0 °C	71.4 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	15.0 J/cm ² @Temperature 23.0 °C	71.4 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU

Mechanical Properties	Metric	English	Comments
Charpy Impact, Notched	0.500 J/cm ²	2.38 ft-lb/in ²	ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	
	0.500 J/cm ²	2.38 ft-lb/in ²	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Creep Modulus, 1000 hours	1350 MPa	196000 psi	ISO 899-1

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	110 µm/m-°C	61.1 µin/in-°F	DIN 53752
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
Melting Point	167 °C	333 °F	
Maximum Service Temperature, Air	100 °C	212 °F	
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75-2
Vicat Softening Point	150 °C	302 °F	ISO 306
Decomposition Temperature	>= 240 °C	>= 464 °F	

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 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.8	3.8	IEC 60250
	@Frequency 100 Hz	@Frequency 100 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	
	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

Electrical Properties	Metric	English	Comments
Processing Properties	Metric	English	Comments
Processing Temperature	200 °C	392 °F	Hopper Throat
Zone 1	200 °C	392 °F	Feed zone
Zone 2	200 °C	392 °F	Compression
Zone 3	200 °C	392 °F	Metering-zone
Zone 4	200 °C	392 °F	Nozzle
Melt Temperature	200 °C	392 °F	Optimal
	190 - 230 °C	374 - 446 °F	Injection-molding
Mold Temperature	60.0 - 100 °C	140 - 212 °F	Injection-molding
	90.0 °C	194 °F	Optimal
Drying Temperature	100 °C	212 °F	
Dry Time	3 hour	3 hour	

Descriptive Properties	Value	Comments
Commercial Status	Europe	
Ignition Temperature	320 - 340°C	ASTM D1929
Peripheral screw speed	<0.3 m/s	
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