

BASF Ultraform® N2320 0035 LEV POM

Description: Is a POM, rapidly solidifying standard grade with improved impact strength for injection molding
Information provided by BASF

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C; 50% RH; ISO 62
Water Absorption at Saturation	0.80 %	0.80 %	ISO 62
Linear Mold Shrinkage, Flow	0.021 cm/cm	0.021 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.021 cm/cm	0.021 in/in	ISO 2577
Melt Flow	10.5 g/10 min @Load 2.16 kg, Temperature 190 °C	10.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	130 MPa @Load 36.5 kg, Time 30.0 sec	18900 psi @Load 80.5 lb, Time 0.00833 hour	ISO 2039-1
Tensile Strength, Yield	63.0 MPa	9140 psi	50 mm/min; ISO 527-2
Elongation at Break	33 %	33 %	Nominal, 50 mm/min; ISO 527-2
Elongation at Yield	12.5 %	12.5 %	50 mm/min; ISO 527-2

Modulus of Elasticity	2.45 GPa	355 ksi	ISO 527-2
Izod Impact, Notched (ISO)	6.00 kJ/m ² @Temperature -30.0 °C	2.86 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
	6.50 kJ/m ² @Temperature 23.0 °C	3.09 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact Unnotched	19.0 J/cm ² @Temperature -30.0 °C	90.4 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	26.0 J/cm ² @Temperature 23.0 °C	124 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.550 J/cm ² @Temperature -30.0 °C	2.62 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	0.650 J/cm ² @Temperature 23.0 °C	3.09 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA
Tensile Creep Modulus, 1000 hours	1000 MPa @Strain <=0.5 %	145000 psi @Strain <=0.5 %	ISO 899-1

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Surface Resistance	1.00e+15 ohm	1.00e+15 ohm	IEC 60093
Dielectric Constant	3.8 @Frequency 1e+6 Hz	3.8 @Frequency 1e+6 Hz	IEC 60250
	3.9 @Frequency 100 Hz	3.9 @Frequency 100 Hz	IEC 60250

Dielectric Strength	36.0 kV/mm	914 kV/in	IEC 60243-1
Dissipation Factor	0.0030 @Frequency 100 Hz	0.0030 @Frequency 100 Hz	IEC 60250
	0.0060 @Frequency 1e+6 Hz	0.0060 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	Test solution A; IEC 60112
	600 V	600 V	Test solution B; IEC 60112
Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	110 $\mu\text{m}/\text{m}\cdot\text{°C}$ @Temperature 23.0 - 55.0 °C	61.1 $\mu\text{in}/\text{in}\cdot\text{°F}$ @Temperature 73.4 - 131 °F	DIN 53752
Melting Point	167 °C	333 °F	DIN 53765
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
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	

Ignition Temperature	320 - 340 °C	608 - 644 °F	ASTM D1929
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Processing Properties	Metric	English	Comments
Melt Temperature	200 °C	392 °F	Optimal
	190 - 230 °C	374 - 446 °F	Injection-molding
Mold Temperature	60.0 - 120 °C	140 - 248 °F	Injection-molding
	90.0 °C	194 °F	Optimal
Drying Temperature	100 °C	212 °F	
Dry Time	3 hour	3 hour	

Descriptive Properties	
Commercial Status	Europe

Primary Processing Technique

Injection Molding