

BASF Ultraform® W2320 0035 LEV POM

Description: Is a POM, very free-flowing, rapidly solidifying grade for injection molding, with reduced emission potential.
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
Melt Flow	30 g/10 min @Load 2.16 kg, Temperature 190 °C	30 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	135 MPa @Load 36.5 kg, Time 30.0 sec	19600 psi @Load 80.5 lb, Time 0.00833 hour	ISO 2039-1
Tensile Strength, Yield	65.0 MPa	9430 psi	50 mm/min; ISO 527-2
Elongation at Break	25 %	25 %	ISO 527-2
Elongation at Yield	9.5 %	9.5 %	ISO 527-2
Modulus of Elasticity	2.60 GPa	377 ksi	ISO 527-2
Charpy Impact Unnotched	18.0 J/cm ² @Temperature -30.0 °C	85.7 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	18.0 J/cm ² @Temperature 23.0 °C	85.7 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.500 J/cm ² @Temperature -30.0 °C	2.38 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	0.500 J/cm ² @Temperature 23.0 °C	2.38 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA
Tensile Creep Modulus, 1000 hours	1000 MPa	145000 psi	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	11.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ @Temperature 23.0 - 55.0 $^\circ\text{C}$	6.11 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$ @Temperature 73.4 - 131 $^\circ\text{F}$	DIN 53752
Melting Point	167 $^\circ\text{C}$	333 $^\circ\text{F}$	DIN 53765
Maximum Service Temperature, Air	100 $^\circ\text{C}$	212 $^\circ\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	95.0 $^\circ\text{C}$	203 $^\circ\text{F}$	ISO 75-2
Vicat Softening Point	150 $^\circ\text{C}$	302 $^\circ\text{F}$	ISO 306

Processing Properties	Metric	English	Comments
Melt Temperature	190 - 220 $^\circ\text{C}$	374 - 428 $^\circ\text{F}$	Injection-molding
Mold Temperature	60.0 - 120 $^\circ\text{C}$	140 - 248 $^\circ\text{F}$	