

# BASF Ultraform® W2320 U035 LEV POM

Description: Is a POM, UV-stabilized, very free-flowing, rapidly solidifying grade for injection molding, with reduced emission potential.  
Information provided by BASF

Physical Properties	Metric	English	Comments
Bulk Density	0.850 g/cc	0.0307 lb/in <sup>3</sup>	
Density	1.40 g/cc	0.0506 lb/in <sup>3</sup>	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	0.023 cm/cm	0.023 in/in	ISO 2577
Linear Mold Shrinkage, Transverse	0.023 cm/cm	0.023 in/in	ISO 2577
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	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	62.0 MPa	8990 psi	50 mm/min; ISO 527-2
Elongation at Break	25 %	25 %	ISO 527-2
Elongation at Yield	10 %	10 %	ISO 527-2
Modulus of Elasticity	2.45 GPa	355 ksi	ISO 527-2
Charpy Impact Unnotched	19.0 J/cm <sup>2</sup> @Temperature -30.0 °C	90.4 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eU
	20.0 J/cm <sup>2</sup> @Temperature 23.0 °C	95.2 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.500 J/cm <sup>2</sup> @Temperature -30.0 °C	2.38 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eA
	0.600 J/cm <sup>2</sup> @Temperature 23.0 °C	2.86 ft-lb/in <sup>2</sup> @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
Melting Point	166 °C	331 °F	DIN 53765
Maximum Service Temperature, Air	100 °C	212 °F	
Deflection Temperature at 1.8 MPa (264 psi)	95.0 °C	203 °F	ISO 75-2
Vicat Softening Point	150 °C	302 °F	ISO 306
Decomposition Temperature	>= 240 °C	>= 464 °F	
Flammability, UL94	HB @Thickness 1.60 mm	HB @Thickness 0.0630 in	
Ignition Temperature	320 - 340 °C	608 - 644 °F	ASTM D1929