

BASF Ultraform® S 2320 003 LEV AT POM

Product Description: Ultraform® S 2320 003 LEV AT is an easy flowing and rapidly freezing injection molding POM grade. This grade is optimized for low emission and smell during processing. Typical applications include difficult, thin-walled parts.

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in ³	ISO 1183
Water Absorption	0.20 %	0.20 %	Equilibrium, 50% RH; ISO 62
Water Absorption at Saturation	0.90 %	0.90 %	ISO 62
Maximum Moisture Content	0.15	0.15	
Linear Mold Shrinkage, Flow	0.021 cm/cm	0.021 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.021 cm/cm	0.021 in/in	ISO 294-4
Melt Flow	11 g/10 min @Load 2.16 kg, Temperature 190 °C	11 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	64.0 MPa	9280 psi	ISO 527-2
Elongation at Break	29 %	29 %	Nominal; ISO 527-2
Elongation at Yield	10 %	10 %	ISO 527-2
Tensile Modulus	2.70 GPa	392 ksi	ISO 527-1
Charpy Impact Unnotched	23.1 J/cm ² @Temperature -30.0 °C	110 ft-lb/in ² @Temperature -22.0 °F	ISO 179
	25.2 J/cm ² @Temperature 22.8 °C	120 ft-lb/in ² @Temperature 73.0 °F	ISO 179
Charpy Impact, Notched	0.546 J/cm ² @Temperature -30.0 °C	2.60 ft-lb/in ² @Temperature -22.0 °F	ISO 179
	0.609 J/cm ² @Temperature 22.8 °C	2.90 ft-lb/in ² @Temperature 73.0 °F	ISO 179
Tensile Creep Modulus, 1000 hours	1300 MPa	189000 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+13 ohm	1.00e+13 ohm	IEC 60093
Dielectric Constant	3.8 @Frequency 1e+6 Hz	3.8 @Frequency 1e+6 Hz	IEC 60250
Dissipation Factor	0.0050 @Frequency 1e+6 Hz	0.0050 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	Solution A; IEC 60112

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	110 µm/m-°C	61.0 µin/in-°F	ISO 11359-2
Melting Point	167 °C	333 °F	ISO 3146
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	Unannealed; ISO 75-2/A

Processing Properties	Metric	English	Comments
Melt Temperature	190 - 230 °C	374 - 446 °F	
Mold Temperature	60.0 - 120 °C	140 - 248 °F	
Drying Temperature	80.0 - 110 °C	176 - 230 °F	
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	
Injection Pressure	3.50 - 7.03 MPa	508 - 1020 psi	