

BASF Ultraform® H 4320 Q600

Ultraform H4320 Q600 is an extrusion POM high molecular weight grade. This grade enables high extrusion rates with thick-walled product. It also exhibits high thermal stability and a low tendency to discolor.

Physical Properties	Metric	English	Comments
Density	1.39 g/cc	0.0502 lb/in ³	ISO 1183
Water Absorption	0.80 %	0.80 %	ISO 62
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C/50% R.H.; ISO 62

Melt Flow	26 g/10 min @Load 2.16 kg, Temperature 190 °C	26 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133
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Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	125 MPa	18100 psi	358/30; ISO 2039-1
Tensile Strength, Yield	63.0 MPa	9140 psi	50mm/min; ISO 527
Elongation at Break	31 %	31 %	50mm/min; ISO 527
Elongation at Yield	10 %	10 %	50mm/min; ISO 527
Modulus of Elasticity	2.60 GPa	377 ksi	ISO 527
Izod Impact, Notched (ISO)	6.50 kJ/m ²	3.09 ft-lb/in ²	ISO 180/A
	6.00 kJ/m ² @Temperature -30.0 °C	2.86 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
Charpy Impact Unnotched	25.0 J/cm ²	119 ft-lb/in ²	ISO 179
	18.0 J/cm ² @Temperature -30.0 °C	85.7 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Charpy Impact, Notched	0.600 J/cm ²	2.86 ft-lb/in ²	ISO 179
	0.550 J/cm ² @Temperature -30.0 °C	2.62 ft-lb/in ² @Temperature -22.0 °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 100 Hz	3.8 @Frequency 100 Hz	IEC 60250
	3.8 @Frequency 1e+6 Hz	3.8 @Frequency 1e+6 Hz	IEC 60250
Dielectric Strength	40.0 kV/mm	1020 kV/in	IEC 60243-1
Dissipation Factor	0.0010 @Frequency 100 Hz	0.0010 @Frequency 100 Hz	IEC 60250
	0.0050 @Frequency 1e+6 Hz	0.0050 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112
	600 V	600 V	Test Solution B; ICE 60112