

BASF Ultraform® N 2320 U03 UNC Q600 POM

Ultraform N2320 U03 UNC Q600 is a rapidly freezing UV stabilized general-purpose injection molding grade.

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 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
Linear Mold Shrinkage	0.020 cm/cm	0.020 in/in	ASTM Data; MD
Linear Mold Shrinkage, Flow	0.021 cm/cm	0.021 in/in	ISO Data
Linear Mold Shrinkage, Transverse	0.021 cm/cm	0.021 in/in	ISO Data
Melt Flow	7.5 g/10 min @Load 2.16 kg, Temperature 190 °C	7.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	63.0 MPa	9140 psi	50mm/min; ISO 527
	63.0 MPa	9140 psi	2 in/min; ASTM Test
	33.0 MPa @Temperature 80.0 °C	4790 psi @Temperature 176 °F	ISO Data
	93.0 MPa @Temperature -40.0 °C	13500 psi @Temperature -40.0 °F	ISO Data
Elongation at Break	30 %	30 %	50mm/min, Nominal strain; ISO 527
Elongation at Yield	9.4 %	9.4 %	50mm/min; ISO 527
	9.4 %	9.4 %	2 in/min; ASTM Test
	5.8 % @Temperature -40.0 °C	5.8 % @Temperature -40.0 °F	ISO Data
	9.3 % @Temperature 80.0 °C	9.3 % @Temperature 176 °F	ISO Data
Tensile Modulus	2.60 GPa	377 ksi	1mm/min; ISO 527
	2.76 GPa	400 ksi	ASTM Test
Flexural Modulus	4.00 GPa	580 ksi	ISO Data
Izod Impact, Notched	0.598 J/cm @Temperature -40.0 °C	1.12 ft-lb/in @Temperature -40.0 °F	ASTM Test
	0.694 J/cm @Thickness 3.17 mm	1.30 ft-lb/in @Thickness 0.125 in	ASTM Test
Izod Impact, Notched (ISO)	6.50 kJ/m ²	3.09 ft-lb/in ²	ISO Test
Charpy Impact Unnotched	20.0 J/cm ²	95.2 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	0.550 J/cm ²	2.62 ft-lb/in ²	ISO 179
	0.500 J/cm ² @Temperature -30.0 °C	2.38 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Tensile Creep Modulus, 1 hour	1800 MPa	261000 psi	ISO 899
Tensile Creep Modulus, 1000 hours	1400 MPa	203000 psi	ISO 899