

BASF Ultraform® N2200 G53 UNC Q600

Ultraform N2200 G53 UNC Q600 is a 25% glass fiber reinforced POM injection molding grade with enhanced stiffness and toughness.

Physical Properties	Metric	English	Comments
Density	1.58 g/cc	0.0571 lb/in³	ISO 1183
Water Absorption	0.90 %	0.90 %	ISO 62
Moisture Absorption at Equilibrium	0.15 %	0.15 %	23°C/50% R.H.; ISO 62

Melt Flow	5.5 g/10 min @Load 2.16 kg, Temperature 190 °C	5.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133
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Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	190 MPa	27600 psi	ISO2039
Tensile Strength at Break	130 MPa	18900 psi	5mm/min; ISO 527
Tensile Strength, Yield	60.0 MPa @Temperature 120 °C	8700 psi @Temperature 248 °F	ISO 527
	90.0 MPa @Temperature 80.0 °C	13100 psi @Temperature 176 °F	ISO 527
	125 MPa @Temperature 40.0 °C	18100 psi @Temperature 104 °F	ISO 527

Tensile Stress at Strain	10.0 MPa @Strain 0.2 %, Time 3.60e+7 sec	1450 psi @Strain 0.2 %, Time 10000 hour	ISO 899-1
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	12.0 MPa @Strain 0.2 %, Time 3.60e+6 sec	1740 psi @Strain 0.2 %, Time 1000 hour	ISO 899-1
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	15.0 MPa @Strain 0.2 %, Time 3600 sec	2180 psi @Strain 0.2 %, Time 1.00 hour	ISO 899-1
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	31.0 MPa @Strain 0.6 %, Time 3.60e+6 sec	4500 psi @Strain 0.6 %, Time 1000 hour	ISO 899-1
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	32.0 MPa @Strain 0.6 %, Time 3.60e+7 sec	4640 psi @Strain 0.6 %, Time 10000 hour	ISO 899-1
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	35.0 MPa @Strain 0.5 %, Time 3600 sec	5080 psi @Strain 0.5 %, Time 1.00 hour	ISO 899-1
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	55.0 MPa @Strain 1.4 %, Time 3.60e+6 sec	7980 psi @Strain 1.4 %, Time 1000 hour	ISO 899-1
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	55.0 MPa @Strain 1.8 %, Time 3.60e+7 sec	7980 psi @Strain 1.8 %, Time 10000 hour	ISO 899-1
	58.0 MPa @Strain 0.8 %, Time 3600 sec	8410 psi @Strain 0.8 %, Time 1.00 hour	ISO 899-1
Elongation at Break	3.0 %	3.0 %	5mm/min; ISO 527
Modulus of Elasticity	8.80 GPa	1280 ksi	ISO 527
	2.50 GPa @Temperature 140 °C	363 ksi @Temperature 284 °F	SIO 527
	5.00 GPa @Temperature 100 °C	725 ksi @Temperature 212 °F	SIO 527
	8.10 GPa @Temperature 40.0 °C	1170 ksi @Temperature 104 °F	SIO 527
Izod Impact, Notched (ISO)	9.00 kJ/m ²	4.28 ft-lb/in ²	ISO 180
	9.00 kJ/m ² @Temperature -30.0 °C	4.28 ft-lb/in ² @Temperature -22.0 °F	ISO 180
Charpy Impact Unnotched	5.50 J/cm ²	26.2 ft-lb/in ²	ISO 179
	6.00 J/cm ² @Temperature -30.0 °C	28.6 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Charpy Impact, Notched	0.900 J/cm ²	4.28 ft-lb/in ²	ISO 179
	0.880 J/cm ² @Temperature -30.0 °C	4.19 ft-lb/in ² @Temperature -22.0 °F	ISO 179
Tensile Creep Modulus, 1000 hours	5800 MPa	841000 psi	ISO 899