

BASF Ultramid® B3EG5

Description: 25% glass-fiber reinforced injection-molding grade for industrial articles and electrical insulating parts
Information provided by BASF

Physical Properties	Metric	English	Comments
Bulk Density	0.500 - 0.800 g/cc	0.0181 - 0.0289 lb/in ³	
Density	1.32 g/cc	0.0477 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	2.1 - 2.5 %	2.1 - 2.5 %	23°C; 50% RH; ISO 62
Water Absorption at Saturation	6.8 - 7.4 %	6.8 - 7.4 %	ISO 62
Viscosity Measurement	140	140	ISO 307
Linear Mold Shrinkage	0.0035 cm/cm	0.0035 in/in	restricted
Melt Flow	72.6 g/10 min @Load 5.00 kg, Temperature 275 °C	72.6 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	160 MPa	23200 psi	50 mm/min; ISO 527-1/-2
Elongation at Yield	3.5 %	3.5 %	50 mm/min; ISO 527-1/-2
Modulus of Elasticity	8.00 GPa	1160 ksi	ISO 527-1/-2
Flexural Strength	220 MPa	31900 psi	at max force; ISO 178
Flexural Modulus	7.40 GPa	1070 ksi	ISO 178
Izod Impact, Notched (ISO)	12.0 kJ/m ² @Temperature 23.0 °C	5.71 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact Unnotched	7.50 J/cm ² @Temperature -30.0 °C	35.7 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	8.00 J/cm ² @Temperature 23.0 °C	38.1 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	1.00 J/cm ² @Temperature -30.0 °C	4.76 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	1.20 J/cm ² @Temperature 23.0 °C	5.71 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA