DSM Akulon® Diablo HT50-HPG5 (PA66+PA6)-GF25

Categories: Polymer; Thermoplastic; Nylon; Nylon 6/66; Nylon 66/Nylon 6 Blend, Glass Fiber Filled

Material Notes: 25% Glass Reinforced, Heat Stabilized, Blow Molding Grade

Vendors: No vendors are listed for this material. Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.29 g/cc	0.0466 lb/in³	dry; ISO 1183
Water Absorption	6.7 %	6.7 %	Sim. To ISO 62
Moisture Absorption	2.60 %	2.60 %	Sim. To ISO 62
Linear Mold Shrinkage, Flow	0.0115 cm/cm	0.0115 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.014 cm/cm	0.014 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	80.0 MPa	11600 psi	cond; ISO 527-1/-2
	145 MPa	21000 psi	dry; ISO 527-1/-2
Elongation at Break	4.5 %	4.5 %	dry; ISO 527-1/-2
	16 %	16 %	cond; ISO 527-1/-2
Tensile Modulus	3.40 GPa	493 ksi	cond; ISO 527-1/-2
	8.20 GPa	1190 ksi	dry; ISO 527-1/-2
Charpy Impact Unnotched	8.00 J/cm² @Temperature 23.0 °C	38.1 ft-lb/in² @Temperature 73.4 °F	dry; ISO 179/1eU
	9.00 J/cm² @Temperature -30.0 °C	42.8 ft-lb/in² @Temperature -22.0 °F	dry; ISO 179/1eU
	9.00 J/cm² @Temperature -30.0 °C	42.8 ft-lb/in² @Temperature -22.0 °F	cond; ISO 179/1eU
	11.5 J/cm² @Temperature 23.0 °C	54.7 ft-lb/in² @Temperature 73.4 °F	cond; ISO 179/1eU
Charpy Impact, Notched	1.00 J/cm² @Temperature -30.0 °C	4.76 ft-lb/in² @Temperature -22.0 °F	dry; ISO 179/1eA
	1.50 J/cm² @Temperature -30.0 °C	7.14 ft-lb/in² @Temperature -22.0 °F	cond; ISO 179/1eA
	1.90 J/cm² @Temperature 23.0 °C	9.04 ft-lb/in² @Temperature 73.4 °F	dry; ISO 179/1eA
	4.00 J/cm² @Temperature 23.0 °C	19.0 ft-lb/in² @Temperature 73.4 °F	cond; ISO 179/1eA

Thermal Properties	Metric	English	Comments
Melting Point	255 °C	491 °F	10°C/min,dry; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	225 °C	437 °F	dry; ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	200 °C	392 °F	dry; ISO 75-1/-2