



Chemlon® MDF463

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

Product Description

MDF463 is a 15% glass fibre reinforced grade of nylon 6 that contains an impact modification system which offers superior low temperature performance - along with a stabilisation package to enhance component life in severe environmental conditions. This grade offers a good balance of rigidity and toughness over a wide temperature range.

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Heat Stabilizer • Impact Modifier
Features	• Heat Stabilized • Low Temperature Impact Resistance • Impact Modified • Low Temperature Toughness
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm ³	ISO 1183
Molding Shrinkage ²	0.90 to 1.8	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	1.8	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	638000	psi	ISO 527-2
Tensile Stress	13100	psi	ISO 527-2
Tensile Strain (Break)	8.0	%	ISO 527-2
Flexural Modulus	522000	psi	ISO 178
Flexural Stress	16000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	9.5	ft-lb/in ²	ISO 179/1eA
Notched Izod Impact Strength	10	ft-lb/in ²	ISO 180/A
Unnotched Izod Impact Strength	> 21	ft-lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	374	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	284	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, Teknor Apex test result)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	20	hr
Rear Temperature	482 to 536	°F
Middle Temperature	482 to 536	°F
Front Temperature	482 to 536	°F
Processing (Melt) Temp	482 to 554	°F
Mold Temperature	140 to 176	°F
Injection Rate	Fast	
Back Pressure	Moderate	
Screw Speed	Moderate	