



Chemlon® MDF606

Teknor Apex Company (Chem Polymer) - Polyamide 6

General Information

Product Description

MDF606 is a 30% glass fibre reinforced, impact modified nylon 6 that offers good rigidity and toughness over a wide temperature range. The grade is also stabilised for good weathering performance in outdoor applications.

General

Material Status	• Commercial: Active
Availability	• Europe • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Impact Modifier
Features	• Good Thermal Stability • Impact Modified • Weather Resistant • Good Toughness • Medium Rigidity
Uses	• Outdoor Applications
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm ³	ISO 1183
Molding Shrinkage ²	0.70 to 1.4	%	Internal Method
Water Absorption (Equilibrium, 73°F, 50% RH)	1.8	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break)	17400	psi	ISO 527-2
Tensile Strain (Break)	6.0	%	ISO 527-2
Flexural Modulus	972000	psi	ISO 178
Flexural Stress ³	23900	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	8.6	ft-lb/in ²	ISO 179
Notched Izod Impact Strength	6.7	ft-lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	> 392	°F	ISO 75-2/B
Heat Deflection Temperature (264 psi, Unannealed)	> 374	°F	ISO 75-2/A
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, Teknor Apex test result)	HB		UL 94
Oxygen Index	22	%	ISO 4589-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Rear Temperature	482 to 536	°F
Middle Temperature	482 to 536	°F
Front Temperature	482 to 536	°F
Processing (Melt) Temp	< 572	°F
Mold Temperature	140 to 176	°F
Injection Rate	Fast	
Screw Speed	50 to 200	rpm

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Injection Notes

Back pressure: Low

Injection pressure: High

No drying is necessary unless the materials has been exposed to air for longer than three hours.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Mould shrinkage is significantly influenced by many factors including wall thickness, gating, component shape and moulding conditions. The range values stated were determined from specimen bar mouldings of 1.5mm to 4mm wall thickness. They are provided as a guide for comparison purposes only and no guarantee should be inferred from their inclusion. (Specimens measured in the dry state, 24 hours after moulding).

³ At conventional deflection