



# Chemlon® MDFS2

Teknor Apex Company (Chem Polymer) - Polyamide 6

## General Information

### Product Description

MDFS2 is a 50% glass reinforced nylon 6 that offers excellent mechanical performance coupled with good surface finish.

### General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Good Flow • Good Surface Finish
Processing Method	• Injection Molding

## ASTM & ISO Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.56	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>	0.40 to 1.0	--	%	Internal Method
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.96E+6	1.38E+6	psi	ISO 527-2
Tensile Stress	31900	21000	psi	ISO 527-2
Tensile Strain (Break)	3.0	5.0	%	ISO 527-2
Flexural Modulus	1.80E+6	1.31E+6	psi	ISO 178
Flexural Stress	42800	29000	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Notched Izod Impact Strength	5.7	--	ft-lb/in <sup>2</sup>	ISO 180/A
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/B
66 psi, Unannealed	> 392	--	°F	
Heat Deflection Temperature				ISO 75-2/A
264 psi, Unannealed	> 392	--	°F	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+15	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+17	1.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	280	200	V/mil	IEC 60243-1
Comparative Tracking Index	525	--	V	IEC 60112

## Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Rear Temperature	482 to 563	°F
Middle Temperature	482 to 563	°F
Front Temperature	482 to 563	°F
Processing (Melt) Temp	527 to 572	°F
Mold Temperature	176 to 194	°F
Injection Rate	Fast	
Back Pressure	Low	
Screw Speed	Moderate	

## Chemlon® MDFS2

### Teknor Apex Company (Chem Polymer) - Polyamide 6

---

#### Injection Notes

---

No drying is necessary unless the material has been exposed to air for longer than three hours. The appearance of splash marks on the surface of mouldings indicates excessive moisture is present.

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Mould shrinkage is significantly influenced by many factors including wall thickness, gating, moulding shape and processing conditions. The range values given are 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).