# Chemlon® MDF863

## Polyamide 6

## Teknor Apex Company (Chem Polymer)

## Message:

MDF863 is a 15% glass fibre reinforced, highly impact modified, flame retarded nylon 6 - suitable for use in sub zero service environments. It contains a RoHS permissible Brominated Flame Retardant.

General Information					
Filler / Reinforcement	Glass fiber reinforced material, 15% filler by weight				
Additive	Impact modifier				
	Flame retardancy 2				
Features	Impact modification				
	Low temperature impact resistance				
	Flame retardancy				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Density	1.36	g/cm³	ISO 1183		
Molding Shrinkage <sup>1</sup>	0.80 - 1.6	%	Internal method		
Water Absorption (Equilibrium, 23°C, 509 RH)	6 1.6	%	ISO 62		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Stress	60.0	MPa	ISO 527-2		
Flexural Modulus	2800	MPa	ISO 178		
Flexural Stress	70.0	MPa	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Notched Izod Impact	17	kJ/m²	ISO 180/A		
Thermal	Nominal Value	Unit	Test Method		
Heat Deflection Temperature					
0.45 MPa, not annealed	> 200	°C	ISO 75-2/B		
1.8 MPa, not annealed	> 190	°C	ISO 75-2/A		
Electrical	Nominal Value	Unit	Test Method		
Surface Resistivity	1.0E+12	ohms	IEC 60093		
Volume Resistivity	1.0E+14	ohms•cm	IEC 60093		
Dielectric Strength (3.00 mm)	20	kV/mm	IEC 60243-1		
Comparative Tracking Index	300	V	IEC 60112		
Flammability	Nominal Value	Unit	Test Method		
Flame Rating			UL 94		
1.50 mm, Teknor Apex test result	V-1		UL 94		
3.00 mm, Teknor Apex test result	V-0		UL 94		

Glow Wire Flammability Index (1.50 mm)	960	°C	IEC 60695-2-12
Oxygen Index	30	%	ISO 4589-2

#### Additional Information

Due to the thermal sensitivity of flame retarded products steps should be taken to limit hold up time and temperature for the material. Additional care should be taken during any interruptions to routine production and during any purging procedures in order to minimise degradation of the product.

Injection	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	20	hr	
Rear Temperature	245 - 280	°C	
Middle Temperature	245 - 280	°C	
Front Temperature	245 - 280	°C	
Processing (Melt) Temp	245 - 280	°C	
Mold Temperature	60.0 - 80.0	°C	
Injection Rate	Fast		
Back Pressure	Low		
Screw Speed	Moderate		
Injection instructions			

#### Injection instructions

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.

#### NOTE

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).

#### 1.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

### Recommended distributors for this material

# Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533 Email: sales@su-jiao.com No. 215, Lianhe North Road, Fengxian District, Shanghai, China

