MEXPRENE PPH 8 GF20 H NC

Description	Polypropylene homopolymer with 20% glass fiber reinforced, heat stabilized		
Color	Natural	**Additional formulations**	
Norm	-	Fluidity form 1 to 50 gr/10'	EL - High impact
Sector:	Automotive, forniture, white	UV - Light stabilized	IB - Hybrid Mineral+GF
Processing	Injection	UL94 - Flame	AB - Anti bacterial

Applications: Piezas exteriores, rejillas de radiador, manijas de puertas y componentes de motor parts. Piezas mecánicas de alta resistencia, componentes de carga y piezas de maquinaria.

Mechanical Properties		**Values**	**Unit**	**ISO**
Density		1,04	g/cm³	1183
Filler Content		20	%	3451
Melt Flow Index 230° C/2.16 kg		6	g/10min	1133
Melting Point (DSC)		167	° C	3146
Mechanical Properties		**Values**	**Unit**	**ISO**
Tensile strength at yield		75	MPa	527-1
Flexural Modulus		4200	MPa	178
IZOD Impact strength, notched	(23° C)	-	lb-ft/in2	-
IZOD Impact strength, notched	(23° C)	11,0	KJ/m²	180 1eA
Thermal Properties		**Values**	**Unit**	**ISO**
HDT method A (1.820 MPa)		145	° C	75-1
Flammability		**Values**		
Flame rating at 3.2 mm		HB		UL94

Processing Conditions		**Values**		
Drying	-	Suggeste max moisture	0.15	%
Hopper	220° C	Min temperture	200	° C
1st Zone	230° C	Max temperture	240	° C
2nd Zone	230° C	Injection rate	Medium/High	
3rd Zone	240° C	Injection pressure	40 ÷ 80	MPa
Nozzle	240° C	Injection time	3 ÷ 15	Sec.
Moulds	20 - 40° C	Cooling time	20 ÷ 60	Sec.

Melt Temperature: A critical parameter, generally between 200-300° C for PP, with the recommendation to avoid exceeding 220° C for flame-retardant (FR) grades to prevent degradation.

Mold Temperature: Higher mold temperatures can improve part brilliance and appearance. A typical mold temperature for PP GF is around 20 ÷ 50° C.

Injection Speed: Use high injection speeds to ensure good surface finish and prevent weld lines.

Injection Pressure: Pressure should be high enough to fill the part effectively but not excessive, which can cause flashing or burning.

Mold Venting: Essential for preventing burn marks by allowing trapped gases to escape.

Fiber Length Control: The shear forces within the injection molding barrel can significantly reduce fiber length. Processing conditions need to be managed to control this.

After annealing treatment, PP products can eliminate residual internal stresses and improve impact resistance.

To reduce internal stress and deformation, high-speed injection should be chosen, but some PP grades and molds are not applicable.