MEXBLEND PCN 20 GF20 H BK

Description	PBT/SAN whit 20% glass fiber blends, show the excellent toughness and dimensional stability of SAN are combined with the good melt flow properties and chemical resistance of		
Color	Black	**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 retardant	H - Heat stabilized

Applications: PBT/SAN is widely used in the automotive, electronics, aerospace and additive manufacturing sectors, standing out for its combination of high impact resistance, rigidity, thermal resistance and ease of processing.

Mechanical Properties		**Values**	**Unit**	**ISO**
Density		1.34	g/cm³	1183
Filler Content		-	%	3451
Melt Flow Index 250° C/5 kg		8	g/10min	1133
Shrinkage		1.8 -2	%	294
Mechanical Properties		**Values**	**Unit**	**ISO**
Tensile strength at yield		120	MPa	527-1
Flexural Modulus		7300	MPa	178
IZOD Impact strength, notched	(23° C)	45	KJ/m²	180 1eA
IZOD Impact strength, notched	(-30° C)	-	KJ/m²	180 1eA
Thermal Properties		**Values**	**Unit**	**ISO**
HDT (0.45 MPa)		-	° C	75
HDT (01.82 MPa)		165	° C	75
Flammability		**Values**		
Flame rating at 3.2 mm		HB	-	UL94

Processing Conditions		**Values**		
Drying	3h/90° C	Suggeste max moisture	0.15	%
Hopper	240° C	Min temperture	240	° C
1st Zone	250° C	Max temperture	275	° C
2nd Zone	250° C	Injection rate	Medium/High	
3rd Zone	260° C	Injection pressure	40 ÷ 80	MPa
Nozzle	265° C	Injection time	3 ÷ 15	Sec.
Moulds	50 - 70° 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.

info@mexpolimeros.com - M. +52.237.58.904