MEXMID A HI90 H NC

Description	Unreinforced, Super Toughened, Polyamide 66 medium viscosity, heat stabilized		
Color	Natural Color	**Additional formulations**	
Applications: Automotive, furniture, domestic appliances, sporting goods and construction industry.		HR - Resistance to hydrolysis	EL - High impact
		Viscosity from 2.4 to 3.3	IB - Hybrid Mineral+GF
Processing	Injection	UL94 - Flame retardant	UV - Light stabilized

Mechanical Properties	**Values**	**Unit**	**ISO**
Density	1.08	g/cm³	1183
Filler Content	-	%	3451
Reletive viscosity (1% in 96% H_2SO_4)	2.7 ± 0.10	-	307
Melting Point (DSC)	262	° C	3146
Mechanical Properties	**Dry/Wet**	**Unit**	**ISO**
Tensile elongation at break	40/50	MPa	527-2
Tensile strength at yield	50/43	MPa	178
Flexural Modulus	1900/800	MPa	178
IZOD Impact strength, notched (23° C)	80/110	KJ/m²	180 1eA
Thermal Properties	**Values**	**Unit**	**ISO**
HDT method A (1.820 MPa)	65	° C	75-1
Flammability	**Values**		
Flame rating at 3.2 mm	HB		UL94

Processing Conditions	**Values**			
Drying	4-6h/90° C	Suggeste max moisture	0.15	%
Hopper	270÷280° C	Min temperture	270	° C
Front	280÷290° C	Max temperture	320	° C
Middle	280÷290° C	Injection rate	High	
Rear	295÷305° C	Injection pressure	40 ÷ 120	MPa
Nozzle	285÷300° C	Injection time	3 ÷ 15	Sec.
Hot Runner Temp,	295÷320° C	Screw Back	3,5	Bar
Moulds	80 - 120° C	Cooling time	30 ÷ 90	Sec.

Due to the high moisture absorption of PA6, special attention should be given to drying before processing. If the humidity exceeds 0.2%, it is recommended to dry in hot air at temperatures above 80° C for 8 hours. If the material has been exposed to the air for more than 8 hours, vacuum drying at 105° C for at least 8 hours is advised.

Melting Temperature: 280-300° C. For reinforced varieties, the melting temperature is 250-280° C.

Mold temperature significantly affects crystallinity, which, in turn, impacts the mechanical properties of the plastic parts. it is recommended to set the mold temperature at 80~90° C. For thin-walled, longer-flow plastic parts, such as the nylon cable tie production, a higher mold temperature is also recommended. Increasing the mold temperature can enhance the strength and rigidity of the plastic parts but reduces toughness.

Injection Pressure: Generally between 750-1250 bar (depending on the material and product design).

Injection Speed: High-speed (slightly reduced for reinforced materials).

Due to the short solidification time of PA6, the gate's position is crucial. The gate aperture should not be smaller than 0.5*t (where t is the thickness of the plastic part). If using a hot runner, the gate size should be slightly smaller than with a conventional runner, as the hot runner helps prevent premature solidification of the material. If using a submerged gate, the minimum diameter of the gate should be 0.75mm.

The information and data contained herein is believed to be accurate and are given in good faith. However, accuracy is not guaranteed and no warranty nor representation in such regard or in connection with any of the products referred to herein is given and PMexpolimeros declaims all liability accordingly, whether in contract tort or otherwise.