

PA6 GF30 is a 30% glass fiber reinforced nylon 6 compound known for its exceptional stiffness, mechanical strength, and dimensional stability, heat stabilized. It is commonly used as a metal replacement material in demanding industries such as automotive, electrical, industrial machinery, and power tools.

Form		Granules		
Color available		All color		
Processing method		Injecton		
Features		Lubricated	Heat stabilized	
Additive				
Available		Resistant to hydrolysis	Resistant to metals	Colored
According or exceeded	VW TL 50125-PA6-007	BN0214-GF3		
According or exceeded	GMP.PA6.054			
According or exceeded	FORD ESB-M4D354-A1			

Physical properties	ASTM	ISO	Unit	Value
Description	-	1043	-	PA6GF30
Density	D1505	1183	g/cm ³	1.35
Ash content	D2584	3451	%	30
Linear molds shrinkage	D955	294-4	%	0.3 ÷ 0.4
Relative Viscosity (RV) 1% [m/v] in 96% [m/m] sulfuric acid	-	307	-	2.7
Viscosity Number (VN) 0,5% [m/v] in 96% [m/m] sulfuric acid	-	307	ml/g	148
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	D1238	1133	gr/10'	-

Mechanical properties	Dry/Wet			
Tensile strength at yield	D638	527	MPa	-
Tensile strength at break	D638	527	MPa	170/120
Tensile elongation at break	D638	527	%	3.5/4
Tensile modulus	D638	527	MPa	9300/6000
Flexural stress	D790	178	MPa	250/150
Flexural modulus	D790	178	MPa	8000/4500
IZOD impact strength, notched 23°C	-	ISO 180 1eA	kJ/m ²	11/18
IZOD impact strength, notched -30°C	-	ISO 180 1eA	kJ/m ³	-
Charpy impact strength, unnotched 23°C	-	ISO 179 1eA	kJ/m ²	-

Thermal properties				
Vicat Method B50 (50N/50°C)	D1525	306	°C	-
H.D.T. method B (0.45MPa)	D647	75	°C	210
H.D.T. method A (1.82 MPa)	D648	75	°C	205
Aging test (150°C)	-	-	hrs	> 200

Flammability properties	> 200			
Flame rating 1.6 mm	UL 94	UL 94	Class	HB
Flame rating 3.2 mm	UL 94	UL 94	Class	HB
Automotive materials (Thickness >=1 mm)	FMVSS 302	3795	mm/min	< 100

Processing conditons				
Rear temperature	-	-	°C	250 ÷ 255
Middle temperature	-	-	°C	250 ÷ 255
Front temperature	-	-	°C	250 ÷ 255
Nozzle temperature	-	-	°C	250 ÷ 255
Molds temperature	-	-	°C	80 ÷ 90
Injection Pressure	-	-	MPa	3.50 ÷ 12.5
Injection rate	-	-	-	Fast
Back Pressure	-	-	MPa	0.2 ÷ 3
Ejection emperature	-	-	°C	155
Drying (Optional)	-	-	hrs / °C	2 ÷ 4 h - 80°C
Suggested Max Moisture	-	-	%	0.05