Provisional technical datasheet

MEXMID A GF/33 HL BK

PA 66, 33% Glass Fiber Reinforced, Heat Stabilized, Lubricated, Black Color. The slightly higher glass fiber content (33%) further enhances tensile strength, offering marginally better performance in load-bearing applications.

Form		Granules		
Color avalaible		All color		
Processing method		Injecton		
Features		Lubricated	Heat stabilized	
Additive				
According or exceeded	GMP PA66.013			
According or exceeded				
According or exceeded				

Physical properties	ASTM	ISO	Unit	Value
Description	-	1043	-	PA66-GF33
Density	D1505	1183	g/cm^3	1,36
Ash content	D2584	3451	%	33
Linear molds shrinkage	D955	294-4	%	0.2 ÷ 0.6
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	150
Mechanical properties				**Dry/Wet**
Tensile strength at yield	D638	527	MPa	-
Tensile strength at break	D638	527	MPa	140/100
Tensile elongation at break	D638	527	%	2
Tensile modulus	D638	527	MPa	-
Flexural stress	D790	178	MPa	180/120
Flexural modulus	D790	178	MPa	9500/7000
IZOD impact strength, notched 23°C	-	ISO 180 1eA	kJ/m^2	9/14
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	245
H.D.T. method A (1.82 MPa)	D648	75	°C	255
Aging test (150°C)	-	-	hrs	> 200
Flammability properties				
Flame rating 1.6 mm	UL 94	UL 94	Class	HB
Flame rating 3.2 mm	UL 94	UL 94	Class	HB
Automotive materials (Thikness >=1 mm)	FMVSS 302	3795	mm/min	< 100
Processing conditions				
Rear temperature	-	-	°C	280 ÷ 290
Middle temperature	-	-	°C	280 ÷ 290
Front temperature	-	-	°C	280 ÷ 295
Nozzle temperature	-	-	°C	295 ÷ 305
Molds temperature	-	-	°C	80 ÷ 90
Injection Pressure	-	-	MPa	3.50 ÷ 12.5
Injection rate	-	-	-	Fast
Back Pressure	-	-	MPa	0.2 ÷ 3
Ejection emperature	-	-	°C	195
Drying (Optional)	-	-	hrs / °C	2 ÷ 4 h - 80°C
Suggested Max Moisture	-	-	%	0.05