

HiDura™ S3MG30H BK0835

polyamide 610



HiDura S3MG30H BK0835 is a 30% glass fiber reinforced, heat stabilized polyamide 610 with 42% bio-based content for injection molding applications.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer		
Features	• Chemical Resistant	• Oil Resistant	• Solvent Resistant
Agency Rating	• ASTM, D4066 PA0720A4306	• ASTM, D6779 PA0000A4356	• ISO, 1043 PA610 GF30
Appearance	• Black		
Forms	• Pellets		

Physical

	dry	cond.	Unit	Test Standard
Density	1.31	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.6	*	%	
Flow : 23°C, 2.00 mm	0.3	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.4	*	%	
Equilibrium, 23°C, 50% RH	1	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	9100	6800	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	158	120	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	4.4	7.6	%	ISO 527-2
Flexural Modulus (23°C)	8400	6200	MPa	ISO 178
Flexural Strength (23°C)	215	152	MPa	ISO 178
Poisson's Ratio (23°C)	0.38		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	18	20	kJ/m ²	
-30°C	13	13	kJ/m ²	
-40°C	11	12	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	97	102	kJ/m ²	
-30°C	97	87	kJ/m ²	
-40°C	96	87	kJ/m ²	

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Notched Izod Impact Strength				ISO 180/1A
+23°C	16	18	kJ/m²	
-30°C	13	13	kJ/m²	
-40°C	12	12	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	197	193	°C	
0.45 MPa, Unannealed	219	216	°C	
Melting Temperature	225	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	21	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	120	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	32	29	kV/mm	IEC 60243

Injection	Value	Unit
Drying Temperature	≥ 80	°C
Drying Time	≥ 4	h
Rear Temperature	245 - 275	°C
Middle Temperature	265 - 290	°C
Front Temperature	270 - 300	°C
Nozzle temperature	275 - 305	°C
Processing (Melt) Temperature	255 - 300	°C
Mold Temperature	70 - 100	°C

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