

HiDura™ D1MG33H NT0863

polyamide 612



HiDura D1MG33H NT0863 is a heat stabilized, 33% glass filled PA612 designed for injection molding applications.

General

Regional Availability	• North America • South and Central America	• Europe • Near East/Africa	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Lubricated	• Good Colorability • Medium-High Viscosity	• Heat Stabilized
Agency Rating	• ASTM, D4066 PA0620A4346	• ASTM, D6779 PA0520A4346	• ISO, 1043 PA612 GF33
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.32	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	0.7	*	%	
Flow : 23°C, 2.00 mm	0.3	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.3	*	%	
Equilibrium, 23°C, 50% RH	0.8	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	9600	8600	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	172	141	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	4.3	5.4	%	ISO 527-2
Flexural Modulus (23°C)	9700	8200	MPa	ISO 178
Flexural Strength (23°C)	249	193	MPa	ISO 178
Poisson's Ratio (23°C)	0.39		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	16	17	kJ/m ²	
-30°C	12	12	kJ/m ²	
-40°C	12	11	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	95	90	kJ/m ²	

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-30°C	94	85	kJ/m²	
-40°C	83	81	kJ/m²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	17	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	193	193	°C	
0.45 MPa, Unannealed	213	211	°C	
Melting Temperature	218	*	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C, 2.00 mm	20	*	E-6/K	
Transverse : 23 to 55°C, 2.00 mm	113	*	E-6/K	

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	32	30	kV/mm	IEC 60243

Injection	Value	Unit
Drying Temperature	80 - 100	°C
Drying Time	4 - 6	h
Suggested Max Regrind	30	%
Suggested Max Moisture	0.15	%
Processing (Melt) Temperature	235 - 290	°C
Mold Temperature	50 - 90	°C

HiDURA™