HiDura™ D1MG33H NT0863

Ascend Performance Materials Operations LLC - *Polyamide 612*

General Information

Product Description			
HiDura D1MG33H NT0863 is a heat stabilized, 33% glass filled PA612 designed for injection molding applications.			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Features	• Chemical Resistant • Good Colorability	• Heat Stabilized • Lubricated	• Medium-high Viscosity
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA612-GF33		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.32	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.70	--	%	
Flow : 73°F, 0.0787 in	0.30	--	%	
Water Absorption (24 hr, 73°F)	0.30	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.80	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.39E+6	1.25E+6	psi	ISO 527-1
Tensile Stress (Break, 73°F)	24900	20500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.3	5.4	%	ISO 527-2
Flexural Modulus (73°F)	1.41E+6	1.19E+6	psi	ISO 178
Flexural Stress (73°F)	36100	28000	psi	ISO 178
Poisson's Ratio (73°F)	0.39	--		ISO 527-2
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	5.7	5.2	ft·lb/in²	
-22°F	5.7	5.7	ft·lb/in²	
73°F	7.6	8.1	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	39	39	ft·lb/in²	
-22°F	45	40	ft·lb/in²	
73°F	45	43	ft·lb/in²	
Notched Izod Impact Strength				ISO 180/1A
-40°F	5.7	5.7	ft·lb/in²	
-22°F	6.2	6.2	ft·lb/in²	
73°F	8.1	8.6	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	415	412	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	379	379	°F	ISO 75-2/A
Melting Temperature	424	--	°F	ISO 11357-3

CLTE - Flow (73 to 131°F, 0.0787 in)	1.1E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	6.3E-5	--	in/in/°F	ISO 11359-2

Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	810	760	V/mil	IEC 60243-1

Processing Information

Injection	Dry	Unit
Drying Temperature	176 to 212	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.15	%
Suggested Max Regrind	30	%
Processing (Melt) Temp	455 to 554	°F
Mold Temperature	122 to 194	°F

Notes

[1] Typical properties: these are not to be construed as specifications.