



Amilan™ U127G X07

Toray Industries, Inc. - Polyamide 6

General Information

Product Description

GF35%

General

Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Features	• Chemical Resistant • High Impact Resistance	• High Strength • High Toughness	
Uses	• Appliance Components • Automotive Applications • Construction Applications	• Electrical/Electronic Applications • Office Automation Equipment • Sporting Goods	• White Goods & Small Appliances
Processing Method	• Injection Molding		
ISO Designation	• >PA6-I-GF35<		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density (73°F)	1.35	--	g/cm ³	ISO 1183
Molding Shrinkage - Flow ² (0.118 in)	0.20 to 0.80	--	%	Internal Method
Water Absorption ³ (24 hr, 73°F)	0.60	--	%	ISO 62
Water Absorption ³ Saturation, 73°F	5.0	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Stress (73°F)	21800	14500	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.5	7.0	%	ISO 527-2
Flexural Modulus (73°F)	1.15E+6	638000	psi	ISO 178
Flexural Stress (73°F)	30500	17400	psi	ISO 178
Taber Abrasion Resistance 1000 Cycles	13.0	--	mg	ISO 9352
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength 73°F	14	19	ft·lb/in ²	ISO 179
Charpy Unnotched Impact Strength 73°F	57	76	ft·lb/in ²	ISO 179
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness R-Scale, 73°F	115	--		ISO 2039-2
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	410	--	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	383	--	°F	ISO 75-2/A
Melting Temperature	437	--	°F	DSC
Coefficient of Linear Thermal Expansion	4	--	cm ⁻⁵ /cm/°C	ISO 11359-2

Additional Information

Dry	Water absorption Moisture Content 1.6%
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