

Amilan™ EA1R21G-33

Toray Industries, Inc. - Polyamide 6

General Information

Product Description

Recycled 20%, GF33%

General

Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Recycled Content	• Yes, 20%
Features	• Chemical Resistant • High Strength
Uses	• Construction Applications • Household Goods • Power/Other Tools
Processing Method	• Injection Molding
ISO Designation	• >PA6-GF33<

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.38	g/cm ³	ISO 1183
Molding Shrinkage ²			Internal Method
Across Flow : 0.118 in	0.50 to 0.80	%	
Flow : 0.118 in	0.20 to 0.40	%	
Water Absorption ³ (24 hr, 73°F)	1.0	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	27800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	3.8	%	ISO 527-2
Flexural Modulus (73°F)	1.29E+6	psi	ISO 178
Flexural Stress (73°F)	38600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	8.9	ft-lb/in ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	435	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	419	°F	ISO 75-2/A
Melting Temperature	437	°F	DSC
Specific Heat	0.382	Btu/lb/°F	
Thermal Conductivity	2.8	Btu-in/hr/ft ² /°F	
Coefficient of Linear Thermal Expansion	2 to 3	cm [^] -5/cm/°C	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating ⁴ (Equivalent)	HB		Internal Method

Notes

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

² 80x80x3mm

³ in water

⁴ UL94