

# Amilan™ U118G-40

Toray Industries, Inc. - Polyamide 6

## General Information

### Product Description

High impact

### General

Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Features	• Chemical Resistant • High Impact Resistance
Uses	• Automotive Applications
Processing Method	• Injection Molding
ISO Designation	• >PA6-I-GF40<

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.43	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage - Flow <sup>2</sup> (0.118 in)	0.30 to 0.80	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	26800	psi	ISO 527-2
Tensile Strain (Break, 73°F)	4.0	%	ISO 527-2
Flexural Modulus (73°F)	1.60E+6	psi	ISO 178
Flexural Stress (73°F)	40600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	12	ft·lb/in <sup>2</sup>	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	410	°F	ISO 75-2/A
Melting Temperature	437	°F	DSC
Coefficient of Linear Thermal Expansion	2	cm <sup>^</sup> -5/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms·cm	IEC 60093

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 80x80x3mm