

# Amilan™ S133

Toray Industries, Inc. - Polyamide 6

## General Information

### Product Description

Super high impact, Nano-Alloy

### General

Features	<ul style="list-style-type: none"> <li>• Chemical Resistant</li> </ul>	<ul style="list-style-type: none"> <li>• High Impact Resistance</li> </ul>	<ul style="list-style-type: none"> <li>• High Toughness</li> </ul>
Uses	<ul style="list-style-type: none"> <li>• Connectors</li> <li>• Fiber Optic Cable</li> </ul>	<ul style="list-style-type: none"> <li>• Luggage</li> <li>• Rubber Replacement</li> </ul>	<ul style="list-style-type: none"> <li>• Sporting Goods</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>• Extrusion</li> </ul>	<ul style="list-style-type: none"> <li>• Injection Molding</li> </ul>	<ul style="list-style-type: none"> <li>• Sheet Extrusion</li> </ul>
ISO Designation	<ul style="list-style-type: none"> <li>• &gt;PA6-I&lt;</li> </ul>		

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density (73°F)	1.07	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup> (0.118 in)	1.0 to 1.3	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (73°F)	6530	psi	ISO 527-2
Tensile Strain (Break, 73°F)	> 50	%	ISO 527-2
Flexural Modulus (73°F)	218000	psi	ISO 178
Flexural Stress (73°F)	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	50	ft·lb/in <sup>2</sup>	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 73°F)	100		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	185	°F	ISO 75-2/B
Deflection Temperature Under Load 264 psi, Unannealed	122	°F	ISO 75-2/A
Melting Temperature	437	°F	DSC

### Notes

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

<sup>2</sup> 80x80x3mm