

Amilan® U320

Nylon 66

TECHNICAL DATA

Product Description

Type:

- Nylon66/High impact

Features:

- High impact

Features

- High Impact Resistance

Uses

- Appliance Components
- Automotive Applications
- Automotive Electronics
- Construction Applications
- Electrical/Electronic Applications
- Office Automation Equipment
- Rubber Replacement
- Safety Equipment
- Sporting Goods
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PA66-I<

ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.09	--	g/cm³	ISO 1183
Molding Shrinkage - Across Flow ¹ (3.00 mm)	1.2 to 1.5	--	%	Internal Method
Water Absorption				ISO 62
24 hr, 23°C	1.1	--	%	
Saturation, 23°C	6.0	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
-40°C	100	92.0	MPa	
23°C	60.0	43.0	MPa	
Tensile Strain				ISO 527-2
Break, -40°C	5.5	8.5	%	
Break, 23°C	30	50	%	
Flexural Modulus				ISO 178
-40°C	2.60	2.60	GPa	
23°C	2.00	0.800	GPa	
Flexural Stress				ISO 178
-40°C	115	110	MPa	
23°C	75.0	40.0	MPa	
Taber Abrasion Resistance				ISO 9352
1000 Cycles	7.00 to 8.00	--	mg	
Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	14	20	kJ/m²	
23°C	22	57	kJ/m²	
Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness				ISO 2039-2
R-Scale, 80°C	114	--		

Thermal	Dry	Water Absorption	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	180	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	60.0	--	°C	ISO 75-2/A
Melting Temperature	265	--	°C	DSC
CLTE - Flow	10 to 11	--	cm ³ /cm ³ /°C	ISO 11359-2
Additional Information				
Dry	Water absorption Moisture Content 2.5%			

Notes

¹ 80x80x3mm

Toray Industries, Inc.

