

Amilan™ CM3001R

Nylon 66

TECHNICAL DATA

Product Description

Low warpage, Mineral filler reinforced

Uses

- Appliance Components
- Automotive Applications
- Automotive Exterior Parts
- Automotive Interior Parts
- Construction Applications
- Electrical/Electronic Applications
- Office Automation Equipment
- Power/Other Tools
- Sporting Goods
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PA66-MD40<

Type

- Nylon66/Reinforced

ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.51	--	g/cm ³	ISO 1183
Molding Shrinkage ¹				Internal Method
Across Flow : 3.00 mm	1.00 to 1.40	--	%	
Flow : 3.00 mm	0.70 to 1.00	--	%	
Water Absorption ²				ISO 62
24 hr, 23°C	0.60	--	%	
Saturation, 23°C	5.1	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
-40°C	120	--	MPa	
23°C	95	70	MPa	
80°C	40	--	MPa	
Tensile Strain				ISO 527-2
Break, -40°C	3.0	--	%	
Break, 23°C	3.5	5.0	%	
Break, 80°C	5.0	--	%	
Flexural Modulus				ISO 178
-40°C	6200	--	MPa	
23°C	5800	3000	MPa	
80°C	2000	--	MPa	
Flexural Stress				ISO 178
-40°C	185	--	MPa	
23°C	155	100	MPa	
80°C	65	--	MPa	
Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
23°C	5.5	--	kJ/m ²	
Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness				ISO 2039-2
M-Scale, 23°C	83	--		
R-Scale, 23°C	120	--		



Thermal	Dry	Water Absorption	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	243	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	185	--	°C	ISO 75-2/A
Melting Temperature	265	--	°C	DSC
Flammability	Dry	Water Absorption	Unit	Test Method
Flame Rating ³ (Equivalent)	HB	HB		Internal Method
Additional Information				
Dry	Water absorption Moisture Content 1.2%			

Notes

¹ 80x80x3mm

² in water

³ UL94

Toray Industries, Inc.

