

Amilan™ CM1014-V0

Nylon 6

TECHNICAL DATA

Product Description

Unreinforced, Non-halogen

Uses

- Appliances
- Camera Applications
- Cell Phones
- Communication Applications
- Computer Components
- Connectors
- Displays
- Electrical Housing
- Electrical/Electronic Applications
- Insulation
- Lighting Applications
- Office Automation Equipment
- Printer
- Switches
- Video Equipment
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PA6-FR(30)<

Type

- Nylon6/Flame retardant

ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.18	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
1.00 mm ¹	0.40 to 0.80	--	%	
3.00 mm ²	1.00 to 1.30	--	%	
Water Absorption ³				ISO 62
24 hr, 23°C	1.7	--	%	
Saturation, 23°C	9.5	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
23°C	80	45	MPa	
80°C	40	--	MPa	
Tensile Strain				ISO 527-2
Break, 23°C	7.5	37	%	
Break, 80°C	56	--	%	
Flexural Modulus				ISO 178
23°C	3500	1200	MPa	
80°C	1000	--	MPa	
Flexural Stress				ISO 178
-40°C	150	--	MPa	
23°C	115	45	MPa	
80°C	55	--	MPa	
Taber Abrasion Resistance				ISO 9352
1000 Cycles	5 to 6	--	mg	
Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	3.5	--	kJ/m ²	
23°C	4.5	21.5	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179
23°C	120.0 kJ/m ²	No Break		

Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness R-Scale, 23°C	120	--		ISO 2039-2
Thermal	Dry	Water Absorption	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	207	--	°C	ISO 75-2/B
Melting Temperature	225	--	°C	DSC
Electrical	Dry	Water Absorption	Unit	Test Method
Volume Resistivity	1.0E+13	--	ohms·m	IEC 60093
Electric Strength	30	--	kV/mm	IEC 60243-1
Dielectric Constant 23°C, 1 MHz	5.2	--		IEC 60250
Dissipation Factor (23°C, 1 MHz)	0.080	--		IEC 60250
Arc Resistance	120	--	sec	UL 746
Comparative Tracking Index (CTI)	> 600	--	V	UL 746A
Flammability	Dry	Water Absorption	Unit	Test Method
Flame Rating (0.71 mm)	V-0	V-0		UL 94

Additional Information

Dry Water absorption Moisture Content 3.0%

Notes

¹ 80x80x1mm

² 80x80x3mm

³ in water

Toray Industries, Inc.

