

Amilan™ CM1056

Nylon 6

TECHNICAL DATA

Product Description

High viscosity, High impact

Uses

- Automotive Applications
- Bottles
- Blow Molding Applications
- Tubing

Processing Method

- Blow Molding

ISO Designation

- >PA6-I<

Type

- Nylon6/Blow molding

ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.09	--	g/cm³	ISO 1183
Water Absorption ¹				ISO 62
24 hr, 23°C	1.7	--	%	
Saturation, 23°C	8.0	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
-40°C	105	95	MPa	
23°C	60	35	MPa	
80°C	25	20	MPa	
Tensile Strain				ISO 527-2
Break, -40°C	3.5	1.0	%	
Break, 23°C	> 50	> 50	%	
Break, 80°C	> 50	> 50	%	
Flexural Modulus				ISO 178
-40°C	2900	--	MPa	
23°C	2100	700	MPa	
80°C	500	--	MPa	
Flexural Stress				ISO 178
-40°C	130	--	MPa	
23°C	80	--	MPa	
Taber Abrasion Resistance				ISO 9352
1000 Cycles	6 to 7	--	mg	
Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	13.5	--	kJ/m²	
23°C	16.0	54.0	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179
23°C	No Break	--		
Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness				ISO 2039-2
R-Scale, 23°C	114	--		



Thermal	Dry	Water Absorption	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	160	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	51	--	°C	ISO 75-2/A
Melting Temperature	225	--	°C	DSC
Coefficient of Linear Thermal Expansion	8 to 9	--	cm ³ -5/cm/°C	ISO 11359-2

Additional Information

Dry Water absorption Moisture Content 3.0%

Notes

¹ in water

Toray Industries, Inc.

