

Amilan™ CM3211G-35 UB1

Nylon 610+Nylon 66

TECHNICAL DATA

Product Description

Calcium chloride resistance, GF35%

Uses

- Automotive Applications
- Automotive Under the Hood
- Connectors
- Tanks

Processing Method

- Injection Molding

ISO Designation

- >PA66+PA610-GF35<

Type

- Nylon66/Reinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.36	g/cm ³	ISO 1183
Molding Shrinkage ¹			Internal Method
Across Flow : 3.00 mm	0.50 to 0.80	%	
Flow : 3.00 mm	0.20 to 0.40	%	
Water Absorption ²			ISO 62
24 hr, 23°C	0.40	%	
Saturation, 23°C	3.0	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ISO 527-2
-40°C	280	MPa	
23°C	195	MPa	
80°C	120	MPa	
Tensile Strain			ISO 527-2
Break, -40°C	3.0	%	
Break, 23°C	3.0	%	
Break, 80°C	5.0	%	
Flexural Modulus			ISO 178
-40°C	11000	MPa	
23°C	9500	MPa	
80°C	4800	MPa	
Flexural Stress			ISO 178
-40°C	370	MPa	
23°C	290	MPa	
80°C	160	MPa	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-40°C	10.0	kJ/m ²	
23°C	13.5	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-40°C	89.0	kJ/m ²	
23°C	94.5	kJ/m ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ISO 2039-2
M-Scale, 23°C	93		
R-Scale, 23°C	120		



Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	228	°C	ISO 75-2/B
1.8 MPa, Unannealed	225	°C	ISO 75-2/A
Melting Temperature	265	°C	DSC
Thermal Conductivity	0.42	W/m/K	
Coefficient of Linear Thermal Expansion	2 to 3	cm ⁻⁵ /cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+13	ohms·m	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating ³ (1.6 mm, Equivalent)	HB		Internal Method

Notes

¹ 80x80x3mm

² in water

³ UL94

Toray Industries, Inc.

