

Torelina™ A400M D1 PPS

TECHNICAL DATA

Product Description

High filler, High stiffness, High toughness

Uses	- Automotive Applications - Automotive Electronics - Automotive Under the Hood
Processing Method	Injection Molding
ISO Designation	>PPS-(GF+MD)55<
Type	PPS/GF+Mineral filler reinforced

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.82	g/cm ³	ISO 1183
Spiral Flow ¹	115	mm	Internal Method
Molding Shrinkage ²			Internal Method
Across Flow : 3.00 mm	0.75	%	
Flow : 3.00 mm	0.16	%	
Water Absorption ³ (24 hr, 23°C)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (23°C)	165	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	1.2	%	ISO 527-2
Flexural Modulus (23°C)	18500	MPa	ISO 178
Flexural Stress (23°C)	255	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	7.5	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	30.0	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	122		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	> 260	°C	ISO 75-2/A
Melting Temperature	278	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow	1.8	cm ³ -5/cm/°C	
Transverse	3.0	cm ³ -5/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+14	ohms·m	IEC 60093
Electric Strength	22	kV/mm	IEC 60243-1
Dielectric Constant (23°C, 1 MHz)	4.9		IEC 60250
Dissipation Factor (23°C, 1 MHz)	0.002		IEC 60250
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.36 mm)	V-0		UL 94

Toray Industries, Inc.

