

Torlon® 4203L

(PAI+PTFE)

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.0072	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	4480	MPa	ASTM D 638
Tensile Strength	152	MPa	ASTM D 638
Elongation at Break	7.6	%	ASTM D 638
Compressive Modulus	4000	MPa	ASTM D 695
Compressive Strength	221	MPa	ASTM D 695
Flexural Modulus	5033	MPa	ASTM D 790
Flexural Strength	241	MPa	ASTM D 790
Izod Impact notched, 1/8 in	140	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	1100	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
DTUL @ 264 psi	278	°C	ASTM D 648
Thermal Conductivity, solid state	0.0375	W/(m K)	ASTM C 177

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	23	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.026	-	ASTM D 150
Dissipation Factor, 1 MHz	0.031	-	ASTM D 150
Dielectric Constant, 60 Hz	4.2	-	ASTM D 150
Dielectric Constant, 1 MHz	3.9	-	ASTM D 150
Surface Resistivity	>1E15	Ohm	ASTM D 257
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.33	%	ASTM D 570
Density	1420	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	177	°C	-
Pre-drying - Time	3	h	-
Processing humidity	≤0.05	%	-
Mold temperature	199 - 216	°C	-
Zone 1	304	°C	-
Nozzle temperature	371	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	6.89	MPa	-

Characteristics**Processing**

Injection Molding, Profile Extrusion

Delivery form

Pellets

Additives

Lubricants

Features

Creep Resistance, Ductile, Fatigue Resistance

Chemical Resistance

General Chemical Resistance

Applications

Aircraft and Aerospace, Automotive, Electrical and Electronical

Special Characteristics

Flame retardant, High impact or impact modified, Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa