Torlon® 4435

PAI — Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.0014**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	**14500**	MPa	ASTM D 638
Tensile Strength	**94**	MPa	ASTM D 638
Elongation at Break	**1**	%	ASTM D 638
Compressive Modulus	**8550**	MPa	ASTM D 695
Compressive Strength	**138**	MPa	ASTM D 695
Flexural Modulus	**14500**	MPa	ASTM D 790
Flexural Strength	**152**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**42.7**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**220**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Coefficient of Thermal Expansion, MD	**14**	E-6/K	ASTM D 696
DTUL @ 264 psi	**278**	°C	ASTM D 648
Thermal Conductivity, solid state	**0.117**	W/(m K)	ASTM C 177

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**6E6**	Ohm	ASTM D 257
Volume Resistivity	**2E7**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	**0.12**	%	ASTM D 570
Density	**1590**	kg/m³	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

Special Characteristics
Anti-static, Flame retardant, Heat stabilized or stable to heat

Features
Creep Resistance, Tribologic Grade

Chemical Resistance
General Chemical Resistance

Applications
Aircraft and Aerospace, Automotive

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