

Delrin® FG100 NC010

POM

Delrin

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	1.9	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Melt flow index, MFI	2.3	g/10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	1.9	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3000	MPa	ISO 527
Yield stress	71	MPa	ISO 527
Yield strain	25	%	ISO 527
Nominal strain at break	45	%	ISO 527
Flexural modulus, 23°C	2700	MPa	ISO 178
Tensile creep modulus, 1h	2900	MPa	ISO 899-1
Tensile creep modulus, 1000h	1600	MPa	ISO 899-1
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	11	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	178	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	98	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	165	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110	E-6/K	ISO 11359-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-

Other properties	Value	Unit	Test Standard
Water absorption	0.9	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1420	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	210 - 220	°C	-
Mold temperature	80 - 100	°C	-
Holding pressure	90 - 110	MPa	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.2	%	-
Melt temperature	195 - 205	°C	-

Characteristics**Processing**

Injection Molding, Other Extrusion

Chemical Resistance

General Chemical Resistance, Solvent Resistance

Delivery form

Natural Color

Certifications

Food contact

Special Characteristics

High impact or impact modified

Applications

Automotive, Electrical and Electronical, Sports Equipment

Features

Fatigue Resistance, Homopolymer

Regional Availability

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