

Delrin® 51HSE NC010

POM

Delrin

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	1.2	g/10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.3	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3000	MPa	ISO 527
Yield stress	73	MPa	ISO 527
Yield strain	26	%	ISO 527
Nominal strain at break	36	%	ISO 527
Stress at break	71	MPa	ISO 527
Strain at break	>50	%	ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	300	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	8	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	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	99	°C	ISO 75-1/-2
Burning rate, FMVSS, Thickness 1 mm	80	mm/min	ISO 3795 (FMVSS 302)

Other properties	Value	Unit	Test Standard
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	≤0.2	%	-
Melt temperature	205 - 215	°C	-
Mold temperature	80 - 120	°C	-
Holding pressure	90 - 110	MPa	-

Processing Recommendation Extrusion	Value	Unit	Test Standard
Pre-drying - Temperature	75 - 85	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.2	%	-
Melt temperature	195 - 205	°C	-

Characteristics**Processing**

Injection Molding, Other Extrusion

Delivery form

Natural Color

Special Characteristics

High impact or impact modified

Chemical Resistance

General Chemical Resistance, Solvent Resistance

Applications

Automotive, Electrical and Electronical, Sports Equipment

Regional Availability

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

Features

Creep Resistance, Fatigue Resistance, Low Emission, Nucleated, Homopolymer