

## DuPont Mobility and Materials Delrin® SC699 NC010 POM (discontinued \*\*)



Categories: [Polymer](#); [Thermoplastic](#); [Acetal \(Polyoxymethylene, POM\)](#)

**Material Notes:** Silicone Lubricated Low Viscosity Acetal Homopolymer with Low Wear and Low Friction Developed for the Healthcare Industry

Information provided by DuPont; The Delrin product line was sold by DuPont in 2023 but this specific grade was discontinued prior to the sale

**Vendors:** No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.40 g/cc	0.0506 lb/in <sup>3</sup>	ISO 1183
Water Absorption	1.0 % @Thickness 2.00 mm	1.0 % @Thickness 0.0787 in	Sim. to ISO 62
Moisture Absorption	0.240 % @Thickness 2.00 mm	0.240 % @Thickness 0.0787 in	Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.019 cm/cm	0.019 in/in	ISO 294-4, 2577
Linear Mold Shrinkage, Transverse	0.018 cm/cm	0.018 in/in	ISO 294-4, 2577
Melt Flow	25 g/10 min 21 g/10 min @Load 2.16 kg, Temperature 190 °C	25 g/10 min 21 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133 cm <sup>3</sup> /10min Volumetric Rate; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	91	91	ISO 2039-2
Hardness, Rockwell R	119	119	ISO 2039-2
Tensile Strength, Yield	63.0 MPa	9140 psi	ISO 527-1/-2
Elongation at Break	30 %	30 %	ISO 527-1/-2
Elongation at Yield	15 %	15 %	ISO 527-1/-2
Tensile Modulus	3.10 GPa	450 ksi	ISO 527-1/-2
Flexural Yield Strength	82.0 MPa @Strain 3.5 %	11900 psi @Strain 3.5 %	ISO 178
Flexural Modulus	3.00 GPa	435 ksi	ISO 178
Poissons Ratio	0.37	0.37	ISO 527-1/-2
Charpy Impact Unnotched 	16.0 J/cm <sup>2</sup> @Temperature 23.0 °C	76.1 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eU
	17.5 J/cm <sup>2</sup> @Temperature -30.0 °C	83.3 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched 	0.650 J/cm <sup>2</sup> @Temperature 23.0 °C	3.09 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eA
	0.750 J/cm <sup>2</sup> @Temperature -30.0 °C	3.57 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eA
Coefficient of Friction, Dynamic	0.10	0.10	1h against itself; ASTM 1894

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 µm/m-°C	55.6 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	105 µm/m-°C	58.3 µin/in-°F	ISO 11359-1/-2
Melting Point	178 °C	352 °F	10°C/min; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	160 °C	320 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75-1/-2
Flame Spread	28.0 mm/min @Thickness 1.00 mm	1.10 in/min @Thickness 0.0394 in	ISO 3795 (FMVSS 302)


Processing Properties	Metric	English	Comments
Melt Temperature	210 - 220 °C 215 °C	410 - 428 °F 419 °F	Injection Injection Optimum
Mold Temperature	80.0 - 100 °C 90.0 °C	176 - 212 °F 194 °F	Injection Injection Optimum
Drying Temperature	80.0 °C	176 °F	Injection
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	Dehumidified Dryer; Injection
Moisture Content	0.050 %	0.050 %	Injection

Hold Pressure	<a href="#">80.0</a> - <a href="#">100</a> MPa	<a href="#">11600</a> - <a href="#">14200</a> psi	Injection
Annealing Temperature	<a href="#">160</a> °C	<a href="#">320</a> °F	Injection

### Descriptive Properties

Additives	Lubricants	
	Release agent	
Annealing time	30 min/mm	Injection - Optional
Delivery form	Pellets	
Drying Recommended	yes	Injection
Hold pressure time (s/mm)	8	Injection
Part Marking Code	POM	ISO 11469
Processing	Injection Molding	
Resin Identification	POM	ISO 1043

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Materials flagged as discontinued (  ) are no longer part of the manufacturer's standard product line according to our latest information. These materials may be available by special order, in distribution inventory, or reinstated as an active product. Data sheets from materials that are no longer available remain in MatWeb to assist users in finding replacement materials.

Users of our Advanced Search (registration required) may exclude discontinued materials from search results.

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