

Product Texts

Common features of Delrin® acetal resins include mechanical and physical properties such as high mechanical strength and rigidity, excellent fatigue and impact resistance, as well as resistance to moisture, gasoline, lubricants, solvents, and many other neutral chemicals. Delrin® acetal resins also have excellent dimensional stability and good electrical insulating characteristics. They are naturally resilient, self-lubricating, and available in a variety of colors and speciality grades.

Delrin® acetal resin typically is used in demanding applications in the automotive, domestic appliances, sports, industrial engineering, electronics, and consumer goods industries.

Delrin® SC655 is a medium viscosity acetal homopolymer, developed for parts requiring high precision molding in the healthcare industry.

SPECIAL CONTROL for HEALTHCARE APPLICATIONS

This product is manufactured according to Good Manufacturing Practice (GMP) principles and generally accepted in food contact applications in Europe and the USA when meeting applicable use conditions. This product is also tested against ISO 10993-5 and -11 and selected parts of USP Class VI. For details, individual compliance statements are available from your DuPont representative.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	13	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	2.16	kg	-
^[C] Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.9	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	3100	MPa	ISO 527
^[C] Yield stress	71	MPa	ISO 527
^[C] Yield strain	17	%	ISO 527
^[C] Nominal strain at break	30	%	ISO 527
^[C] Tensile creep modulus, 1h	2800	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	1600	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	300	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	280	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	9	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA
^[C] Puncture - maximum force, +23°C	2000	N	ISO 6603-2
^[C] Puncture energy, +23°C	3	J	ISO 6603-2

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	178	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	95	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	160	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	155	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	110	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
^[C] Relative permittivity, 100Hz	3.8	-	IEC 62631-2-1
^[C] Relative permittivity, 1MHz	3.8	-	IEC 62631-2-1
^[C] Dissipation factor, 100Hz	90	E-4	IEC 62631-2-1
^[C] Dissipation factor, 1MHz	55	E-4	IEC 62631-2-1
^[C] Volume resistivity	2E12	Ohm*m	IEC 62631-3-1
^[C] Surface resistivity	4E14	Ohm	IEC 62631-3-2
^[C] Electric strength	44	kV/mm	IEC 60243-1

Delrin® SC655 NC010

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[C] Comparative tracking index **600** - IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Water absorption	1.4	%	Sim. to ISO 62
[C] Humidity absorption	0.3	%	Sim. to ISO 62
[C] Density	1420	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Delivery form

Pellets, Natural Color

Additives

Lubricants, Release agent

Features

Homopolymer

Regional Availability

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