

Product Text

Common features of Delrin® acetal resin 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 colours and speciality grades.

The good melt stability of Delrin® acetal resin normally enables the recycling of properly handled production waste. If recycling is not possible, DuPont recommends, as the preferred option, incineration with energy recovery (-17 kJ/g of base polymer) in appropriately equipped installations. For disposal, local regulations have to be observed.

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

Delrin® 911AL is a unreinforced polyacetal homopolymer for injection molding. It has low wear / low friction.

Rheological properties	Value	Unit	Test Standard
CAMPUS/ISO Data			
Melt volume-flow rate	20	cm ³ /10min	ISO 1133
Temperature	190	°C	ISO 1133
Load	2.16	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
CAMPUS/ISO Data			
Tensile Modulus	3200	MPa	ISO 527-1/-2
Yield stress	70	MPa	ISO 527-1/-2
Yield strain	9	%	ISO 527-1/-2
Nominal strain at break	22	%	ISO 527-1/-2
Charpy notched impact strength (+23°C)	6	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
CAMPUS/ISO Data			
Melting temperature (10°C/min)	178	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	100	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	160	°C	ISO 75-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
UL recognition	UL	-	-
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.0	mm	IEC 60695-11-10
UL recognition	UL	-	-

Thermal properties	Value	Unit	Test Standard
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	1.5	mm	-

Characteristic

Regional Availability

[North America](#), [Europe](#), [Asia Pacific](#), [South and Central America](#), [Near East/Africa](#), [India](#)

Processing

Injection Molding

Delivery Form

Pellets

Additives

Release agent

Additional Information acc. to PLASPEC Global

Color

Natural Color

Processing

Injection Molding

PREPROCESSING

Drying Temperature = 80°C

Drying Time, Dehumidified Dryer = 2-4h

Processing Moisture Content = <0.2 %

PROCESSING

Melt Temperature Optimum = 215°C

Melt Temperature Range = 210-220°C

Mold Temperature Optimum = 90°C

Mold Temperature Range = 80-100°C

Hold pressure range = 80-100 MPa

Hold pressure time = 8-10 s/mm