

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® RA500CPE is a medium viscosity acetal homopolymer with very low VOC emissions for applications in automotive interiors, reduced lifecycle greenhouse gas emissions and lower fossil resource. Delrin® RA500CPE provides good mechanical performances with improved processing, thermal stability and productivity for injection molding.

Delrin® Renewable Attributed base polymer is produced from 100% bio-feedstock from waste*. 100% certified renewable electricity is used for its production.

This approach helps customers in achieving their sustainability goals.

* according to ISCC Plus mass balance certification.

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	72	MPa	ISO 527
^[C] Yield strain	18	%	ISO 527
^[C] Nominal strain at break	33	%	ISO 527
^[C] Charpy impact strength, +23°C	250	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	340	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA

[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	97	°C	ISO 75-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1420	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics**Processing**

Injection Molding

Certifications

Contains renewable resources, ISCC Plus

Delivery form

Pellets, Natural Color

Applications

Automotive

Additives

Release agent

Regional Availability

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

Features

Low Emission, Thermal Stability, Homopolymer

Other text information**Injection molding**

Drying is recommended, but not necessary for newly opened packaging stored in a dry location.

Follow the drying guidelines above in the following cases:

- If moisture is above the Processing Moisture Content recommendation,
- When a resin container is damaged,
- When the material is not properly stored in a dry place at room temperature, or
- When packaging stays open for a significant time.