

DuPont™ Delrin® PC650 NC010

ACETAL RESIN

Product Information

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® PC650 is a medium viscosity acetal homopolymer, developed for parts requiring high precision molding in the healthcare industry.

PREMIUM 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 and US FDA drug and device master files (DMF and MAF) have been established. For details, individual compliance statements are available from your DuPont representative.

The below datasheet is a condensed version. For a complete datasheet, please contact your DuPont representative.

General information	Value	Unit	Test Standard
Resin Identification	POM	-	ISO 1043
Part Marking Code	POM	-	ISO 11469
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	3100	MPa	ISO 527-1/-2
Yield stress	71	MPa	ISO 527-1/-2
Yield strain	17	%	ISO 527-1/-2
Nominal strain at break	30	%	ISO 527-1/-2
Charpy notched impact strength, 73 °F	9	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature, 18 °F/min	178	°C	ISO 11357-1/-3
Other properties	Value	Unit	Test Standard
Density	1420	kg/m ³	ISO 1183
VDA Properties	Value	Unit	Test Standard
Emissions	<8	mg/kg	VDA 275
Fogging, G-value (condensate)	0.35	mg	ISO 6452
Injection	Value	Unit	Test Standard
Annealing time, optional	30	min/mm	-
Annealing temperature	160	°C	-

Characteristics

Processing	• Injection Molding
Delivery form	• Pellets
Additives	• Lubricants • Release agent

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 160 mil (Hytrel® measured at 80 mil), IEC Electrical properties measured at 80 mil, all ASTM properties measured at 120 mil, and test temperatures are 73 °F unless otherwise stated.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents. Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your DuPont customer representative and read Medical Caution H-50103-5.

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

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