

DuPont™ Delrin® PC690 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® PC690 is a low viscosity acetal homopolymer, developed for thin-walled 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 | 3300 | MPa | ISO 527-1/-2 |
| Yield stress | 71 | MPa | ISO 527-1/-2 |
| Yield strain | 12 | % | ISO 527-1/-2 |
| Nominal strain at break | 23 | % | ISO 527-1/-2 |
| Charpy notched impact strength, 73 °F | 8 | 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) | 0.2 | mg | ISO 6452 |

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 (Hytre® 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.

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