Delrin® 1700SL NC010 ACETAL RESIN

Product Description

Delrin® 1700SL is a very high flow acetal homopolymer with special lubricants for applications requiring extremely low coefficient of friction against itself and other plastics. It provides dimensional stability for precision parts.

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|---------------------------------------|--|--|--|--|--|--|
| General | | | | | | |
| Material Status | Commercial: Active | | | | | |
| Availability | Asia Pacific Europe North America | | | | | |
| Additive | Lubricant | | | | | |
| Features | Good Wear Resistance Homopolymer Low Viscosity | | | | | |
| RoHS Compliance | Contact Manufacturer | | | | | |
| Appearance | Natural Color | | | | | |
| Part Marking Code (ISO 11469) | • >POM-S< | | | | | |
| Resin ID (ISO 1043) | • POM-S | | | | | |
| Product Category | Low Wear and Friction Resins | | | | | |
| | | | | | | |

| Physical | Nominal Value Unit | Test Method |
|---|--------------------|----------------------|
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 36 g/10 min | ISO 1133 |
| Molding Shrinkage | | Internal Method |
| Flow | 0.020 in/in | |
| Across Flow | 0.021 in/in | |
| Across Flow ² | 2.2 % | |
| Flow ³ | 2.2 % | |
| Mechanical | Nominal Value Unit | Test Method |
| Tensile Modulus (73°F) | 439000 psi | ISO 527-2 |
| Tensile Stress (Yield, 73°F) | 9570 psi | ISO 527-2 |
| Tensile Strain (Yield, 73°F) | 8.0 % | ISO 527-2 |
| Nominal Tensile Strain at Break (73°F) | 11 % | ISO 527-2 |
| Flexural Modulus (73°F) | 447000 psi | ISO 178 |
| Impact | Nominal Value Unit | Test Method |
| Charpy Notched Impact Strength (73°F) | 1.6 ft·lb/in² | ISO 179/1eA |
| Thermal | Nominal Value Unit | Test Method |
| CLTE | | ISO 11359-2 |
| Flow: 73 to 131°F | 0.000061 in/in/°F | |
| Transverse: 73 to 131°F | 0.000061 in/in/°F | |
| Flammability | Nominal Value Unit | Test Method |
| Flame Rating - UL | | UL 94 |
| 0.0295 in | НВ | |
| 0.0591 in | НВ | |
| 0.118 in | НВ | |
| Flammability Classification | | IEC 60695-11-10, -20 |
| 0.0295 in | НВ | |
| 0.0591 in | НВ | |
| 0.118 in | НВ | |
| Injection | Nominal Value Unit | |
| Drying Temperature | 176 °F | |

| Injection | Nominal Value Unit | |
|------------------------|--------------------|--|
| Drying Temperature | 176 °F | |
| Drying Time | 4.0 hr | |
| Suggested Max Moisture | 0.20 % | |
| Processing (Melt) Temp | 392 to 419 °F | |

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To find out more, visit plastics.dupont.com or contact the nearest DuPont location.

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| Injection | Nominal Value Unit | |
|---------------------------|--------------------|--|
| Melt Temperature, Optimum | | |
| Injection Molding | 401 °F | |
| Mold Temperature | 140 to 212 °F | |
| Mold Temperature, Optimum | | |
| Injection Molding | 176 °F | |
| | | |

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 100mm diameter pulley, Weld Direction
- ³ 100mm diameter pulley, Gate Direction

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.

ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.

Test temperatures are 23°C unless otherwise stated.

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials, additives or pigments or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. CAUTION: Do not use DuPont materials in medical application involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of DuPont POLICY Regarding Medical Applications ... H-50102-3.

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