# NORYL™ RESIN PX1390

REGION ASIA

## DESCRIPTION

NORYL™ PX1390 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade inherently meets UL94 HB flame rating. NORYL PX1390 resin exhibits excellent electrical properties, easy processability, high heat resistance, and good dimensional stabilty. It is an excellent candidate for automotive connector applications.

## TYPICAL PROPERTY VALUES

Revision 20190226

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| MECHANICAL | | | |
| Tensile Stress, yld, Type I, 50 mm/min | 62 | MPa | ASTM D 638 |
| Tensile Strain, brk, Type I, 50 mm/min | 30 | % | ASTM D 638 |
| Flexural Stress, yld, 2.6 mm/min, 100 mm span | 99 | MPa | ASTM D 790 |
| Flexural Modulus, 2.6 mm/min, 100 mm span | 2270 | MPa | ASTM D 790 |
| IMPACT | | | |
| Izod Impact, notched, 23°C | 288 | J/m | ASTM D 256 |
| Izod Impact, notched, -40°C | 160 | J/m | ASTM D 256 |
| THERMAL | | | |
| HDT, 0.45 MPa, 6.4 mm, unannealed | 154 | °C | ASTM D 648 |
| HDT, 1.82 MPa, 6.4 mm, unannealed | 146 | °C | ASTM D 648 |
| CTE, 0°C to 100°C, flow | 7.2E-05 | 1/°C | ASTM E 831 |
| PHYSICAL | | | |
| Specific Gravity | 1.06 | - | ASTM D 792 |
| Water Absorption, 24 hours | 0.1 | % | ASTM D 570 |
| Mold Shrinkage, flow, 3.2 mm | 0.5 – 0.7 | % | SABIC method |
| INJECTION MOLDING | | | |
| Drying Temperature | 105 – 110 | °C | |
| Drying Time | 3 – 4 | hrs | |
| Drying Time (Cumulative) | 8 | hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 295 – 315 | °C | |
| Nozzle Temperature | 295 – 315 | °C | |
| Front - Zone 3 Temperature | 280 – 315 | °C | |
| Middle - Zone 2 Temperature | 270 – 310 | °C | |
| Rear - Zone 1 Temperature | 260 – 305 | °C | |
| Mold Temperature | 75 – 105 | °C | |
| Back Pressure | 0.3 – 0.7 | MPa | |
| Screw Speed | 20 – 100 | rpm | |
| Shot to Cylinder Size | 30 – 70 | % | |

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