

AuroraGuard™ ENV11-10575

Aurora Material Solutions, LLC - Polycarbonate

General Information
Product Description

AuroraGuard™ ENV11-10575 is an UV stabilized, clear Polycarbonate (PC) Injection Molding Grade.

General

| | |
|-------------------|--|
| Material Status | • Commercial: Active |
| Availability | • Asia Pacific • Latin America • Europe • North America |
| Additive | • Mold Release • UV Stabilizer |
| Features | • Good Heat Resistance • Good Mold Release • UV Stabilized |
| Uses | • Construction Applications • Electrical/Electronic Applications • Lighting Applications |
| Agency Ratings | • EC 1907/2006 (REACH) |
| RoHS Compliance | • RoHS Compliant |
| Appearance | • Clear - Blue Tint |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

Properties ¹

| | Nominal Value | Unit | Test Method |
|---|------------------|----------|-----------------|
| Physical | | | |
| Density / Specific Gravity | 1.20 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 12 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.125 in) | 5.0E-3 to 7.0E-3 | in/in | ASTM D955 |
| Mechanical | | | |
| Tensile Modulus | 341000 | psi | ASTM D638 |
| Tensile Strength (Yield) | 9100 | psi | ASTM D638 |
| Tensile Elongation (Break) | > 70 | % | ASTM D638 |
| Flexural Modulus | 334000 | psi | ASTM D790 |
| Flexural Strength | 13100 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact (73°F) | 15 | ft-lb/in | ASTM D256 |
| Gardner Impact (73°F) | 560 | in-lb | ASTM D5420 |
| Thermal | | | |
| Deflection Temperature Under Load (264 psi, Unannealed) | 260 | °F | ASTM D648 |
| Flammability | | | |
| Flame Rating (0.06 in) | V-2 | | Internal Method |

Processing Information

| | Nominal Value | Unit |
|------------------------|---------------|------|
| Injection | | |
| Drying Temperature | 230 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Rear Temperature | 500 to 540 | °F |
| Middle Temperature | 500 to 540 | °F |
| Front Temperature | 500 to 540 | °F |
| Nozzle Temperature | 480 to 520 | °F |
| Mold Temperature | 160 to 200 | °F |
| Injection Rate | Moderate-Fast | |
| Back Pressure | 50.0 to 200 | psi |
| Screw Speed | 40 to 70 | rpm |

