

AuroraGuard™ 135-71882

Aurora Material Solutions, LLC - Polycarbonate

General Information
Product Description

AuroraGuard™ 135-71882 is a 20% Fiberglass Reinforced, 6.0 MFR Black, Flame-Retardant Polycarbonate (PC). UL94 V-0 and 5VA Flame Rated Product. This Product Contains High-Viscosity Post-Industrial Recycle Polycarbonate.

Formerly Branded as ENVIROPLAS.

General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Asia Pacific • Europe • Latin America • North America |
| Filler / Reinforcement | • Glass Fiber, 20% Filler by Weight |
| Features | • Flame Retardant • Good Mold Release |
| Uses | • Appliances • Automotive Applications • Construction Applications • Displays • Electrical/Electronic Applications • Electronic Displays • Industrial Applications • Medical/Healthcare Applications |
| Agency Ratings | • EC 1907/2006 (REACH) - SVHC Free |
| RoHS Compliance | • RoHS Compliant |
| UL File Number | • E.192776 |
| Appearance | • Black |
| Processing Method | • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|----------|-------------|
| Density / Specific Gravity | 1.34 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 6.0 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.125 in) | 1.0E-3 to 3.0E-3 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 14500 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 780000 | psi | ASTM D790 |
| Flexural Strength | 21000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F) | 2.0 | ft·lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 288 | °F | ASTM D648 |
| RTI Elec | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |
| RTI Imp | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |
| RTI Str | | | UL 746B |
| 0.06 in | 176 | °F | |
| 0.12 in | 176 | °F | |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.06 in | | V-0 | |
| 0.12 in | | V-0 | |
| | | 5VA | |



Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 225 to 250 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Rear Temperature | 500 to 540 | °F |
| Middle Temperature | 520 to 560 | °F |
| Front Temperature | 520 to 560 | °F |
| Nozzle Temperature | 480 to 520 | °F |
| Mold Temperature | 180 to 200 | °F |
| Injection Rate | Moderate | |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 70 | rpm |

Notes

¹ Typical properties: these are not to be construed as specifications.

