

AuroraGuard™ F0612

Aurora Material Solutions, LLC - Polycarbonate

General Information
Product Description

 Flame Retardant PC with Release
 Formerly known as EnPure F0612

General

| | | | |
|-------------------|---------------------------|----------------------|---------------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East | • Europe | • North America |
| | • Asia Pacific | • Latin America | |
| Additive | • Flame Retardant | | |
| Features | • Flame Retardant | • Good Mold Release | |
| Uses | • Automotive Applications | • Business Equipment | • Thin-walled Parts |
| Appearance | • Black | • Colors Available | • Natural Color |
| Processing Method | • Injection Molding | • Profile Extrusion | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------|
| Density / Specific Gravity | 1.20 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 6.0 to 11 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.126 in) | 6.0E-3 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield) | 9000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 120 | % | ASTM D638 |
| Flexural Modulus | 330000 | psi | ASTM D790 |
| Flexural Strength | 12000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F) | 13 | ft·lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 270 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 260 | °F | ASTM D648 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating | | | UL 94 |
| 0.06 in | | V-0 | |
| 0.13 in | | V-0 | |

Processing Information

| | Nominal Value | Unit |
|------------------------|------------------|------|
| Injection | | |
| Drying Temperature | 220 to 250 | °F |
| Drying Time | 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Suggested Shot Size | 40 to 75 | % |
| Rear Temperature | 520 to 560 | °F |
| Middle Temperature | 540 to 580 | °F |
| Front Temperature | 550 to 600 | °F |
| Nozzle Temperature | 550 to 590 | °F |
| Processing (Melt) Temp | 560 to 600 | °F |
| Mold Temperature | 160 to 210 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 30 to 70 | rpm |
| Vent Depth | 1.5E-3 to 3.0E-3 | in |

Injection Notes

Maximum Drying Time 7 hrs

