

AuroraGuard™ 6643GFHS

Aurora Material Solutions, LLC - Polyamide 66

General Information

Product Description

Heat Stabilized, Lubricated 43% Glass Filled Nylon 66

Formerly known as EnLon 6643GFHS

General

| | |
|------------------------|---|
| Material Status | • Commercial: Active |
| Availability | • Africa & Middle East • Europe • North America • Asia Pacific • Latin America |
| Filler / Reinforcement | • Glass Fiber, 43% Filler by Weight |
| Additive | • Heat Stabilizer • Lubricant |
| Features | • Heat Stabilized • Lubricated |
| Uses | • Automotive Applications • Industrial Applications |
| Appearance | • Black |
| Processing Method | • Injection Molding |

Properties ¹

| | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------|
| Physical | | | |
| Density / Specific Gravity | 1.51 | | ASTM D792 |
| Molding Shrinkage - Flow (0.126 in) | 3.0E-3 | in/in | ASTM D955 |
| Mechanical | | | |
| Tensile Strength (Yield) | 29000 | psi | ASTM D638 |
| Tensile Elongation (Break) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 1.65E+6 | psi | ASTM D790 |
| Flexural Strength | 43000 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact (73°F) | 2.2 | ft·lb/in | ASTM D256 |
| Thermal | | | |
| Deflection Temperature Under Load (66 psi, Unannealed) | 495 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed) | 480 | °F | ASTM D648 |

Processing Information

| | Nominal Value | Unit |
|------------------------|---------------|------|
| Injection | | |
| Drying Temperature | 180 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Rear Temperature | 520 to 540 | °F |
| Middle Temperature | 540 to 570 | °F |
| Front Temperature | 540 to 580 | °F |
| Nozzle Temperature | 550 to 580 | °F |
| Processing (Melt) Temp | 550 to 580 | °F |
| Mold Temperature | 180 to 220 | °F |
| Back Pressure | 20.0 to 60.0 | psi |
| Screw Speed | 60 to 120 | rpm |

Injection Notes

Maximum Drying Time 4.0 hrs

