

## AuroraGuard™ 630GFV

Aurora Material Solutions, LLC - Polyamide 6

### General Information

#### Product Description

30% Glass Filled Nylon 6, Recycled Content

Formerly known as EnLon 630GFV

#### General

|                        |                                     |                 |                 |
|------------------------|-------------------------------------|-----------------|-----------------|
| Material Status        | • Commercial: Active                |                 |                 |
| Availability           | • Africa & Middle East              | • Europe        | • North America |
|                        | • Asia Pacific                      | • Latin America |                 |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight |                 |                 |
| Recycled Content       | • Yes                               |                 |                 |
| Features               | • Recyclable Material               |                 |                 |
| Uses                   | • Automotive Applications           |                 |                 |
| Appearance             | • Black                             |                 |                 |
| Processing Method      | • Injection Molding                 |                 |                 |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.38          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.126 in)                     | 3.0E-3        | in/in    | ASTM D955   |
| Water Absorption (Saturation)                           | 0.70          | %        | ASTM D570   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                | 23000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 5.0           | %        | ASTM D638   |
| Flexural Modulus                                        | 1.10E+6       | psi      | ASTM D790   |
| Flexural Strength                                       | 30500         | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F)                              | 1.8           | ft-lb/in | ASTM D256   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 400           | °F       | ASTM D648   |

### Processing Information

| Injection                   | Nominal Value | Unit |
|-----------------------------|---------------|------|
| Drying Temperature          | 185           | °F   |
| Drying Time                 | 2.0 to 4.0    | hr   |
| Suggested Max Moisture      | 0.020         | %    |
| Rear Temperature            | 428 to 500    | °F   |
| Middle Temperature          | 446 to 509    | °F   |
| Front Temperature           | 482 to 518    | °F   |
| Mold Temperature            | 131 to 203    | °F   |
| Back Pressure               | 50.8 to 102   | psi  |
| Screw Speed                 | 60 to 90      | rpm  |
| Injection Notes             |               |      |
| Maximum Drying Time 4.0 hrs |               |      |

