

## AuroraGuard™ 633GF-FR-BK

Aurora Material Solutions, LLC - Polyamide 6

### General Information

#### Product Description

33% Glass Filled Flame Retardant Polyamide 6  
Formerly known as EnLon 633GF-FR-BK

#### General

|                        |                                     |                    |                 |
|------------------------|-------------------------------------|--------------------|-----------------|
| Material Status        | • Commercial: Active                |                    |                 |
| Availability           | • Africa & Middle East              | • Europe           | • North America |
|                        | • Asia Pacific                      | • Latin America    |                 |
| Filler / Reinforcement | • Glass Fiber, 33% Filler by Weight |                    |                 |
| Additive               | • Flame Retardant                   |                    |                 |
| Features               | • Flame Retardant                   |                    |                 |
| Uses                   | • Industrial Applications           |                    |                 |
| Appearance             | • Black                             | • Colors Available | • Natural Color |
| Processing Method      | • Injection Molding                 |                    |                 |

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

| Physical                                                | Nominal Value    | Unit     | Test Method |
|---------------------------------------------------------|------------------|----------|-------------|
| Density / Specific Gravity                              | 1.36             |          | ASTM D792   |
| Molding Shrinkage - Flow (0.126 in)                     | 2.0E-3 to 5.0E-3 | in/in    | ASTM D955   |
| Mechanical                                              | Nominal Value    | Unit     | Test Method |
| Tensile Strength (Yield)                                | 21000            | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 4.0              | %        | ASTM D638   |
| Flexural Modulus                                        | 1.40E+6          | psi      | ASTM D790   |
| Flexural Strength                                       | 34000            | psi      | ASTM D790   |
| Impact                                                  | Nominal Value    | Unit     | Test Method |
| Notched Izod Impact (73°F)                              | 1.7              | ft-lb/in | ASTM D256   |
| Thermal                                                 | Nominal Value    | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 400              | °F       | ASTM D648   |
| Flammability                                            | Nominal Value    | Unit     | Test Method |
| Flame Rating (0.08 in)                                  | HB               |          | UL 94       |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 180           | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.020         | %    |
| Rear Temperature       | 550 to 570    | °F   |
| Middle Temperature     | 530 to 550    | °F   |
| Front Temperature      | 510 to 530    | °F   |
| Nozzle Temperature     | 540 to 560    | °F   |
| Processing (Melt) Temp | 550 to 580    | °F   |
| Mold Temperature       | 150 to 210    | °F   |
| Back Pressure          | 20.0 to 60.0  | psi  |
| Screw Speed            | 40 to 120     | rpm  |

