

## AuroraGuard™ 610GFIM

Aurora Material Solutions, LLC - Polyamide 6

### General Information

#### Product Description

10% Glass Filled Nylon 6, Impact Modified

Formerly known as EnLon 610GFIM

#### General

|                        |                                     |                    |                 |
|------------------------|-------------------------------------|--------------------|-----------------|
| Material Status        | • Commercial: Active                |                    |                 |
| Availability           | • Africa & Middle East              | • Europe           | • North America |
|                        | • Asia Pacific                      | • Latin America    |                 |
| Filler / Reinforcement | • Glass Fiber, 10% Filler by Weight |                    |                 |
| Additive               | • Impact Modifier                   |                    |                 |
| Features               | • Impact Modified                   |                    |                 |
| Uses                   | • Automotive Applications           |                    |                 |
| Appearance             | • Black                             | • Colors Available | • Natural Color |
| Processing Method      | • Injection Molding                 |                    |                 |

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

| Physical                                                | Nominal Value | Unit     | Test Method |
|---------------------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                              | 1.19          |          | ASTM D792   |
| Molding Shrinkage - Flow (0.126 in)                     | 4.0E-3        | in/in    | ASTM D955   |
| Molding Shrinkage - Across Flow                         | 8.0E-3        | in/in    | ASTM D955   |
| Mechanical                                              | Nominal Value | Unit     | Test Method |
| Tensile Strength (Yield)                                | 8700          | psi      | ASTM D638   |
| Tensile Elongation (Break)                              | 10            | %        | ASTM D638   |
| Flexural Modulus                                        | 319000        | psi      | ASTM D790   |
| Impact                                                  | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F)                              | 4.0           | ft-lb/in | ASTM D256   |
| Thermal                                                 | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 380           | °F       | ASTM D648   |
| Flammability                                            | Nominal Value | Unit     | Test Method |
| Flame Rating                                            | HB            |          | UL 94       |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 165           | °F   |
| Drying Time            | 4.0 to 8.0    | hr   |
| Suggested Max Moisture | 0.020         | %    |
| Suggested Shot Size    | 25 to 75      | %    |
| Rear Temperature       | 470 to 520    | °F   |
| Middle Temperature     | 480 to 530    | °F   |
| Front Temperature      | 490 to 540    | °F   |
| Nozzle Temperature     | 490 to 540    | °F   |
| Processing (Melt) Temp | 490 to 530    | °F   |
| Mold Temperature       | 160 to 200    | °F   |
| Back Pressure          | 20.0 to 60.0  | psi  |
| Screw Speed            | 50 to 120     | rpm  |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

