

## AuroraGuard™ ENV00-79276

Aurora Material Solutions, LLC - Acrylonitrile Butadiene Styrene

### General Information

#### Product Description

AuroraGuard™ ENV00-79276 is a Black Acrylonitrile Butadiene Styrene (ABS) Blow Molding Grade.

#### General

|                   |                           |                             |                        |
|-------------------|---------------------------|-----------------------------|------------------------|
| Material Status   | • Commercial: Active      |                             |                        |
| Availability      | • Asia Pacific            | • Latin America             |                        |
|                   | • Europe                  | • North America             |                        |
| Features          | • Good Impact Resistance  | • Good Processability       | • High Heat Resistance |
| Uses              | • Automotive Applications | • Automotive Exterior Parts |                        |
| Appearance        | • Black                   |                             |                        |
| Forms             | • Pellets                 |                             |                        |
| Processing Method | • Blow Molding            |                             |                        |

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

| Physical                                                | Nominal Value    | Unit                  | Test Method     |
|---------------------------------------------------------|------------------|-----------------------|-----------------|
| Density / Specific Gravity                              | 1.04             |                       | ASTM D792       |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)               | 4.0              | g/10 min              | ASTM D1238      |
| Molding Shrinkage - Flow                                | 5.0E-3 to 8.0E-3 | in/in                 | ASTM D955       |
| Mechanical                                              | Nominal Value    | Unit                  | Test Method     |
| Tensile Strength                                        |                  |                       |                 |
| Yield                                                   | 6020             | psi                   | ASTM D638       |
| Yield                                                   | 5950             | psi                   | ISO 527-2       |
| Tensile Elongation                                      |                  |                       |                 |
| Break                                                   | 25               | %                     | ASTM D638       |
| Break                                                   | 30               | %                     | ISO 527-2       |
| Flexural Modulus                                        |                  |                       |                 |
| --                                                      | 284000           | psi                   | ASTM D790       |
| --                                                      | 305000           | psi                   | ISO 178         |
| Flexural Strength                                       |                  |                       |                 |
| --                                                      | 9300             | psi                   | ASTM D790       |
| --                                                      | 8820             | psi                   | ISO 178         |
| Impact                                                  | Nominal Value    | Unit                  | Test Method     |
| Charpy Notched Impact Strength (73°F)                   | 14               | ft·lb/in <sup>2</sup> | ISO 179/1eA     |
| Notched Izod Impact (73°F)                              | 6.4              | ft·lb/in              | ASTM D256       |
| Notched Izod Impact Strength (73°F)                     | 13               | ft·lb/in <sup>2</sup> | ISO 180         |
| Thermal                                                 | Nominal Value    | Unit                  | Test Method     |
| Deflection Temperature Under Load (264 psi, Unannealed) | 203              | °F                    | ASTM D648       |
| Deflection Temperature Under Load (264 psi, Unannealed) | 194              | °F                    | ISO 75-2/A      |
| Vicat Softening Temperature                             | 221              | °F                    | ASTM D1525      |
| Vicat Softening Temperature                             | 220              | °F                    | ISO 306         |
| Flammability                                            | Nominal Value    | Unit                  | Test Method     |
| Flame Rating (0.06 in)                                  | HB               |                       | Internal Method |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 158 to 176    | °F   |
| Drying Time            | 2.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.020         | %    |

