

## AuroraGuard™ ENV13-NC230

Aurora Material Solutions, LLC - Polycarbonate

### General Information

#### Product Description

Injection Molding - Structural Foaming Grade, Non-Halogenated/Non-Brominated Flame Retardant, 5 % Fiberglass Reinforced, RoHS Compliant  
 NC0230 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.  
 The ENV13 Series Products Are Available With Mold Release and/or UV Stabilizer.  
 Contact Enviroplas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV13-NC230

#### General

|                        |   |
|------------------------|---|
| Material Status        | • Commercial: Active  |
| Availability           | • Africa & Middle East • Europe • North America<br>• Asia Pacific • Latin America |
| Filler / Reinforcement | • Glass Fiber, 5.0% Filler by Weight  |
| Additive               | • Mold Release  |
| Features               | • Bromine Free • Foamable<br>• Flame Retardant • Halogen Free                     |
| Uses                   | • Medical/Healthcare Applications   |
| RoHS Compliance        | • RoHS Compliant  |
| Appearance             | • Black • Colors Available • Natural Color  |
| Forms                  | • Pellets   |
| Processing Method      | • Injection Molding   |

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

| Physical  | Nominal Value    | Unit     | Test Method     |
|---|------------------|----------|-----------------|
| Density / Specific Gravity                              | 1.23             |          | ASTM D792       |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)                | 5.5              | g/10 min | ASTM D1238      |
| Molding Shrinkage - Flow                                | 5.0E-3 to 7.0E-3 | in/in    | ASTM D955       |
| Ash Content   | 5.0              | %        | ASTM D5630      |
| Mechanical  | Nominal Value    | Unit     | Test Method     |
| Tensile Strength (Break)                                | 9800             | psi      | ASTM D638       |
| Flexural Modulus  | 500000           | psi      | ASTM D790       |
| Flexural Strength                                       | 15000            | psi      | ASTM D790       |
| Impact  | Nominal Value    | Unit     | Test Method     |
| Notched Izod Impact (73°F)                              | 2.2              | ft·lb/in | ASTM D256       |
| Thermal   | Nominal Value    | Unit     | Test Method     |
| Deflection Temperature Under Load (264 psi, Unannealed) | 288              | °F       | ASTM D648       |
| Flammability  | Nominal Value    | Unit     | Test Method     |
| Flame Rating (0.12 in)                                  | • V-0<br>• 5VA   |          | Internal Method |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 225           | °F   |
| Drying Time            | 3.0 to 4.0    | hr   |
| Suggested Max Moisture | 0.050         | %    |
| Rear Temperature       | 490 to 510    | °F   |
| Middle Temperature     | 560 to 600    | °F   |
| Front Temperature      | 560 to 600    | °F   |
| Nozzle Temperature     | 520 to 560    | °F   |
| Mold Temperature       | 165 to 200    | °F   |



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**Injection Notes**

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Recommended Blow Agent (FLC95) Drying: 4 hrs. @ 225 °F

Recommended Blowing Agent Concentration: 1.5 % nominal / Range 3 - 5 %

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**Notes**

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

