

AuroraGuard™ ENV13-NC820

Aurora Material Solutions, LLC - Polycarbonate

General Information
Product Description

Injection Molding Grade, 30% Fiberglass Reinforced, Flame Retardant, w/Mold Release, Increased Toughness, High Heat Resistance

NC820 = To Be Assigned 5 Digit Number Indicating Natural, Black, or Custom Color.

The ENV13 Series Products Are Available With Added UV Stabilizer.

Contact Enviropas Regarding UL Recognized Versions Of This Product.

Formerly known as ENVIROPLAS® ENV13-NC820

General

| | | | |
|------------------------|--------------------------------------|------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East | • Europe | • North America |
| | • Asia Pacific | • Latin America | |
| Filler / Reinforcement | • Glass Fiber, 30% Filler by Weight | | |
| Additive | • Flame Retardant | • Mold Release | • UV Stabilizer |
| Features | • Flame Retardant | • Good Toughness | • UV Resistant |
| | • Good Mold Release | • High Heat Resistance | |
| Uses | • Electrical/Electronic Applications | • Fluid Handling | |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Black | • Colors Available | • Natural Color |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|------------------|----------|-----------------|
| Density / Specific Gravity | 1.43 | | ASTM D792 |
| Molding Shrinkage - Flow | 1.0E-3 to 3.0E-3 | in/in | ASTM D955 |
| Ash Content | 30 | % | ASTM D5630 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Break) | 14500 | psi | ASTM D638 |
| Tensile Elongation (Break) | 4.0 | % | ASTM D638 |
| Flexural Modulus | 965000 | psi | ASTM D790 |
| Flexural Strength | 22000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F) | 2.0 | ft-lb/in | ASTM D256 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 290 | °F | ASTM D648 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | V-2 | | Internal Method |

Processing Information

| Injection | Nominal Value | Unit |
|--------------------|---------------|------|
| Drying Temperature | 230 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Rear Temperature | 500 to 540 | °F |
| Middle Temperature | 520 to 580 | °F |
| Front Temperature | 520 to 580 | °F |
| Nozzle Temperature | 460 to 500 | °F |
| Mold Temperature | 180 to 220 | °F |
| Back Pressure | 0.00 to 50.0 | psi |
| Screw Speed | 40 to 70 | rpm |

