

AuroraTec™ ENV39-NC920

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information
Product Description

Injection Molding Grade, Impact Modified, UV Stabilized for Outdoor Exposures - Provides Excellent Weatherability, Good Chemical Resistance, w/Mold Release. REACH and RoHS Compliant.
 NC920 Indicates a 5 Digit Color Number Representing a Natural, Black or Opaque Custom Color.

Formerly known as ENVIRON® ENV39-NC920

General

| | | | |
|-------------------|--|---|-------------------------------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Additive | • Impact Modifier | • Mold Release | • UV Stabilizer |
| Features | • Chemical Resistant • Excellent Weather Resistance | • Good Mold Release • Impact Modified | • UV Stabilized |
| Uses | • Agricultural Applications • Housings | • Material Handling • Outdoor Applications | • Recreational Vehicle Applications |
| Agency Ratings | • EC 1907/2006 (REACH) | | |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Black | • Colors Available | • Natural Color |
| Processing Method | • Injection Molding | | |

Properties ¹

| | Nominal Value | Unit | Test Method |
|---|----------------|----------|-----------------|
| Physical | | | |
| Density / Specific Gravity | 1.28 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (250°C/5.0 kg) | 22 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.125 in) | 0.014 to 0.018 | in/in | ASTM D955 |
| Mechanical | | | |
| Tensile Strength (Yield) | 6600 | psi | ASTM D638 |
| Tensile Elongation (Break) | 160 | % | ASTM D638 |
| Flexural Modulus | 289000 | psi | ASTM D790 |
| Flexural Strength | 9900 | psi | ASTM D790 |
| Impact | | | |
| Notched Izod Impact | | | ASTM D256 |
| -22°F | 12 | ft-lb/in | |
| 73°F | 16 | ft-lb/in | |
| Gardner Impact (73°F) | 400 | in-lb | ASTM D5420 |
| Thermal | | | |
| Deflection Temperature Under Load (264 psi, Unannealed) | 140 | °F | ASTM D648 |
| Flammability | | | |
| Flame Rating (0.06 in) | HB | | Internal Method |

Processing Information

| | Nominal Value | Unit |
|--------------------|---------------|------|
| Injection | | |
| Drying Temperature | 230 | °F |
| Drying Time | 3.0 to 4.0 | hr |
| Rear Temperature | 450 to 470 | °F |
| Middle Temperature | 470 to 490 | °F |
| Front Temperature | 480 to 510 | °F |
| Nozzle Temperature | 480 to 510 | °F |
| Mold Temperature | 110 to 170 | °F |



| | |
|----------------|-----------------|
| Injection Rate | Moderate-Fast |
| Back Pressure | 50.0 to 200 psi |
| Screw Speed | 50 to 80 rpm |

Notes

¹ Typical properties: these are not to be construed as specifications.

