

AuroraTec™ 1016UIM

Aurora Material Solutions, LLC - Polycarbonate + PBT

General Information

Product Description

Impact Modified, Molding Grade PC/PBT with UV Stabilizer

Formerly known as EnCounter 1016UIM

General

| | | | |
|-------------------|--|-----------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Additive | • Impact Modifier | • UV Stabilizer | |
| Features | • Impact Modified | • UV Stabilized | |
| Uses | • Automotive Applications | • Lawn & Garden Equipment | |
| Appearance | • Black | • Colors Available | • Natural Color |
| Processing Method | • Injection Molding | • Profile Extrusion | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|----------------|----------|-------------|
| Density / Specific Gravity | 1.20 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (265°C/5.0 kg) | 30 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.126 in) | 0.010 to 0.012 | in/in | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength (Yield) | 7300 | psi | ASTM D638 |
| Tensile Elongation (Break) | 100 | % | ASTM D638 |
| Flexural Modulus | 300000 | psi | ASTM D790 |
| Flexural Strength | 12000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact | | | ASTM D256 |
| -22°F | 10 | ft·lb/in | |
| 73°F | 13 | ft·lb/in | |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed, 0.252 in) | 220 | °F | ASTM D648 |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in) | 210 | °F | ASTM D648 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 225 | °F |
| Drying Time | 3.0 to 6.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Rear Temperature | 480 to 520 | °F |
| Middle Temperature | 490 to 530 | °F |
| Front Temperature | 490 to 530 | °F |
| Nozzle Temperature | 490 to 520 | °F |
| Processing (Melt) Temp | 530 to 585 | °F |
| Mold Temperature | 140 to 190 | °F |
| Back Pressure | 50.0 to 100 | psi |
| Screw Speed | 40 to 75 | rpm |

Injection Notes

Maximum Drying Time 7.0 hrs

