

Diamond ASA S950 1750 UVBLK

LyondellBasell Industries - Acrylonitrile Styrene Acrylate

General Information

Product Description

Diamond ASA S950 1750 UVBLK is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and Ultra High Impact Resistance.

General

| | |
|-------------------|---|
| Features | <ul style="list-style-type: none"> • Good Weather Resistance • Ultra High Impact Resistance |
| Forms | <ul style="list-style-type: none"> • Pellets |
| Processing Method | <ul style="list-style-type: none"> • Injection Molding |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|---|---------------|----------|-------------------------|
| Density / Specific Gravity | 1.07 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) ² | | | ASTM D1238 |
| 200°C/5.0 kg | 0.80 | g/10 min | |
| 230°C/3.8 kg | 2.5 | g/10 min | |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength ³ (Yield) | 5210 | psi | ASTM D638 |
| Flexural Modulus - Tangent ⁴ | 234000 | psi | ASTM D790 |
| Impact | Nominal Value | Unit | Test Method |
| Notched Izod Impact (73°F, 0.125 in) | 8.1 | ft-lb/in | ASTM D256 |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 87 | | ASTM D785 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi, Unannealed, 0.125 in | 167 | °F | |
| Deflection Temperature Under Load | | | ASTM D648 |
| 264 psi, Annealed, 0.125 in | 196 | °F | |
| Vicat Softening Temperature | 219 | °F | ASTM D1525 ⁵ |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 176 to 185 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Suggested Max Moisture | 0.10 | % |
| Suggested Shot Size | 40 to 70 | % |
| Rear Temperature | 446 to 500 | °F |
| Middle Temperature | 450 to 509 | °F |
| Front Temperature | 455 to 522 | °F |
| Nozzle Temperature | 428 to 522 | °F |
| Processing (Melt) Temp | 428 to 522 | °F |
| Mold Temperature | 104 to 176 | °F |
| Injection Rate | Fast | |
| Back Pressure | 75.0 to 149 | psi |