

Technical Data Sheet

Diamond ABS 3300GPBLK



Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS 3300GPBLK is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications. Features include: High Impact Resistance, and Impact Modified.

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|--------------------------|---|
| Processing Method | Injection Molding |
| Attribute | High Impact Resistance; Impact Modified |
| Forms | Pellets |
| Appearance | Black |
| Additive | Impact Modifier |
| Application | General Purpose |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (230 °C/3.8 kg) | 5.0 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.05 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength at Yield, (51 mm/min) | 41.4 | MPa | ASTM D638 |
| Flexural Modulus, (1.3 mm/min, Tangent) | 2280 | MPa | ASTM D790 |
| Impact | | | |
| Notched Izod Impact, (23 °C, 3.18 mm) | 210 | J/m | ASTM D256 |
| Hardness | | | |
| Rockwell Hardness, (R-Scale) | 110 | | ASTM D785 |
| Thermal | | | |
| Vicat Softening Temperature | 104 | °C | ASTM D1525 |
| Deflection Temperature Under Load Annealed (264 psi), (3.18 mm) | 92.2 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm) | 75.0 | °C | ASTM D648 |

| Injection Parameters | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time | 2.0 to 4.0 | hr |
| Drying Temperature | 80 to 85 | °C |
| Suggested Max Moisture | 0.1 | % |
| Front Temperature | 190 to 250 | °C |
| Middle Temperature | 190 to 250 | °C |
| Rear Temperature | 190 to 250 | °C |
| Mold Temperature | 40 to 80 | °C |
| Injection Pressure | 48.3 to 75.8 | MPa |