

Technical Data Sheet

Diamond ABS 9501 7782 GREEN BAY GOLD

Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS 9501 7782 GREEN BAY GOLD is a Acrylonitrile Butadiene Styrene material and is typically used in Extrusion, Sheet Extrusion, Thermoforming applications. Features include: Ultra High Impact Resistance.

| | |
|--------------------------|--------------------------------------------------------|
| Processing Method | Extrusion; Sheet Extrusion |
| Attribute | Ultra High Impact Resistance |
| Forms | Pellets |
| Appearance | Colors Available |
| Application | Marine Applications; Sheet; Thermoforming Applications |

| Typical Properties | Nominal Value | Units | Test Method |
|-------------------------------------------------------------------|----------------------|-------------------|--------------------|
| Physical | | | |
| Melt Flow Rate, (200 °C/5.0 kg, Procedure A) | 0.40 to 1.2 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.04 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength at Yield, (51 mm/min) | 43.0 | MPa | ASTM D638 |
| Tensile Strength at Break | 34 | MPa | ASTM D638 |
| Flexural Modulus, (1.3 mm/min, 2% Secant) | 2300 | MPa | ASTM D790 |
| Tensile Elongation at Break | 20 | % | ASTM D638 |
| Flexural Strength | 69 | MPa | ASTM D790 |
| Impact | | | |
| Notched Izod Impact | | | |
| (23 °C) | 520 | J/m | ASTM D256 |
| (-40 °C) | 150 | J/m | ASTM D256 |
| Hardness | | | |
| Rockwell Hardness, (R-Scale) | 101 | | ASTM D785 |
| Thermal | | | |
| Vicat Softening Temperature, (Loading 1 (10 N)) | 105 | °C | ASTM D1525 |
| Deflection Temperature Under Load Annealed (264 psi), (3.18 mm) | 95.0 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm) | 75.6 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm) | 90.7 | °C | ASTM D648 |
| UL Information | | | |
| Flame Rating, (1.5 mm) | HB | | UL 94 |
| UL File Number | E119088 | | |
| Extrusion Parameters | | | |
| Cylinder Zone 1 Temp. | 177 to 185 | °C | |
| Drying Time | 2.0 to 4.0 | hr | |
| Cylinder Zone 5 Temp. | 218 to 232 | °C | |
| Suggested Max Moisture | <0.10 | % | |
| Cylinder Zone 3 Temp. | 199 to 210 | °C | |
| Drying Temperature | 80 to 85 | °C | |
| Cylinder Zone 2 Temp. | 191 to 196 | °C | |
| Cylinder Zone 4 Temp. | 213 to 218 | °C | |