

## Technical Data Sheet

### *Diamond* ABS 3500LG 50467 UVGRY



Acrylonitrile Butadiene Styrene

#### Product Description

*Diamond* ABS 3500LG 50467 UVGRY is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications. Features include: Low Gloss, Medium Flow, and Medium Impact Resistance.

**Processing Method** Injection Molding

**Attribute** Low Gloss; Medium Flow; Medium Impact Resistance

| Typical Properties                                                                  | Nominal Value | Units             | Test Method |
|-------------------------------------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                                                     |               |                   |             |
| Melt Flow Rate                                                                      |               |                   |             |
| (200 °C/5.0 kg, Procedure A)                                                        | 2.3           | g/10 min          | ASTM D1238  |
| (230 °C/3.8 kg, Procedure A)                                                        | 6.0           | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                                                          | 1.04          | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                                                   |               |                   |             |
| Tensile Strength at Yield, (51 mm/min)                                              | 41.4          | MPa               | ASTM D638   |
| Flexural Modulus, (1.3 mm/min, Tangent)                                             | 2070          | MPa               | ASTM D790   |
| <b>Impact</b>                                                                       |               |                   |             |
| Notched Izod Impact, (23 °C, 3.18 mm)                                               | 250           | J/m               | ASTM D256   |
| <b>Hardness</b>                                                                     |               |                   |             |
| Rockwell Hardness, (R-Scale)                                                        | 104           |                   | ASTM D785   |
| <b>Thermal</b>                                                                      |               |                   |             |
| Vicat Softening Temperature, (Loading 1 (10 N))                                     | 104           | °C                | ASTM D1525  |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Injection Molded) | 76.7          | °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      | 200 to 220    | °C    |
| Middle Temperature     | 200 to 220    | °C    |
| Rear Temperature       | 200 to 220    | °C    |
| Injection Rate         | Slow-Moderate |       |
| Mold Temperature       | 40 to 60      | °C    |