

Technical Data Sheet

Diamond ABS 3001MC 8782ORE



Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS 3001MC 8782ORE is a Acrylonitrile Butadiene Styrene material. Features include: Platable.

| | |
|------------------|----------|
| Attribute | Platable |
| Forms | Pellets |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate | | | |
| (200 °C/5.0 kg, Procedure A) | 2.0 | g/10 min | ASTM D1238 |
| (230 °C/3.8 kg, Procedure A) | 7.5 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.05 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Strength at Yield, (51 mm/min) | 43.4 | MPa | ASTM D638 |
| Flexural Modulus, (1.3 mm/min, Tangent) | 2280 | MPa | ASTM D790 |
| Impact | | | |
| Notched Izod Impact, (23 °C, 3.18 mm) | 350 | J/m | ASTM D256 |
| Hardness | | | |
| Rockwell Hardness, (R-Scale) | 101 | | ASTM D785 |
| Thermal | | | |
| Vicat Softening Temperature, (Loading 1 (10 N)) | 103 | °C | ASTM D1525 |
| Deflection Temperature Under Load Annealed (264 psi) | 87.2 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm) | 77.8 | °C | ASTM D648 |
| UL Information | | | |
| Flame Rating, (1.5 mm) | HB | | UL 94 |
| UL File Number | E150937 | | |

| 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 |
| Injection Rate | Moderate-Fast | |
| Mold Temperature | 40 to 80 | °C |