

Technical Data Sheet

**Diamond ABS831G10D1A13270**



Acrylonitrile Butadiene Styrene

**Product Description**

Diamond ABS831G10D1A13270 is a Acrylonitrile Butadiene Styrene Glass Fiber, 10% filled material.

**Forms** Pellets  
**Filler/Reinforcement** Glass Fiber, 10%

| Typical Properties                                     | Nominal Value | Units             | Test Method |
|--|---------------|-------------------|-------------|
| <b>Physical</b>  |               |                   |             |
| Melt Flow Rate, (200 °C/5.0 kg)                        | 1.5           | g/10 min          | ASTM D1238  |
| Density - Specific Gravity                             | 1.18          | g/cm <sup>3</sup> | ASTM D792   |
| <b>Mechanical</b>                                      |               |                   |             |
| Tensile Elongation at Yield                            | 3             | %                 | ASTM D638   |
| Tensile Strength at Yield                              | 56            | MPa               | ASTM D638   |
| Tensile Strength at Break                              | 56            | MPa               | ASTM D638   |
| Flexural Modulus                                       | 3700          | MPa               | ASTM D790   |
| Tensile Elongation at Break                            | 5             | %                 | ASTM D638   |
| Tensile Modulus  | 3000          | MPa               | ASTM D638   |
| Flexural Strength                                      | 75            | MPa               | ASTM D790   |
| <b>Impact</b>  |               |                   |             |
| Notched Izod Impact                                    | 91            | J/m               | ASTM D256   |
| <b>Hardness</b>  |               |                   |             |
| Rockwell Hardness, (R-Scale)                           | 105           |                   | ASTM D785   |
| <b>Thermal</b>   |               |                   |             |
| Deflection Temperature Under Load Unannealed (264 psi) | 88            | °C                | ASTM D648   |
| Deflection Temperature Under Load Unannealed (66 psi)  | 98            | °C                | ASTM D648   |