

NOVALLOY B series

PBT/ABS resin

Technical Information

TI-05389

Properties

B27B3M

Glass fiber-reinforced PBT/ABS resin (GF15%)

Good surface appearance

| Properties | Test methods | Test conditions | Units | |
|---|--------------|-----------------|-------------------|---------|
| Mold shrinkage | Our standard | - | % | 0.4-0.6 |
| Tensile strength | ISO 527 | - | MPa | 80 |
| Flexural strength | ISO 178 | - | MPa | 115 |
| Flexural modulus | ISO 178 | - | MPa | 5000 |
| Notched Charpy impact strength | ISO 179/1eA | 23 deg C | kJ/m ² | 6 |
| Notched Izod impact strength | ASTM D256 | 23 deg C/6.4mm | J/m | 60 |
| Deflection temperature under load | ISO 75 | 1.80MPa | deg C | 155 |
| Deflection temperature under load | ASTM D648 | 1.82MPa/6.4mm | deg C | 180 |
| Deflection temperature under load | ISO 75 | 0.45MPa | deg C | 200 |
| Deflection temperature under load | ASTM D648 | 0.46MPa/6.4mm | deg C | 200 |
| Coefficient of linear thermal expansion | ISO 11359 | MD | X1E-5/deg C | 3 |
| Coefficient of linear thermal expansion | ISO 11359 | TD | X1E-5/deg C | 10 |
| Flammability | UL94 | - | - | HB |
| Water absorption | ISO 62 | - | % | 0.15 |
| Density | ISO 1183 | - | g/cm ³ | 1.33 |

Note

- Test methods such as ISO standards are fully or almost compliant with the standards.
- Values are typical, not quality assured.
- UL recognition File No. is E47773.
- The colorant formulations are restricted for each UL certified color. Please contact us for more information.

Typical settings for processing

| Preliminary drying | Barrel temperature(deg C) | | | | Screw rotation (rpm) | Back pressure (MPa) | Mold temperature (deg C) |
|-----------------------|---------------------------|---------|---------|---------|----------------------|---------------------|--------------------------|
| | Nozzle | Front | Middle | Back | | | |
| 3-5hrs 80-120deg C | 240-260 | 250-270 | 230-250 | 200-220 | 50-100 | 5-20 | 80-100 |

Novacel Co., Ltd.

2024/07/01-0