

# NOVALLOY B series

PBT/ABS resin

Technical Information

TI-05421

## Properties

### **B2706M**

Glass fiber-reinforced PBT/ABS resin (GF30%)

Heat resistance

| Properties                              | Test methods | Test conditions | Units             |         |
|---|--------------|-----------------|-------------------|---------|
| Mold shrinkage                          | Our standard | -               | %                 | 0.3-0.6 |
| Tensile strength                        | ISO 527      | -               | MPa               | 115     |
| Flexural strength                       | ISO 178      | -               | MPa               | 170     |
| Flexural modulus                        | ISO 178      | -               | MPa               | 8900    |
| Notched Charpy impact strength          | ISO 179/1eA  | 23 deg C        | kJ/m <sup>2</sup> | 8       |
| Notched Izod impact strength            | ASTM D256    | 23 deg C/6.4mm  | J/m               | 80      |
| Deflection temperature under load       | ISO 75       | 1.80MPa         | deg C             | 190     |
| Deflection temperature under load       | ASTM D648    | 1.82MPa/6.4mm   | deg C             | 200     |
| Deflection temperature under load       | ISO 75       | 0.45MPa         | deg C             | 210     |
| Deflection temperature under load       | ASTM D648    | 0.46MPa/6.4mm   | deg C             | 210     |
| Coefficient of linear thermal expansion | ISO 11359    | MD              | X1E-5/deg C       | 2       |
| 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 <sup>3</sup> | 1.44    |

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<br>80-120deg C | 230-250                   | 240-250 | 220-240 | 190-230 | 50-90                | 5-20                | 60-80                    |

**Novacel Co., Ltd.**

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