

NOVALLOY B series

PBT/ABS resin

Technical Information

TI-05194

Properties

B5524

Glass fiber-reinforced flame-retardant PBT/ABS resin (GF20%)

Standard

| Properties | Test methods | Test conditions | Units | |
|---|--------------|-----------------|-------------------|-------------------------|
| Mold shrinkage | Our standard | - | % | 0.25-0.45 |
| Tensile strength | ISO 527 | - | MPa | 95 |
| Flexural strength | ISO 178 | - | MPa | 135 |
| Flexural modulus | ISO 178 | - | MPa | 6600 |
| Notched Charpy impact strength | ISO 179/1eA | 23 deg C | kJ/m ² | 7 |
| Notched Izod impact strength | ASTM D256 | 23 deg C/6.4mm | J/m | 70 |
| Deflection temperature under load | ISO 75 | 1.80MPa | deg C | 130 |
| Deflection temperature under load | ASTM D648 | 1.82MPa/6.4mm | deg C | 125 |
| 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 | - | - | V-0/1.5mm 5V/A/2.9mm |
| Dielectric strength | ASTM D149 | 1.5mm | MV/m | 30 |
| Arc resistance | ASTM D495 | 3.0mm | sec(PLC) | 69(6) |
| Hot wire ignition | UL746A | 1.5mm | sec(PLC) | 24(3) |
| High ampere arc ignition | UL746A | 1.5mm | (PLC) | 35(2) |
| High voltage tracking rate | UL746A | 3.0mm | mm/min(PLC) | 187(4) |
| Comparative tracking index | IEC 112 | 3.0mm | V(PLC) | 210(3) |
| Water absorption | ISO 62 | - | % | 0.15 |
| Density | ISO 1183 | - | g/cm ³ | 1.42 |

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 | 230-250 | 240-250 | 220-240 | 190-230 | 50-90 | 5-20 | 60-80 |

Novacel Co., Ltd.

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