

NOVALLOY A series

PA/ABS resin
Technical Information

TI-05190

Properties

A5624

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

| Properties | Test methods | Test conditions | Units | Dry | 1.0% moist. |
|---|--------------|-----------------|-------------|------------|-------------|
| Mold shrinkage | Our standard | - | % | 0.2-0.5 | |
| Tensile strength | ISO 527 | - | MPa | 96 | 77 |
| Flexural strength | ISO 178 | - | MPa | 161 | 130 |
| Flexural modulus | ISO 178 | - | MPa | 6300 | 5100 |
| Notched Charpy impact strength | ISO 179/1eA | 23 deg C | kJ/m2 | 12 | 13 |
| Notched Izod impact strength | ASTM D256 | 23 deg C/6.4mm | J/m | 120 | |
| Rockwell hardness | ISO 2039 | - | - | R116 | R115 |
| Deflection temperature under load | ISO 75 | 1.80MPa | deg C | 181 | 176 |
| Deflection temperature under load | ASTM D648 | 1.82MPa/6.4mm | deg C | 183 | |
| Deflection temperature under load | ISO 75 | 0.45MPa | deg C | 212 | 210 |
| Deflection temperature under load | ASTM D648 | 0.46MPa/6.4mm | deg C | 213 | |
| Coefficient of linear thermal expansion | ISO 11359 | MD | X1E-5/deg C | 5 | |
| Coefficient of linear thermal expansion | ISO 11359 | TD | X1E-5/deg C | 10 | |
| Flammability | UL94 | - | - | V-0/0.75mm | |
| Water absorption | ISO 62 | - | % | 0.6 | |
| Density | ISO 1183 | - | g/cm3 | 1.45 | |

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 | | | |
| 4-5hrs 90-100deg C | 230-250 | 240-260 | 230-250 | 180-210 | 50-80 | 10-20 | 70-90 |