

NOVADURAN[®]

Polybutylene Terephthalate Resin

| Properties | Test Method | Terms | Units | 5010G30 |
|---|----------------------|---------------------|------------------------|---|
| | | | | GF Reinforced UL-HB type Standard |
| Percentage of filler and reinforcing material | - | - | - | GF |
| | - | - | % | 30 |
| Physical properties | | | | |
| Density | ISO 1183 | - | g/cm ³ | 1.52 |
| Water absorption | - | 23degC, Underwater | % | 0.07 |
| Rheological properties | | | | |
| Melt Mass-flow Rate | ISO 1133 | Temperature Load | g/10min | 20 |
| Melt Volume-flow Rate | | | cm ³ /10min | 15 |
| | | | degC | 250 |
| | | | kg | 2.16 |
| Moulding shrinkage(1mmt) | - | MD | % | 0.2 |
| | | TD | % | 0.7 |
| Moulding shrinkage(3mmt) | - | MD | % | 0.3 |
| | | TD | % | 1.0 |
| Mechanical properties | | | | |
| Tensile modulus | ISO 527-1 , 527-2 | - | MPa | 9500 |
| Yield stress | | | - | |
| Yield strain | | | % | - |
| Nominal strain at break | | | - | - |
| Stress at 50% strain | | | MPa | - |
| Stress at break | | | MPa | 130 |
| Strain at break | % | 3 | | |
| Flexural strength | ISO 178 | - | MPa | 210 |
| Flexural modulus | | | 8900 | |
| Charpy impact strength | ISO 179-1 , 179-2 | 23 degC | kJ/m ² | 59 |
| Charpy notched impact strength | | 23 degC | kJ/m ² | 10 |
| Thermal properties | | | | |
| Melting temperature | ISO 11357-3 | | degC | 224 |
| Temperature of deflection under load | ISO 75-1 , 75-2 | 1.80MPa | degC | 202 |
| | | 0.45MPa | degC | 220 |
| Coefficient of Linear thermal expansion | ISO 11359-2 | MD | 1/degC | 3.E-05 |
| | | TD | 1/degC | 7.E-05 |
| Flammability | UL94 | 0.8mmt | - | HB |
| Electrical properties | | | | |
| Relative permittivity | IEC 60250 | 1MHz | - | 3.4 |
| Dissipation factor | IEC 60250 | 1MHz | - | 0.016 |
| Volume resistivity | IEC 60093 | - | ohm-m | 1.E+14 |
| Surface resistivity | IEC 60093 | - | ohm | 1.E+15 |
| Electric strength | IEC 60243-1 | 1mmt | MV/m | 27 |
| | | 2mmt | MV/m | 24 |
| Comparative tracking index | UL746A | - | - | PLC 1 |

The listed properties are portrayed as general information only and are not product specifications.

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