

## RPBT G30 FHBA X

PBT, 30% glass fiber reinforced, flame retardant – halogen (RoHS compliant), heat stabilized, black

| Property (dry as molded)                  |                   |                 |                   |            |
|-------------------------------------------|-------------------|-----------------|-------------------|------------|
| General Properties                        | Condition         | Value           | Unit              | Standard   |
| Abbreviation                              | -                 | PBT GF30 FR(17) | -                 | ISO 1043   |
| Density                                   | -                 | 1,65            | g/cm <sup>3</sup> | ISO 1183   |
| Melt Flow Rate                            | 2.16kg, 270 °C    | -               | g/10'             | ISO 1133   |
| Molding Shrinkage                         | Parallel / Normal | 0,3 / 1,0       | %                 | ISO 15512  |
| Moisture Content                          | -                 | <0,08           | %                 | ISO 960    |
| Moisture Absorption                       | 50% RH, 23 °C     | 0,2             | %                 | ISO 62     |
| Mechanical Properties                     | Condition         | Value           | Unit              | standard   |
| Stress at Break                           | +23 °C            | 125             | MPa               | ISO 527    |
| Strain at Break                           | +23 °C            | 2,0             | %                 | ISO 527    |
| Tensile Modulus                           | +23 °C            | 11000           | MPa               | ISO 527    |
| Yield Strength                            | +23 °C            | -               | MPa               | ISO 527    |
| Izod Impact, notched                      | +23 °C            | 10              | kJ/m <sup>2</sup> | ISO 180/1A |
| Izod Impact, notched                      | -30 °C            | 9               | kJ/m <sup>2</sup> | ISO 180/1A |
| Izod Impact, un-notched                   | +23 °C            | 65              | kJ/m <sup>2</sup> | ISO 180/1U |
| Izod Impact, un-notched                   | -30 °C            | 60              | kJ/m <sup>2</sup> | ISO 180/1U |
| Thermal Properties                        | Condition         | Value           | Unit              | Standard   |
| Melting Temperature                       | 10 K/min          | 225             | °C                | ISO 11357  |
| Heat Deformation Temperature              | 0.45 MPa          | 215             | °C                | ISO 75     |
| Heat Deformation Temperature              | 1.80 MPa          | 200             | °C                | ISO 75     |
| Vicat Softening Temperature               | 50N               | -               | °C                | ISO 306    |
| Electrical Properties & Flammability      | Condition         | Value           | Unit              | Standard   |
| Volume Resistivity                        | -                 | 1E+16           | Ohm.cm            | IEC 60093  |
| Surface Resistivity                       | -                 | 1E+14           | Ohm               | IEC 60093  |
| Comparative Tracking Index                | Solution A        | 225             | V                 | IEC 60112  |
| Glow Wire Flammability Index (GWFI)       | 2 mm plaque       | 960             | °C                | IEC 60695  |
| Glow Wire Ignitability Temperature (GWIT) | 2 mm plaque       | 700             | °C                | IEC 60695  |
| Flame Rating                              | 0.75 mm           | V2              | -                 | UL 94      |
| Flame Rating                              | 1.6 mm            | V0              | -                 | UL 94      |
| Processing Parameters                     | Condition         | Value           | Unit              | Standard   |
| Drying                                    |                   | 120 / 2 – 4     | °C /hr            |            |
| Feed Throat Temperature                   |                   | 50 – 70         | °C                |            |
| Processing Temperature                    |                   | 230 – 260       | °C                |            |
| Mold Temperature                          |                   | 50 – 100        | °C                |            |
| Hold Pressure                             |                   | 40 – 80         | MPa               |            |
| Back Pressure                             |                   | Low             | -                 |            |
| Injection Speed                           |                   | Medium - Fast   | -                 |            |

All above information are gathered under the supervision of ReMo Polytechnic Company in laboratories. For sure there is no guarantee due to various test result under different condition process. As result this is the end users responsibilities and duties to test our products under their required processing condition, uses and by their own facilities.