

| Processing/Physical Characteristics                | Value     | Unit                   | Test Standard       |
|--|-----------|------------------------|---------------------|
| <b>ISO Data</b>                                    |           |                        |                     |
| Melt volume-flow rate, MVR                         | 10        | cm <sup>3</sup> /10min | ISO 1133            |
| Temperature  | 250       | °C                     | -                   |
| Load   | 2.16      | kg                     | -                   |
| Molding shrinkage, parallel                        | 0.4       | %                      | ISO 294-4, 2577     |
| Molding shrinkage, normal                          | 1.3       | %                      | ISO 294-4, 2577     |
| <b>Mechanical properties</b>                       |           |                        |                     |
| <b>ISO Data</b>                                    |           |                        |                     |
| Tensile Modulus                                    | 5800      | MPa                    | ISO 527             |
| Stress at break                                    | 100       | MPa                    | ISO 527             |
| Strain at break                                    | 3         | %                      | ISO 527             |
| Flexural modulus, 23°C                             | 5000      | MPa                    | ISO 178             |
| Charpy impact strength, +23°C                      | 30        | kJ/m <sup>2</sup>      | ISO 179/1eU         |
| Charpy impact strength, -30°C                      | 30        | kJ/m <sup>2</sup>      | ISO 179/1eU         |
| Charpy notched impact strength, +23°C              | 5.5       | kJ/m <sup>2</sup>      | ISO 179/1eA         |
| Charpy notched impact strength, -30°C              | 5.5       | kJ/m <sup>2</sup>      | ISO 179/1eA         |
| Ball indentation hardness                          | 190       | MPa                    | ISO 2039-1          |
| <b>Thermal properties</b>                          |           |                        |                     |
| <b>ISO Data</b>                                    |           |                        |                     |
| Melting temperature, 10°C/min                      | 223       | °C                     | ISO 11357-1/-3      |
| Temp. of deflection under load, 1.80 MPa           | 190       | °C                     | ISO 75-1/-2         |
| Temp. of deflection under load, 0.45 MPa           | 210       | °C                     | ISO 75-1/-2         |
| Temp. of deflection under load, 8.00 MPa           | 65        | °C                     | ISO 75-1/-2         |
| Vicat softening temperature, B                     | 205       | °C                     | ISO 306             |
| Coeff. of linear therm. expansion, parallel        | 45        | E-6/K                  | ISO 11359-1/-2      |
| Coeff. of linear therm. expansion, normal          | 100       | E-6/K                  | ISO 11359-1/-2      |
| Burning behav. at thickness h                      | V-0       | class                  | IEC 60695-11-10     |
| Thickness tested                                   | 0.8       | mm                     | -                   |
| Glow Wire Flammability Index (GWFI)                | 960       | °C                     | IEC 60695-2-12      |
| GWFI - thickness tested (1)                        | 2         | mm                     | -                   |
| <b>Electrical properties</b>                       |           |                        |                     |
| <b>ISO Data</b>                                    |           |                        |                     |
| Relative permittivity, 100Hz                       | 3.6       | -                      | IEC 62631-2-1       |
| Relative permittivity, 1MHz                        | 3.4       | -                      | IEC 62631-2-1       |
| Volume resistivity                                 | >1E13     | Ohm*m                  | IEC 62631-3-1       |
| Surface resistivity                                | 1E15      | Ohm                    | IEC 62631-3-2       |
| Electric strength                                  | 30        | kV/mm                  | IEC 60243-1         |
| Comparative tracking index                         | 200       | -                      | IEC 60112           |
| <b>Other properties</b>                            |           |                        |                     |
| Water absorption                                   | 0.4       | %                      | Sim. to ISO 62      |
| Humidity absorption                                | 0.2       | %                      | Sim. to ISO 62      |
| Density  | 1520      | kg/m <sup>3</sup>      | ISO 1183            |
| <b>Material specific properties</b>                |           |                        |                     |
| <b>ISO Data</b>                                    |           |                        |                     |
| Viscosity number                                   | 103       | cm <sup>3</sup> /g     | ISO 307, 1157, 1628 |
| <b>Processing Recommendation Injection Molding</b> |           |                        |                     |
| Pre-drying - Temperature                           | 120 - 140 | °C                     | -                   |
| Pre-drying - Time                                  | 2 - 4     | h                      | -                   |
| Processing humidity                                | ≤0.02     | %                      | -                   |
| Melt temperature                                   | 260 - 265 | °C                     | -                   |

|                        |                  |     |   |
|------------------------|------------------|-----|---|
| Mold temperature       | <b>75 - 95</b>   | °C  | - |
| Zone 1                 | <b>250 - 265</b> | °C  | - |
| Nozzle temperature     | <b>260 - 265</b> | °C  | - |
| Screw speed            | <b>80</b>        | rpm | - |
| Injection pressure     | <b>60 - 100</b>  | MPa | - |
| Back pressure          | <b>1 - 3</b>     | MPa | - |
| Holding pressure       | <b>40 - 80</b>   | MPa | - |
| Maximum residence time | <b>10</b>        | min | - |

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Flame retardant, Heat stabilized or stable to heat

**Delivery form**

Pellets, Natural Color

**Regional Availability**

Europe