

M - 006

| TECHNICAL DATA SHEET | | APPLICATIONS | CHARACTERISTICS | | |
|---|---------------------|--|--|-----------------|------------------|
| CTE Material name: LONBEL® PEEK-2 POLY ETHER ETHER KETONE "2" Options: Abrasion or sliding n.t.= Not tested | | Mechanical engineering, handling and electyrical indstury, food processing industry | Excelent sliding and abrasion behaviour Excelent dimensional stability High rigidity, dimensional stability and temperature resistance | | |
| GENERAL PROPERTIES | | Unit | Test method | Value | |
| | | | | Abrasion | Sliding |
| Density | g/cm ³ | DIN EN ISO 1183-1 | | 1,46 | 1,36 |
| Water absorption | % | DIN EN ISO 62 | | 0,2 | 0,2 |
| Flammability | | UL 94 | | VO / VO | VO / VO |
| MECHANICAL PROPERTIES | | | | | |
| Yield stress | Mpa | DIN EN ISO 527 | | 75 | 87 |
| Elongation at break | % | DIN EN ISO 527 | | 4 | 3 |
| Tensile modulus of elasticity | Mpa | DIN EN ISO 527 | | 4900 | 3700 |
| Notched impact strength | kJ/m ² | DIN EN ISO 179 | | 5 | 3,5 |
| Shore hardness | scale D | DIN EN ISO 868 | | 85 | 86 |
| Rockwell hardness | scale R | DIN EN ISO 2039-2 | | n.t. | n.t. |
| THERMAL PROPERTIES | | | | | |
| Thermal conductivity | W/(m*K) | DIN 52612-1 | | 0,24 | n.t. |
| Thermal capacity | KJ/(kg*K) | DIN 52612 | | n.t. | n.t. |
| Coefficient of linear thermal expansion | 10 ⁻⁶ /K | DIN 53752 | | 25 | 30 |
| Service temperature long term | °C | Average | | -30 / 250 | -30 / 250 |
| Service temperature short term max. | °C | Average | | 310 | 310 |
| Vicat softening temperature | °C | DIN EN ISO 306, Vicat B | | n.t. | n.t. |
| Heat deflection temperature | °C | DIN EN ISO 75, Verf. A, HDT | | 293 | 315 |
| Crystalline grain melting range | °C | ISO 11357-3 | | 343 | 343 |
| ELECTRICAL PROPERTIES | | | | | |
| Volume resistivity | Ω | DIN EN 61340 | | n.t. | n.t. |
| Surface resistivity | Ω | DIN EN 61340 | | n.t. | n.t. |
| Volume resistivity | Ω * cm | IEC 60093 | | 10 ⁶ | n.t. |
| Surface resistivity | Ω | IEC 60093 | | 10 ⁶ | 10 ¹⁶ |
| Dielectric constant | | IEC 60250 | | n.t. | n.t. |
| Dielectric dissipation factor (50 Hz) | | IEC 60250 | | n.t. | n.t. |
| Comparative tracking index | | IEC 60112 | | n.t. | n.t. |
| Dielectric strength | Kv/mm | IEC 60243 | | n.t. | 20 |