POLYabs





Features UL listed

| Feature | Value | Unit | Testmethod |
|-------------------------------|---------|----------|-------------|
| PHYSICAL PROPERTIES | | | |
| Density | 1,04 | g/cm³ | ISO 1183 |
| MFI at 230°C/5 kg | 10 | g/10 min | ISO 1133 |
| MECHANICAL PROPERTIES | | | |
| Flexural modulus at +23°C | 2600 | MPa | ISO 178 |
| Maximum flexural strength | 84 | MPa | ISO 178 |
| Maximum tensile strength | 48 | MPa | ISO 527-2 |
| Elongation at break | | % | ISO 527-2 |
| Elongation at yield | 6 | % | ISO 527-2 |
| IMPACT PROPERTIES | | | |
| Impact strength | | | |
| Notched Charpy at +23°C | 16 | kJ/m² | ISO 179 |
| Notched Charpy at -20°C | 11 | kJ/m² | ISO 179 |
| Unnotched Charpy at +23°C | | kJ/m² | ISO 179 |
| Unnotched Charpy at -20°C | | kJ/m² | ISO 179 |
| THERMAL PROPERTIES | | | |
| Heat Distortion Temperature | | | |
| HDT 120°C/h at 455kPa (B) | 88 | °C | ISO 75/1 |
| HDT 120°C/h at 1820kPa (A) | 77 | °C | ISO 75/1 |
| Softening temperature | | | |
| Vicat 50°C/h at 9,81N (A) | 106 | °C | ISO 306 |
| Vicat 50°C/h at 49,05N (B) | 101 | °C | ISO 306 |
| FLAMMABILITY PROPERTIES | | | |
| Flammability | | | |
| GWT at 2 mm | | °C | IEC 695-2-1 |
| UL94 at 1.6 mm | HB* | | UL94 |
| ADDITIONAL INFORMATION | | | |
| Filler content | | ±2% | ISO 3451 |
| Mould shrinkage (with flow) | 0,6-0,8 | % | ISO 294-4 |
| Mould shrinkage (across flow) | 0,6-0,8 | % | ISO 294-4 |
| PROCESS INSTRUCTIONS | | | |
| Drying time | 2-4 | h | |
| Drying temperature | 80 | °C | |
| Maximal moisture content | <0.1 | % | |
| Melt temperature | 190-230 | °C | |
| Mould temperature | 60-80 | °C | |
| Peripherical screw speed | 450-650 | mm/s | |
| Back pressure | 60-100 | bar | |

^{*}UL file no. E122538

During production stops, emptying the cylinder is recommended. Leave the screw in its front most position. For polycarbonate it is also recommended to leave the cylinder temperature at 160-180°C and that the heating on the feeding zone is on. When producing details in flame retardant material, corrosion protected steel is to recommend for the mould. For further information, see the material safety datasheet (MSDS).

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