

KASI-SOL scratch-resistant coating for PC

Special coating for polycarbonate providing for flat PC-sheets in outdoor areas high scratch-resistance and climatic resistance combined with reliable protection against ultra-violet radiation.

Typical properties

| Revision: 10/03 | Standard | Dimension | KASI-SOL |
|---|--------------|---------------------|-----------------------|
| General properties | | | |
| Bulk density* | ISO 1183 | g/cm ³ | 1,2 |
| Water absorption 24h, 23°C* | ISO 62 | mg/kg | <8 |
| Mechanical characteristics | | | |
| Tensile strength* | ISO 527 | MPa | 60 |
| Elongation at tear* | ISO 527 | % | 110 |
| Modulus of elasticity* | ISO 527 | MPa | 2200 |
| Impact resistance* | ISO 179 | kJ/m ² | not broken |
| Abrasion (Taber-process; 1000 rotations; CS-10F; 500 g) | ISO 9352 | % Haze | <1,5 |
| Thickness of layer (depending from necessary grade of protection) | | µm | 7 - 15 |
| Adhesive properties 0,5/1,0/2,0 h boiling period at 100°C | ISO 2409 | | GT 0/0/0 |
| Climatic resistance | ISO 4892 | % Diff. | No visible changes |
| Thermal characteristics | | | |
| Vicat diluting temperature VST/B 50* | ISO 306 | °C | 150 |
| Constancy temperature HDT/A (1,8 N/mm ²)* | ISO 75 | °C | 135 |
| Temperature of permanent use | DIN 53446 | °C | 115 |
| Linear coefficient of cubical thermal expansion (α) 0 - 50 °C | DIN 53752 | K ⁻¹ | 65 x 10 ⁻⁶ |
| Heat conductivity (λ)* | DIN 52612 | W/mK | 0,21 |
| Specific heat (c)* | | J/gK | 1,3 |
| Optical characteristics | | | |
| Transparency 380-780 nm D = 3 mm | DIN 5036 | % | <86 |
| Chamfer angle* | DIN 52305 | Bg' | <5 |
| Refractive power* | DIN 52305 | dtp | <0,1 |
| Electrical characteristics | | | |
| Specific volume resistivity* | DIN VDE 0303 | cm | 10 ¹⁵ |
| Dielectric strength* | DIN EN 60243 | kV/mm | >30 |
| Special characteristics | | | |
| Behaviour in fire* | DIN 4102 | Fire classification | B 2 |

*The information applies to the carrier material.