

KASI-GL scratch-resistant coating for PMMA

Special coating for Polymethylmethacrylat providing high scratch-resistance and hardness combined with improved climatic and chemical resistance.

Typical properties

| Revision: 09/04 | Standard | Dimension | KASI®-AS DUR |
|---|--------------|---------------------|-----------------------|
| General properties | | | |
| Bulk density | ISO 1183 | g/cm ³ | 1,19 |
| Water absorption 24h, 23°C | ISO 62 | mg/kg | <30 |
| Mechanical characteristics | | | |
| Tensile strength* | ISO 527 | MPa | 75 |
| Elongation at tear* | ISO 527 | % | 104,5 |
| Modulus of elasticity* | ISO 527 | MPa | 3300 |
| Impact resistance* | ISO 179 | kJ/m ² | 12 |
| Extensibility of surface | DIN 53455 | % | 1,1 |
| Abrasion (Taber-process; 100 rotations; CS-10F; 500 g) | ISO 9352 | % Haze | 1,1 - 1,5 |
| Thickness of layer | | µm | 4 - 8 |
| Adhesive properties 0,5/1,0/2,0 h boiling period at 80°C | ISO 2409 | | |
| Climatic resistance | 4892 | % Diff. | 0,1 |
| Sand trickle test | DIN 52348 | | 4 |
| Thermal characteristics | | | |
| Vicat diluting temperature VST/B 50 | ISO 306 | °C | 115 |
| Constancy temperature HDT/A (1,8 N/mm ²) | ISO 75 | °C | 100 |
| Temperature of permanent use | DIN 53446 | °C | 80 |
| Linear coefficient of cubical thermal expansion (α) 0 – 50 °C | DIN 53752 | K ⁻¹ | 70 x 10 ⁻⁶ |
| Heat conductivity (λ) | DIN 52612 | W/mK | 0,19 |
| Specific heat (c) | | J/gK | 1,47 |
| Optical characteristics | | | |
| Refractive index | ISO 489 | nd20 | 1,428 (1,492) |
| Transparency 380-780 nm D = 3 mm | DIN 5036 | % | 92 |
| Chamfer angle* | DIN 52305 | Bg' | <3 |
| Refractive power* | DIN 52305 | dtp | <0,05 |
| 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 | B2 |

*The information applies to the carrier material.

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.