

### KASI-PCN scratch-resistant coating for PC

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

#### Typical properties

Revision: 01/03	Standard	Dimension	KASI-PCN
<b>General properties</b>			
Bulk density	ISO 1183	g/cm <sup>3</sup>	1,2
Water absorption 24h, 23°C	ISO 62	mg/kg	<8
<b>Mechanical characteristics</b>			
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 <sup>2</sup>	not broken
Extensibility of surface	DIN53455	%	1,1
Abrasion (Taber-process; 1000 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 100°C	ISO 2409		GT 0/0/0
Climatic resistance	4892	%Diff.	0,1
Sand trickle test	DIN52348		2,5
<b>Thermal characteristics</b>			
Vicat diluting temperature VST/B 50*	ISO 306	°C	150
Constancy temperature HDT/A (1,8 N/mm <sup>2</sup> )	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 <sup>-1</sup>	65 x 10 <sup>-6</sup>
Heat conductivity (λ)	DIN 52612	W/mK	0,21
Specific heat (c)		J/gK	1,3
<b>Optical characteristics</b>			
Refractive index	ISO 489	n <sub>D</sub> 20	1,428 (1,585)
Transparency 380-780 nm D = 3 mm	DIN 5036	%	<86
Chamfer angle*	DIN 52305	Bg'	<5
Refractive power*	DIN 52305	dtp	<0,1
<b>Electrical characteristics</b>			
Specific volume resistivity	DIN VDE 0303	cm	10 <sup>15</sup>
Dielectric strength	DIN EN 60243	kV/mm	>30
<b>Special characteristics</b>			
Behaviour in fire	DIN 4102	Fire classification	B 2

\*The information applies to the carrier material.

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