

**TECHNICAL DATA SHEET**

<b>GENERAL</b>			
<b>Property</b>	<b>Method</b>	<b>Unit</b>	<b>CRYLON®</b>
Density	DIN EN ISO 1183	g/cm <sup>3</sup>	1,19
Water absorption 24h/23°C – 50x50x4mm <sup>3</sup>	DIN EN ISO 62 – Method 1	%	0,2
Ball indentation hardness	DIN EN ISO 2039-1	MPa	235
Forming temperature air pressure		°C	140 - 160
Forming temperature vacuum		°C	160 - 190
Moulding shrinkage		%	0,5 – 0,8
<b>MECHANICAL</b>			
<b>Property</b>	<b>Method</b>	<b>Unit</b>	<b>CRYLON®</b>
Tensile strength	DIN EN ISO 527-2	MPa	70
Elongation at break	DIN EN ISO 527-2	MPa	4
Tensile modulus	DIN EN ISO 527-2	MPa	3100
Flexural strength	DIN EN ISO 178	MPa	110
Flexural modulus	DIN EN ISO 178	MPa	3000
Impact strength Charpy unnotched	DIN EN ISO 179-1	kJ/m <sup>2</sup>	15
Impact strength Charpy notched	DIN EN ISO 179-1	kJ/m <sup>2</sup>	2
<b>OPTICAL</b>			
<b>Property</b>	<b>Method</b>	<b>Unit</b>	<b>CRYLON®</b>
Light transmission (3 mm klar)	DIN 5036-3 / DIN EN ISO 13468-2	%	92
Refractive index	DIN EN ISO 489	n <sub>D</sub> <sup>20</sup>	1,492
Total solar energy transmission (g – Wert)	DIN EN 410	%	86,5
Gloss value	DIN 67530		>100

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<b>THERMAL</b>			
<b>Property</b>	<b>Method</b>	<b>Unit</b>	<b>CRYLON®</b>
Vicat temperature (B 50) Pre-treatment 16h at 80°C	DIN EN ISO 306	°C	105
Specific heat capacity	DIN EN ISO 11357-4	J/gK	1,47
Linear thermal expansion	DIN 53752 ISO 11359-2	mm/m x °C	0,07
Thermal conductivity	DIN 52612 DIN EN ISO 22007-1	W/mK	0,18
Service temperature continuous use		°C	70
Max. temperature short term use		°C	90
Degradation temperature		°C	< 280
<b>ELECTRICAL</b>			
<b>Property</b>	<b>Method</b>	<b>Unit</b>	<b>CRYLON®</b>
Surface resistivity	IEC 60093 DIN EN 62631-1-3-2	Ω	3x10 <sup>15</sup> - 3x10 <sup>16</sup>
Volume resistivity	IEC 60093 DIN EN 62631-1-3-1	Ω x m	1x10 <sup>13</sup> - 5x10 <sup>13</sup>
Electrical strength	IEC 60243-1 DIN EN 60243-1	kV/mm	10
Dielectric strength	IEC 60243-1 DIN EN 60243-1	kV/mm	30
Dielectric dissipation factor 50 Hz	DIN 53483-2		0,06
Dielectric dissipation factor 1 KHz	DIN 53483-2		0,04
Dielectric dissipation factor 1 MHz	DIN 53483-2		0,02
Relative permittivity 50 Hz	DIN 53483-2		2,7
Relative permittivity 1 KHz	DIN 53483-2		3,1
Relative permittivity 1MHz	DIN 53483-2		2,7

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Other			
Property	Method	Unit	CRYLON®
Fire resistance	UL94	flame class	HB
Fire performance	CPD 305/2011 DIN EN 13501-1	classification	E No burning droplets
Food contact - GMP	EU Richtlinie 1935/2004 VO 10/2011	---	Conform
Biocompatibility	DIN ISO 10993-5	---	No cytotoxic

Note: *Technical data of our products are typical ones; the actually measured values are subject to production variations.*