TECHNICAL DATA SHEET

DIN EN ISO 7823-2

GENERAL			
Property	**Method**	**Unit**	**CRYLON®**
Density	DIN EN ISO 1183	g/cm³	1.19
Water absorption_24h/23°C_50x50x4mm³	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
MECHANICAL			
Property	**Method**	**Unit**	**CRYLON®**
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/m²	15
Impact strength Charpy notched	DIN EN ISO 179-1	kJ/m²	2
OPTICAL			
Property	**Method**	**Unit**	**CRYLON®**
Light transmission (3 mm)	DIN 5036-3 / DIN EN ISO 13468-2	%	92
Refractive index	DIN EN ISO 489	n_D^{20}	1.492
Total solar energy transmission (g – Wert)	DIN EN 410	%	86.5
Gloss value	DIN 67530		>100

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THERMAL			
Property	**Method**	**Unit**	**CRYLON®**
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

ELECTRICAL			
Property	**Method**	**Unit**	**CRYLON®**
Surface resistivity	IEC 60093 DIN EN 62631-1-3-2	Ω	$3x10^{15}$ - $3x10^{16}$
Volume resistivity	IEC 60093 DIN EN 62631-1-3-1	Ω x m	$1x10^{13}$ - $5x10^{13}$
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 / 1 KHz / 1 MHz	DIN 53483-2		0.06 / 0.04 / 0.02
Relative permittivity 50 Hz / 1 KHz / 1MHz	DIN 53483-2		2.7 / 3.1 / 2.7

COMPOSITES

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Other			
Property	**Method**	**Unit**	**CRYLON®**
Fire resistance	UL94	classification	HB
Fire performance	CPD 305/2011 DIN EN 13501-1	classification	E No burning droplets
Food contact - GMP	EU directive 1935/2004 Regulation 10/2011	---	Conform
Biocompatibility	DIN ISO 10993-5	---	Not cytotoxic

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