

TECHNICAL DATA SHEET
DIN EN ISO 7823-2

| GENERAL | | | |
|--|---------------------------------|------------------------------|----------------|
| Property | Method | Unit | CRYLON® |
| Density | DIN EN ISO 1183 | g/cm ³ | 1.19 |
| Water absorption_24h/23°C_50x50x4mm ³ | 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 | 3200 |
| Flexural strength | DIN EN ISO 178 | MPa | 115 |
| Flexural modulus | DIN EN ISO 178 | MPa | 3300 |
| Impact strength Charpy unnotched | DIN EN ISO 179-1 | kJ/m ² | 17 |
| Impact strength Charpy notched | DIN EN ISO 179-1 | kJ/m ² | 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 |

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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.