

# HIGH IMPACT POLYSTYRENE

GENERAL				
Property	Method	Units	Glossy/Matt	Matt/Matt
Density	EN ISO 1183	g/cm <sup>3</sup>	1,06	

MECHANICAL				
Property	Method	Units	Glossy/Matt	Matt/Matt
Flexural modulus	EN ISO 178	MPa	1850	1800
Flexural strength	EN ISO 178	MPa	34	32
Tensile modulus	EN ISO 527-2	MPa	1730	1670
Tensile strength	EN ISO 527-2	MPa	24	20
Elongation at break	EN ISO 527-2	%	2,9	4,2
Stress at break	EN ISO 527-2	MPa	18	16
Ball indentation hardness	EN ISO 2039-1	N/mm <sup>2</sup>	80	
Charpy Notched – glossy side impacted	EN ISO 179	kJ/m <sup>2</sup>	9	-
Charpy Notched – matt side impacted	EN ISO 179	kJ/m <sup>2</sup>	6	10

THERMAL				
Property	Method	Units	Glossy/Matt	Matt/Matt
Vicat softening temperature (B 50)	EN ISO 306	°C	92	91
Heat deflection temperature (A)	EN ISO 75-2	°C	82	84
Linear thermal expansion	DIN 53752	K <sup>-1</sup>	80x10 <sup>-6</sup>	
Service temperature continuous use	DIN 52612	°C	70	
Thermal conductivity	EN ISO 11501	W/mK	0,16	
Dimensional change of heating	EN ISO 15015	%	5	5,5

ELECTRICAL				
Property	Method	Units		
Volume resistivity	IEC 93	Ω.cm	>10 <sup>16</sup>	
Surface resistivity	IEC 93	Ω	>10 <sup>13</sup>	
Dielectric Strength	IEC 243-1	KV/mm	155	
Dielectric constant at 100Hz - 1 MHz	IEC 250		2,5	
Disipation factor at 100Hz - 1 MHz	IEC 250		>10 <sup>-4</sup>	

## FIRE RESISTANCE


## PROCESSING

<input checked="" type="checkbox"/> Sawing	<input checked="" type="checkbox"/> Flame polishing	<input checked="" type="checkbox"/> Vacuum forming
<input checked="" type="checkbox"/> Drilling	<input checked="" type="checkbox"/> Diamond polishing	<input checked="" type="checkbox"/> Drape forming
<input checked="" type="checkbox"/> Milling	<input checked="" type="checkbox"/> Cold bending	<input checked="" type="checkbox"/> Glueing
<input checked="" type="checkbox"/> Lasercutting	<input checked="" type="checkbox"/> Warm bending	<input checked="" type="checkbox"/> Printing
<input checked="" type="checkbox"/> Laser engraving	<input checked="" type="checkbox"/> Oven curving	

Suggestions and data on datasheet are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.