

**Triacell<sup>®</sup> - Technical data sheet**

**PHYSICAL PROPERTIES**

Properties	Method	Units	PP*
Specific gravity PP	ISO 1183	g/cm <sup>3</sup>	0,907
Water absorption	ISO 62	%	0,02

**MECHANICAL PROPERTIES**

Properties	Method	Units	PP*
Tensile strength (50 mm/min)	ISO 527-2	MPa	27 - 33
Flexural modulus	ISO 178	MPa	1350
Impact strength Izod (23 °C)	ISO 180	kJ/m <sup>2</sup>	5 - 25
Impact strength Izod (-20 °C)	ISO 180	kJ/m <sup>2</sup>	0 - 6

**MECHANICAL PROPERTIES**

Properties	Method	Units	Triacell
Compression strength at maximum	2,4 mm / 450 g external lab	N/cm <sup>2</sup>	60
	2,7 mm / 600 g external lab	N/cm <sup>2</sup>	130
	3,4 mm / 900g external lab	N/cm <sup>2</sup>	136
	5,7 mm / 1600g external lab	N/cm <sup>2</sup>	176
Compression resistance (at 1000N)	2,4 mm / 450 g external lab	N/cm <sup>2</sup>	< 30%
	2,7 mm / 600 g external lab	N/cm <sup>2</sup>	< 30%
	3,4 mm / 900g external lab	N/cm <sup>2</sup>	< 20%
	5,7 mm / 1600g external lab	N/cm <sup>2</sup>	<15%
Impact resistance	2,4 mm / 450 g Falling dart drop		no effect < 0,30 m
	2,7 mm / 600 g Falling dart drop		no effect < 0,40 m
	3,4 mm / 900g Falling dart drop		no effect < 0,80 m
	5,7 mm / 1600g Falling dart drop		no effect < 1,00 m
Flexural Break resistance	2,4 mm / 450 g ISO 178	N/mm <sup>2</sup>	3,75
	2,7 mm / 600 g ISO 178	N/mm <sup>2</sup>	3,2
	3,4 mm / 900g ISO 178	N/mm <sup>2</sup>	8,28
	5,7 mm / 1600g ISO 178	N/mm <sup>2</sup>	27,4

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**THERMAL PROPERTIES**

Properties	Method	Units	PP*
<i>Coefficient of linear expansion</i>	ASTM D696	mm/m °C	0,18
<i>Specific Heat</i>	DSC	J/g °C	1,68
<i>Heat deflection temp. (0,46 MPa)</i>	ISO 75	°C	78
<i>Heat deflection temp. (1,82 MPa)</i>	ISO 75	°C	52
<i>Vicat softening point (1 kg) (10N)</i>	ISO 306	°C	148
<i>Vicat softening point (5 kg) (50N)</i>	ISO 306	°C	78

**ELECTRICAL PROPERTIES**

Properties	Method	Units	PP*
<i>Surface resistivity</i>	ASTM D257	Ω	ca. 10 <sup>13</sup>
<i>Dielectric constant (at 1 MHz)</i>	ASTM D150	-	2,25
<i>Dissipation factor (tg δ at 1MHz)</i>	ASTM D150	-	< 5 x 10 <sup>-4</sup>
<i>Dielectric strength (500V/sec)</i>	ASTM D149	kV/mm	70

PP\* = test results based upon raw material

Temporary and limited list made to our best knowledge at this time.

The technical data concerning our products are not binding and are given for guidance only.

For more specific information, please feel free to contact our technical department :

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