

Biplex[®] - Technical data sheet

PHYSICAL PROPERTIES

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

MECHANICAL PROPERTIES

Properties	Method	Units	PP*
Tensile strength	ISO 527	MPa	38
Elongation at break	ISO 527	%	800
Flexural modulus	ISO 178	MPa	1250
Impact strength Charpy	ISO 180	kJ/m ²	80
Shore D hardness	ISO 868	-	66

MECHANICAL PROPERTIES

Properties	Method	Units	Biplex
Compression stress 2,1mm/350gr	internal IPB	N/cm ²	min. 3,7
at maximum 2,0mm/400gr	internal IPB	N/cm ²	min. 1,4
3,0mm/650gr	internal IPB	N/cm ²	min. 5,5
4,5mm/1000gr	internal IPB	N/cm ²	min. 14,4

THERMAL PROPERTIES

Properties	Method	Units	PP*
Dilatation coefficient	ASTMD696	mm/m°C	0,18
Specific Heat	DSC	J/g°C	1,68
Heat deflection temp. (0,46 MPa)	ISO 75	°C	78
Heat deflection temp. (1,82 MPa)	ISO 75	°C	52
Vicat softening point (1 kg) (10N)	ISO 306	°C	148
Vicat softening point (5 kg) (50N)	ISO 306	°C	78

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OPTICAL PROPERTIES

Properties	Method	Units	Biplex	
<i>Light transmission</i> <i>(clear sheet)</i>	2,0mm/400gr	internal IPB	%	58
	2,5mm/450gr	internal IPB	%	53
	3,0mm/500gr	internal IPB	%	51
	4,0mm/1000gr	internal IPB	%	37

ELECTRICAL PROPERTIES

Properties	Method	Units	PP*
<i>Surface resistivity</i>	ASTMD257	W	<i>ca.</i> 10^{13}
<i>Dielectric constant (at 1 MHz)</i>	ASTMD150	-	2,25
<i>Dissipation factor (tg δ at 1MHz)</i>	ASTMD150	-	$< 5 \times 10^{-4}$
<i>Dielectric strength (500V/sec)</i>	ASTMD149	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 :