



## TECHNICAL DATA SHEET

<b>CORE MATERIAL: PP</b>			
<b>Dimensions</b>			
Width x Length Tolerance (mm): $\pm 10\%$			
Thicknesses (mm) : $5 \pm 10\%$			
Density ( $\text{kg/m}^3$ ): $80 \pm 10\%$			
Core Diameter (mm): 5			
<b>Rheological properties</b>			
Melt Flow Index 230°C/2.16 kg	ISO 1133	g/10 min	1,3
<b>Mechanical properties</b>			
Tensile Strength at Yield	ISO 527-3	Mpa	29
Elongation at Yield	ISO 527-3	%	6
Tensile modulus	ISO 527-3	Mpa	1500
Flexural modulus	ISO 178	Mpa	1400
Izod Impact Strength (notched)	ISO 180	kJ/m <sup>2</sup>	
at 23°C		>50	
at -20°C		9	
Charpy Impact Strength (notched)	ISO 179	kJ/m <sup>2</sup>	
at 23°C		>50	
at -20°C		10	
<b>Thermal properties</b>			
Melting Point	ISO 3146	°C	165
Resistance Moment W		13,5 cm <sup>3</sup> /m	
Thermal Elogation		$\lambda$	
80 C 6 saat		60,10 <sup>-6</sup> 1/°C	
Heat Resistance	-40/ +80 ° C	Deformation isn't on the sheet	
Heat Isolation		2,3-2,7 W/m <sup>2</sup> K	
<b>Chemical properties:</b>			
Flammability	SAE J369-2007	Class	B



## LAMINATION MATERIAL: GLASS FIBER

### Dimensions

Width x Length (mm): 1800x4380  
Thicknesses Upper lamination (mm) : 1±0,1  
Thicknesses Down lamination (mm): 1±0,1  
Density Up lamination (gr/m<sup>2</sup>): 1300 ±3  
Density Down lamination (gr/m<sup>2</sup>): 1300 ±3

### Mechanical properties

Tensile Strength	ISO 527-3	Long.	43,5
	Mpa	Transv.	18,6
Elongation	ISO 527-3	Long.	1,3
	%	Transv.	1,8
Tensile modulus	ISO 527-3	Long.	8260
	Mpa	Transv.	2060
Flexural modulus	ISO 527-3	Long.	8000
	Mpa	Transv.	3150
Flexural Strength	ISO 527-3	Long.	50,1
	Mpa	Transv.	15,6

<b>HEXAPAN</b>				
<b>Dimensions</b>				
Composition: GF+PP+GF Width x Length (mm): $\pm 10\%$ Thicknesses (mm) : $6,5 \pm 0,6$ Density ( $\text{g/m}^2$ ): $3100 \pm 10\%$				
<b>Mechanical properties</b>				
Four-Point Load				
Max. Force	ASTM C393 M	N	Long.	7420
			Transv.	1330
Core shear stress at max force	ASTM C393 M	MPa	Long.	2,78
			Transv.	0,66
Cover Layer flexural stress at max. force	ASTM C393 M	MPa	Long.	158,71
			Transv.	37,86
Ball Tests	63,5 mm steel ball-1050 gr		The ball falls 0-650 mm high and deformation isn't on the sheet	
Local load	ASTM C365/C 365M, 2005	kg	$\geq 250$	
GF/ Honeycomb breaking down strenght		Kg/cm <sup>2</sup>	$\geq 10$	
Water absorpsion	ASTM D570-98	24 h in the water	Max %1	
Hell Tests	Equipment diameter is $\varnothing 5,5\text{mm}$ and the force is 50 kg on the 3 point	Deformation should'nt be over the 1mm to apply force on the sheet	Passed the tests	