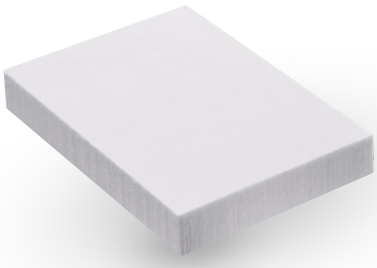

TECHNICAL DATA

PET Foam | **Divinycell PL**

High performance recyclable PET sandwich core

Divinycell PL is a fully recyclable PET-based core material, developed to optimize PET-cored composite structures with high performance and sustainability. Made from post-industrial PET, it combines high shear strength with low resin absorption, reducing both component weight and overall cost – without the need for surface sealing treatment.

With excellent shear strain and high temperature performance, Divinycell PL is compatible with a wide range of processing methods, including vacuum infusion, prepreg, and hot-press moulding. The high-strength Divinycell PL230 variant is particularly suited for demanding structural applications.

Mechanical properties

Property	Test Procedure[1]	Unit		PL100	PL105	PL150	PL200	PL230
Compressive Strength[2]	ASTM D 1621	MPa	Nominal	1.3	1.5	2.5	3.8	4.5
			Minimum	1.0	1.3	2.2	3.2	3.7
Compressive Modulus[2]	ASTM D1621-B-73	MPa	Nominal	100	112	165	230	245
			Minimum	75	85	130	190	210
Tensile Strength[2]	ASTM D 1623	MPa	Nominal	2.4	2.4	2.9	3.4	3.6
			Minimum	1.9	1.9	2.3	2.8	3.2
Tensile Modulus[2]	ASTM D 1623	MPa	Nominal	100	110	175	230	270
			Minimum	80	90	130	180	220
Shear Strength[3]	ISO 1922	MPa	Nominal	0.85	0.95	1.45	2.1	2.6
			Minimum	0.7	0.8	1.25	1.8	2.3
Shear Modulus[3]	ISO 1922	MPa	Nominal	23	25	42	65	76
			Minimum	20	23	37	50	67
Shear Strength[4]	ISO 1922	MPa	Nominal	0.8	0.85	1.35	2.0	2.5
			Minimum	0.65	0.75	1.25	1.7	2.2
Shear Modulus[4]	ISO 1922	MPa	Nominal	21	23	36	55	66
			Minimum	17	19	32	47	58
Shear Strain[3,4]	ISO 1922	%	Nominal	20	20	15	10	10
Density	ISO 845	kg/m^3	Nominal	100	105	150	210	230

1. All values measured at +23°C. Testing is done on foam with welding lines.
2. Properties measured perpendicular to the plane
3. Properties measured parallel to the welding lines, 1-3 direction
4. Shear properties measured perpendicular to weldlines, 2-3 direction

Nominal value is an average value of a mechanical property at a nominal density.
Minimum value is a minimum guaranteed mechanical property a material has independently of density.

Product characteristiscs

- Recyclable
- Based on post-industry recycled PET
- Low resin uptake
- Thermoformable
- Good chemical resistance
- Good shear strain
- Closed cell structure
- Allows for high processing temperatures

Typical application areas

Wind energy · Marine · Construction · Transportation

Other industries

Technical characteristiscs

Characteristics[1]	Unit	PL100	PL105	PL150	PL200	PL230	Test method
Density range	kg/m³	95-105	100-115	145-160	195-220	220-240	
Thermal conductivity[2]	W/(m-K)	0.033	0.033	0.036	0.043	0.046	ASTM C177

1. Typical values are approximate
2. Thermal conductivity measured at +25°C

Maximum processing temperature is dependent on time, pressure and process conditions. Therefore users are advised to contact Diab Technical Services to confirm that Divinycell PL is compatible with their particular processing parameters.

Dimensions

Format		Unit	PL100	PL105	PL150	PL200	PL230
Plain sheets	Length	mm	2440	2440	2440	2440	2440
	Width	mm	1220	1220	1220	1220	1220
GS sheet	Length	mm	1220	1220	1220	1220	1220
	Width	mm	1220	1220	1220	1220	1220
Colour			Beige	Beige	Beige	Beige	Beige

Other dimensions are available on request.

Tolerances	Unit	Length	Width	Thickness
Plain sheets	mm	-0/+10	-0/+6	+/-0.5

Storage of product

The shelf life of Divinycell is unlimited when it is stored in its original package on ambient indoor storage conditions and protected against UV exposure.

Divinycell PL is type approved by:

TYPE APPROVED PRODUCT
DNV·GL
DNVGL.COM/AF

For more info visit:
diabgroup.com/contact

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