



TECHNICAL DATA

Divinycell PY

HIGH PERFORMANCE PET SANDWICH CORE

Divinycell PY is Diab's newest addition to the PET family. All our PET foams are excellent, recyclable thermoplastic core materials, which are suitable for a variety of processes including infusion, prepreg and press bonding.

Divinycell PY provides excellent shear strain, low resin absorption and has been developed to meet latest blade designs.

MECHANICAL PROPERTIES DIVINYCELL® PY

Property	Test Procedure ¹	Unit		PY105	PY250
Compressive Strength ²	ASTM D1621	psi	Nominal	218	638
			Minimum	203	580
Compressive Modulus ²	ASTM D1621-B-73	psi	Nominal	16,240	30,455
			Minimum	12,325	29,000
Tensile Strength	ASTM C 297	psi	Nominal	348	725
			Minimum	275	435
Tensile Modulus	ASTM D 1623	psi	Nominal	15,955	33,355
			Minimum	13,050	29,000
Shear Strength ³	ISO 1922	psi	Nominal	159	362
			Minimum	116	290
Shear Modulus ³	ISO 1922	psi	Nominal	3,625	10,150
			Minimum	3,335	9,860
Shear Strength ⁴	ISO 1922	psi	Nominal	123	319
			Minimum	108	261
Shear Modulus ⁴	ISO 1922	psi	Nominal	3,045	8,700
			Minimum	2,755	8,120
Shear Strain ²	ISO 1922	%	Nominal	30	15
			Minimum	15	5
Density	ISO 845	lb/ft ³	Nominal	6.5	15.6
			Maximum	7.2	15.9
			Minimum	6.2	15

1. All values measured at +73.4°F. 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

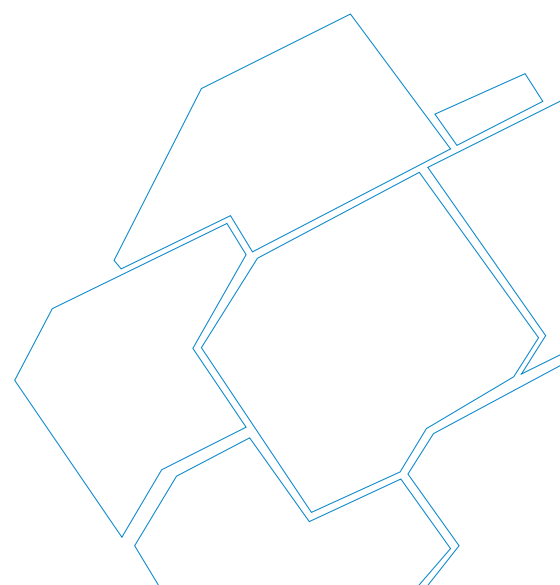
4. Shear properties measured perpendicular to weldlines, 2-3 direction

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 CHARACTERISTICS

- Consistent quality
- Recyclable
- Thermoformable
- Good chemical resistance
- Excellent shear strain
- Low resin uptake
- Allows for high processing temperatures



TECHNICAL CHARACTERISTICS

TECHNICAL CHARACTERISTICS DIVINYCELL® PY

Characteristics ¹	Unit	PY105	PY250	Test method
Density variation	%	± 5	+2-5	-
Thermal conductivity ²	Btu x in/(ft ² x h x °F)	0.024	TBD	EN 12667

1. Typical values are approximate
2. Thermal conductivity measured at +68°F

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

PHYSICAL CHARACTERISTICS DIVINYCELL® PY

Format		Unit	PY105	PY250
Plain sheets	Length	inch	96.06	96.06
	Width	inch	39.57	39.57
GS sheet	Length	inch	48.03	48.03
	Width	inch	39.57	39.57
Colour			Yellow	Yellow

Other dimensions are available on request.

Divinycell PY105 is type approved by:



Disclaimer:

This data sheet may be subject to revision and changes due to development and changes of the material. The data is derived from tests and experience. If not stated as minimum values, the data is average data and should be treated as such. Calculations should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use. The company reserves the right to release new data sheets in replacement.

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