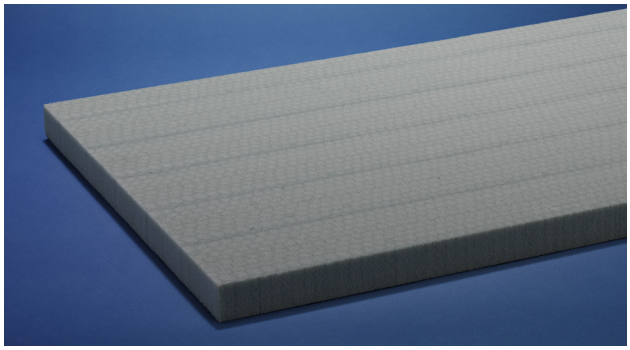

TECHNICAL DATA

Divinycell PR

NEXT GENERATION RECYCLED PET SANDWICH CORE

Divinycell PR is a sandwich core made of up to 45% post-consumer PET and additional post-industry recycled PET to boost performance. A true circular sustainable product to meet environmental needs and commitments, suitable for a variety of applications and processes including infusion, prepreg and press bonding.

Divinycell PR has good compression and shear properties with high dimensional stability at elevated temperature.
A closed cell structure with low resin uptake and good thermal insulation properties.

MECHANICAL PROPERTIES

Property	Test Procedure[1]	Unit		PR80	PR100	PR150	PR200	PR250
Compressive Strength[2]	ASTM D 1621	PSI	Nominal	145	203	363	551	725
			Minimum	116	174	319	464	624
Compressive Modulus[2]	ASTM D1621	PSI	Nominal	14.505	16.245	23.930	33.360	40.601
			Minimum	11.605	12.330	18.855	27.555	31.905
Tensile Strength[2]	ASTM D1623	PSI	Nominal	335	350	420	490	825
			Minimum	230	275	335	405	710
Tensile Modulus[2]	ASTM D1623	PSI	Nominal	13.780	15.955	25.380	33.360	39.160
			Minimum	8.700	13.050	18.855	26.105	31.910
Shear Strength[3]	ISO 1922	PSI	Nominal	87	116	210	305	413
			Minimum	73	102	181	261	326
Shear Modulus[3]	ISO 1922	PSI	Nominal	2.900	3.625	6.090	9.425	12.620
			Minimum	2.175	3.190	5.365	7.250	9.425
Shear Strength[4]	ISO 1922	PSI	Nominal	87	116	196	290	377
			Minimum	65	94	181	247	319
Shear Modulus[4]	ISO 1922	PSI	Nominal	2.320	3.045	5.220	7.975	10.880
			Minimum	1.885	2.465	4.640	6.815	8.700
Shear Strain	ISO 1922	%	Nominal	15	15	15	10	10
Density	ISO 845	lb/ft³	Nominal	5.0	6.2	9.4	13.1	15.6
			Maximum	5.3	6.5	10.0	13.7	16.5
			Minimum	4.7	5.9	9.0	12.2	14.7

1. All values measured on foams with welding lines tested at +73,4°F
2. Properties measured perpendicular to the plane
3. Properties measured parallel to welding lines, 1-3 direction
4. Properties measured perpendicular to welding lines, 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 independently of density.

PR135 available with no DNV certification, data sheet upon request.

PRODUCT CHARACTERISTICS

- Made of up to 45% post-consumer PET, and additional post-industry recycled PET
- Recyclable
- Low resin uptake
- Thermoformable
- Low density variation
- Good chemical resistance
- Good mechanical properties
- Closed cell structure
- Allows for high processing temperatures

TECHNICAL CHARACTERISTICS

TECHNICAL CHARACTERISTICS

Characteristics[1]	Unit	PR80	PR100	PR150	PR200	PR250	Test method
Thermal conductivity[2]	Btu x in/(ft2 x h x °F)	0.23	0.24	TBD	TBD	TBD	ASTM C177

1. Typical values are approximate
2. Thermal conductivity measured at +10°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 PR is compatible with their particular processing parameters.

OTHER CHARACTERISTICS

Format		Unit	PR80	PR100	PR150	PR200	PR250
Plain sheets	Length	inch	96.06	96.06	96.06	96.06	96.06
	Width	inch	48.03	48.03	48.03	48.03	48.03
GS sheet	Length	inch	48.03	48.03	48.03	48.03	48.03
	Width	inch	48.03	48.03	48.03	48.03	48.03
Thickness		inch	0.197-4.72	0.118-4.724	0.118-4.724	0.118-3.740	0.118-3.364
Colour			Light green	Light green	Light green	Light green	Light green

Other dimensions are available on request.

FST CLASSIFICATION

Depending on laminate configuration the following FST classification can be achieved when tested to EN 45545-2.

- HL3 R1 PR Core + aluminium skins
- HL2 R1 PR Core + composite skins
- HL2 R7 PR Core + composite skins

For more details contact our technical experts.

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 PR 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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