

This datasheet is based on provisional product data and is subject to revision.

Gurit® Kerdyn™ Green

RECYCLABLE STRUCTURAL FOAM



- Gurit® Kerdyn™ Green: 100% recycled PET based product range
- Withstands high process temperatures
- Excellent chemical resistance
- Good adhesion & mechanical properties
- Recyclable
- PET low resin uptake performance

INTRODUCTION

Gurit® Kerdyn™ Green has been developed to respond to the growing need for structural core materials with stable properties and improved resin uptake performance. Additionally the Gurit® Kerdyn™ Green allows to comply with the wind energy aim to reduce foot print and reinforce overall goals of waste reduction.

Highly adaptable, recyclable, thermoplastic core material with good balance of mechanical properties, temperature resistance, density and cost for a wide range of applications and processes.

Gurit® Kerdyn™ is compatible with a wide range of resin systems including epoxy, vinyl ester, unsaturated polyester and phenolic resins.

Gurit® Kerdyn™ can be processed at high temperatures, withstanding high exotherms and offers outstanding chemical resistance, good adhesion; as highly consistent extruded foam, it is ideal for wind energy, marine, industrial, and transportation applications.

Applicable processing techniques include vacuum infusion, bonding, prepreg, and thermoforming. Available in a wide range of thicknesses.

INSTRUCTIONS FOR USE

General working practices apply to these products, details of which can be obtained from the Gurit Guide to Composites or by contacting a Gurit representative (contact details provided at the end of this datasheet).

TYPICAL MECHANICAL PROPERTIES

PROPERTY	UNIT	Kerdyn™ Green 80	Kerdyn™ Green 100	Kerdyn™ Green 115	Kerdyn™ Green 135	Kerdyn™ Green 150	Kerdyn™ Green 200	Kerdyn™ Green 250	Kerdyn™ Green 300	STANDARD
Edge Marking	-	Blue	Green	Black	Black + Green	Orange	Black + Yellow	Black + Blue	Black + Orange	-
Nominal Sheet Size	mm	1005 / 1220 x 2440	1005 / 1220 x 2440	1005 / 1220 x 2440	1005 / 1220 x 2440	1005 / 1220 x 2440	1005 / 1220 x 2440	1005 x 2440	1005 x 2440	-
	Inches	39.5 / 48 x 96	39.5 / 48 x 96	39.5 / 48 x 96	39.5 / 48 x 96	39.5 / 48 x 96	39.5 / 48 x 96	39.5 x 96	39.5 x 96	-
Nominal Density	kg/m ³	80	100	115	135	150	200	250	300	ISO 845
	lb/ft ³	4.99	6.24	7.18	8.43	9.39	12.49	15.61	18.73	
Typical Density range	kg/m ³	75-85	95-105	110-120	130 - 140	145-155	195-205	245-255	295-305	ISO 845
	lb/ft ³	4.68-5.31	5.93-6.55	6.87-7.49	8.11-8.74	9.05-9.68	12.17-12.80	15.30-15.92	18.42-19.04	
Compression Strength	MPa	0.85	1.30	1.65	2.10	2.50	3.80	5.20	6.75	ASTM D1621
	Psi	123	189	239	305	363	551	754	979	
Compressive Modulus	MPa	74	91	105	126	142	203	276	360	ISO 844
	Psi	10733	13198	15229	18275	20595	29443	40030	52214	
Shear Strength 0°	MPa	0.60	0.80	1.00	1.20	1.40	2.05	2.35	2.70	ASTM C-273
	Psi	87	116	145	174	203	297	340	392	
Shear Modulus 0°	MPa	18	25	30	37	43	62	83	105	ASTM C-273
	Psi	2611	3626	4351	5366	6237	8992	12038	15229	
Shear Strength 90°	MPa	0.60	0.80	0.95	1.20	1.35	1.95	2.30	2.65	ASTM C-273
	Psi	87	116	138	174	196	283	334	384	
Shear Modulus 90°	MPa	16	23	27	34	39	57	75	93	ASTM C-273
	Psi	2321	3336	3916	4931	5656	8267	10878	13489	
Shear Elongation	%	23	17	14	11	9	6	4	3	ASTM C-273
Tensile Strength	MPa	1.55	1.80	2.0	2.30	2.45	3.00	3.40	3.80	ASTM D-1623
	Psi	225	261	290	334	355	435	493	551	
Tensile Modulus	MPa	88	106	120	141	157	219	290	370	ASTM D-1623
	Psi	12763	15374	17405	20450	22771	31763	42061	53664	

Note:

- 1220mm width (48 inches) is only produced out of Gurit Tianjin Production site.
- Kerdyn™ Green 300 is solely manufactured by Gurit Tianjin Production site.

For further details, please contact your Sales account manager or Regional Customer Service.

NOTICE

All advice, instruction or recommendation is given in good faith but Gurit AG (the company) only warrants that advice in writing is given with reasonable skill and care. No further duty or responsibility is accepted by the Company. All advice is given subject to the terms and conditions of sale (the Conditions) which are available on request from the Company or may be viewed at the Company's Website: www.gurit.com/terms-and-conditions.aspx.

The Company strongly recommends that Customers make test panels and conduct appropriate testing of any goods or materials supplied by the Company to ensure that they are suitable for the Customer's planned application. Such testing should include testing under conditions as close as possible to those to which the final component may be subjected. The Company specifically excludes any warranty of fitness for purpose of the goods other than as set out in writing by the Company. The Company reserves the right to change specifications and prices without notice and Customers should satisfy themselves that information relied on by the Customer is that which is currently published by the Company on its website. Any queries may be addressed to the Technical Services Department.

Gurit are continuously reviewing and updating literature. Please ensure that you have the current version, by contacting Gurit Marketing Communications or your sales contact and quoting the revision number in the bottom right-hand corner of this page.

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Kerdyn is a registered trademark in the EU and in other countries.