Gurit® PVC

STRUCTURAL FOAM CORE

- Optimised properties
- Improved shear elongation
- Suitable for all sandwich composites applications
- Superior strength and stiffness to weight ratio
- Self extinguishing
- Outstanding chemical resistance
- DNV, RINA, Lloyds and Germanischer Lloyd certified

INTRODUCTION

Gurit® PVC is a closed cell, cross-linked PVC foam. It provides superior strength to weight ratio for all composite applications.

Other key features of Gurit® PVC include outstanding chemical resistance, negligible water absorption, and excellent thermal insulation capabilities. It is compatible with most common resin systems including epoxy, polyester and vinylester.

Gurit® PVC is available in a wide range of formats with all standard cut patterns and finishes possible.

MECHANICAL PERFORMANCE

Type	Test Method	Units	Gurit® PVC40	Gurit® PVC48	Gurit® PVC60	Gurit® PVC80	Gurit® PVC100	Gurit® PVC130	Gurit® PVC200	Gurit® PVC250
Foam Colour	-	-	Azure	Lilac	Yellow	Green	Red	Blue	Brown	Green
Nominal Sheet Size	-	mm	1330 x 2850	1270 x 2730	1150 x 2450	1020 x 2180	950 x 2050	850 x 1900	750 x 1600	700 x 1500
		Inches	52.4 x 112.2	50 x 107.5	45.3 x 96.4	40.2 x 85.8	37.4 x 80.7	33.5 x 74.8	29.5 x 63	27.6 x 59
Nominal Density	ASTM D1622	Kg/m^3	40	48	60	80	100	130	200	250
		Lb/ft^3	2.5	3.0	3.7	5.0	6.3	8.1	12.5	15.6
Compressive Strength	ASTM D1621-10	MPa	0.52	0.62	0.98	1.60	2.05	3.22	5.07	6.88
		psi	75	90	142	232	297	467	735	998
Compressive Modulus	ASTM D1621-10	MPa	29	34	48	74	95	138	234	296
		psi	4206	4931	6962	10733	13779	20015	33939	42931
	ASTM D1621-73	MPa	37	44	67	97	121	183	300	384
		psi	5366	6382	9718	14069	17550	26542	43511	55694
Shear Strength	ASTM C273	MPa	0.47	0.52	0.79	1.20	1.48	2.44	3.44	4.37
		psi	68	75	115	174	215	354	499	634
Shear Modulus	ASTM C273	MPa	15	16	21	30	36	55	77	98
		psi	2175	2320	3046	4351	5221	7977	11168	14214
Shear Elongation at break	ASTM C273	%	6	7	18	19	25	32	35	35
Tensile Strength	ASTM D1623	MPa	0.72	0.98	1.82	2.74	3.18	4.35	6.26	7.19
		psi	103	142	264	397	460	631	908	1043
Tensile Modulus	ASTM D1623	MPa	68	71	100	146	162	227	358	439
		psi	9863	10298	14504	21176	22916	32924	51924	63672
HDT	DIN 53424	°C	100	115	125	125	125	125	N/A	N/A
		°F	212	239	257	257	257	257	N/A	N/A
Thermal Conductivity	ASTM C518	W/(m·K)	0.031	0.030	0.031	0.033	0.033	0.036	0.042	0.050
		BTU·in/(h·ft2·°F)	0.218	0.209	0.217	0.227	0.229	0.248	0.292	0.344

Users are advised to contact Gurit to confirm that Gurit® PVC is compatible with their particular processing parameters.

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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