

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 certified, Germanischer Lloyd certification pending**

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.



Type	Test Method	Units	Gurit® PVC40	Gurit® PVC48	Gurit® PVC60	Gurit® PVC80	Gurit® PVC100	Gurit® PVC130	Gurit® PVC200	Gurit® PVC250
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	0.50	0.68	0.96	1.44	1.94	2.75	4.84	6.52
		psi	73	99	139	209	281	399	702	946
Compressive Modulus	ASTM D1621-10	MPa	26	34	46	67	89	124	211	278
		psi	3771	4931	6672	9718	12908	17985	30603	40320
	ASTM D1621-73	MPa	35	46	64	93	123	168	277	358
		psi	5076	6672	9282	13489	17840	24366	40175	51924
Shear Strength	ASTM C273	MPa	0.40	0.55	0.78	1.15	1.53	2.12	3.46	4.42
		psi	58	80	113	167	222	308	502	641
Shear Modulus	ASTM C273	MPa	14	17	21	29	37	48	75	94
		psi	2031	2466	3046	4206	5366	6962	10878	13634
Shear Elongation at break	ASTM C273	%	4	8	14	22	28	35	36	40
Tensile Strength	ASTM D1623	MPa	0.67	1.05	1.89	2.69	3.31	3.93	6.77	7.00
		psi	97	152	274	390	480	570	982	1015
Tensile Modulus	ASTM D1623	MPa	73	87	108	143	177	233	368	465
		psi	10588	12618	15664	20740	25672	33794	53374	67443
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·ft ² ·°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: <http://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.

E gurit@gurit.com
W www.gurit.com