

GURIT PVC

STRUCTURAL FOAM CORE

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.



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

MECHANICAL PERFORMANCE

TYPE	TEST METHOD	UNITS	GURIT PVC40	GURIT PVC48	GURIT PVC60	GURIT PVC80	GURIT PVC100	GURIT PVC130	GURIT PVC200	GURIT PVC250
Foam Color	-	-	Azure	Lilac	Yellow	Green	Red	Blue	Brown	Green
		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
Nominal Sheet Size	-	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
		Kg/m ³	40	48	60	80	100	130	200	250
Nominal Density	ASTM D1622	Lb/ft ³	2.5	3.0	3.7	5.0	6.3	8.1	12.5	15.6
		Kg/m ³	35-47	43-55	54-69	72-92	90-115	120-150	180-250	225-288
Density Range	ASTM D1622	Lb/ft ³	2.2-2.9	2.7-3.4	3.4-4.3	4.5-5.7	5.6-7.2	7.5-9.4	11.2-15.6	14.0-18.0
		MPa	0.52	0.62	0.98	1.60	2.05	3.22	5.07	6.88
Compressive Strength	ASTM D1621-10	psi	75	90	142	232	297	467	735	998
		MPa	29	34	48	74	95	138	234	296
Compressive Modulus	ASTM D1621-10	psi	4206	4931	6962	10733	13779	20015	33939	42931
		MPa	37	44	67	97	121	183	300	384
	ASTM D1621-73	psi	5366	6382	9718	14069	17550	26542	43511	55694
		MPa	0.47	0.52	0.79	1.20	1.48	2.44	3.44	4.37
Shear Strength	ASTM C273	psi	68	75	115	174	215	354	499	634
		MPa	15	16	21	30	36	55	77	98
Shear Modulus	ASTM C273	psi	2175	2320	3046	4351	5221	7977	11168	14214
Elongation at break	ASTM C273	%	6	7	18	19	25	32	35	35
		MPa	0.71	0.98	1.82	2.74	3.18	4.35	6.26	7.19
Tensile Strength	ASTM D1623	psi	103	142	264	397	460	631	908	1043
		MPa	68	71	100	146	162	227	358	439
Tensile Modulus	ASTM D1623	psi	9863	10298	14504	21176	22916	32924	51924	63672
		°C	100	115	125	125	125	125	125	125
HDT	DIN 53424	°F	212	239	257	257	257	257	257	257
		W/(m·K)	0.031	0.030	0.031	0.033	0.033	0.036	0.042	0.050
Thermal Conductivity	ASTM C518	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.

HEALTH AND SAFETY

The following points must be considered:

1. Skin contact must be avoided by wearing protective gloves. Gurit recommends the use of disposable nitrile gloves for most applications. The use of barrier creams is not recommended, but to preserve skin condition a moisturizing cream should be used after washing.
2. Protective clothing should be worn when mixing, laminating or sanding. Contaminated work clothes should be thoroughly cleaned before re-use.
3. Eye protection should be worn if there is a risk of resin, hardener, solvent or dust entering the eyes. If this occurs flush the eye with water for 15 minutes, holding the eyelid open, and seek medical attention.
4. Ensure adequate ventilation in work areas. Respiratory protection should be worn if there is insufficient ventilation. Solvent vapors should not be inhaled as they can cause dizziness, headaches, loss of consciousness and can have long term health effects.
5. If the skin becomes contaminated, then the area must be immediately cleansed. The use of resin-removing cleansers is recommended. To finish, wash with soap and warm water. The use of solvents on the skin to remove resins etc must be avoided.

Washing should be part of routine practice:

- before eating or drinking
- before smoking & vaping
- before using the lavatory
- after finishing work

6. The inhalation of sanding dust should be avoided and if it settles on the skin then it should be washed off. After more extensive sanding operations a shower/bath and hair wash is advised.

Gurit produces a separate full Safety Data Sheet for all hazardous products. Please ensure that you have the correct SDS to hand for the materials you are using before commencing work.

NOTICE

All advice, instruction or recommendation is given in good faith but the selling Gurit entity (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 Gurit's Website: www.gurit.com/terms-and-conditions.aspx

The Company strongly recommends that Customers make test panels in the final process conditions and conduct appropriate testing of any goods or materials supplied by the Company prior to final use 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. Due to the varied nature of end-use applications, the Company does, in particular, not warrant that the test panels in the final process conditions and/or the final component pass any fire standards.

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 is continuously reviewing and updating literature. Please ensure that you have the current version by contacting your sales contact and quoting the revision number in the bottom left-hand corner of this page.

CONTACT INFORMATION

Please see local contact information at www.gurit.com

24-HOUR CHEMICAL EMERGENCY NUMBER

For advice on chemical emergencies, spillages, fires or exposures:

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