



GURIT PRODUCT CATALOGUE **2015**
Europe, Middle East and Africa



www.gurit.com

Introduction to Gurit

Gurit is renowned as one of the leading global manufacturers and suppliers of composite materials and engineering. Gurit's unique approach integrates structural design, materials science and process engineering to offer a complete turnkey composite solution.

Gurit offers a combination of innovative, durable, industry-leading composite products with an unrivalled in-house technical expertise, ensuring best-in-class operation wherever it is applied. The versatility and durability of Gurit's products and in-depth engineering knowledge means every project delivers a performance that is finely tuned to individual specifications and needs. Gurit's long history of development and innovation has increased part quality and durability while continual streamlining of processes have improved productivity and reduced costs.

Gurit offers an impressive portfolio of standardised and customised products suitable for a full range of requirements, including a comprehensive range of tooling, reinforcement and prepreg materials. Gurit's patent-approved, award-winning SPRINT™ technology offers lightweight, cost-effective solutions for a number of applications, potentially reducing production time and cost by 60%, and weight by 40%. Gurit® Corecell™ is a leading structural foam core material, which has become widely accepted for the construction of large, high performance structures.

How to use this Product Catalogue

This product catalogue has been produced to provide information on our main standard products. Gurit is also well served by a network of representatives, who hold stocks of Gurit products locally, and who can also act as a local point of contact for technical and sales information. A list of these representatives is given at the end of this publication.

Brief descriptions of each product and product group are given throughout this publication to facilitate product selection. Full information on any product should be obtained from the relevant technical datasheet. These can be obtained from the Gurit website, www.gurit.com or by contacting customer support. Contact details for customer support are given at the end of this publication.

The product catalogue structure is given in the contents page. For placing orders, contact details can be found at the end of this product catalogue. Written orders may be provided by fax, letter or email. Please use the order codes provided ensure that you obtain the correct products.

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Formulated Products



Gurit is a leading supplier of high performance epoxy products formulated to meet market and customer needs.

Gurits innovative approach and expertise in epoxy formulations continues to deliver market leading products for a wide range of market segments. Gurit provides a complete range of formulated products from in-mould gelcoats to multi-purpose systems.

- > Tooling Products

- > Ampreg Laminating Systems

- > PRIME™ Infusion Products

- > Spabond Adhesives
 - > Spabond 300 Series
 - > Spabond 500 Series
 - > Spabond 700 Series

- > Coatings

- > Multi-purpose Systems

Tooling Products

Mould Materials

Epoxy Tooling Paste

T-Paste 70-2 has been designed for customers looking for a fast and reliable way to manufacture patterns and direct moulds.

T-Paste 70-2 combined with CNC technology allows more design freedom and improves pattern/direct mould accuracy whilst reducing production processes.

T-Paste 70-2 (mix ratio 100:92 by weight / 100:100 by volume)

<u>Resin Size</u>	<u>Order Code</u>		<u>Hardener Size</u>	<u>Order Code</u>
T-Paste 70-2 190 litres Resin	F940-122	# #	T-Paste 70-2 190 litres Hardener	F940-123

Please note: A mixing machine is required to mix and dispense the T-Paste 70-2 product. For more information on suitable mixing machines, please contact Gurit.

Laminating

T-Lam 130-1 (mix ratio 100:40 by weight)

<u>Resin Size</u>	<u>Order Code</u>		<u>Hardener Size</u>	<u>Order Code</u>
T-Lam 130-1 20 kg Resin	F140-202		T-Lam 130-1 8kg Hardener	F140-204

Infusion

T-Prime 130-1 (mix ratio 100:27 by weight)

<u>Resin Size</u>	<u>Order Code</u>		<u>Hardener Size</u>	<u>Order Code</u>
T-Prime 130-1 12.5 kg Resin	F163-102		T-Prime 130-1 3.4 kg Hardener	F163-103
T-Prime 130-1 185 kg Resin	F163-100		T-Prime 130-1 16.7kg Hardener	F163-106

3 x 16.75 kg of T-PRIME 130 hardener required to match 185 kg of resin

= Stock usually available

Gelcoats

CR 3400

In-Mould Epoxy Gelcoat / Surfacing System (mix ratio 100:30 by weight)

CR 3400 is an in-mould epoxy surfacing system for epoxy laminates and is designed to be used as the base for the subsequent application of a paint scheme. CR 3400 is therefore formulated to be easy to sand so that once released, the CR 3400 surface can be readily keyed prior to the application of the paint system. The product has a considerably longer overcoating window than other gelcoats - up to one day with Standard hardener at 20°C.

<u>Resin Size</u>	<u>Order Code</u>		<u>Hardener Size</u>	<u>Order Code</u>
19 kg Resin	F346-013	# #	5.7 kg Standard	F346-015

= Stock usually available

Laminating Systems

Epoxy Laminating Comparison

System	Description	Hardener	Speed	Mix ratio by weight	Intended Application
SP 115	UV stable high clarity laminating system	115	30 mins	100:33.3	Surfboards, Clear parts
Ampreg 21	Good wet out; improved health and safety; low bi-product and good through cure	Fast Standard Slow Extra Slow High Tg	1-2 hrs 2-3 hrs 6-7 hrs 7-10 hrs 14 hrs	100:33.3	General purpose
Ampreg 22	Good wet out; low bi-product; good Tg generation	Fast Standard Slow Extra Slow 14 hour	1-2 hrs 2-3 hrs 6-7 hrs 7-10 hrs 14 hrs	100 : 28	Medium to large mouldings
Ampreg 26	Premium laminating system with high mechanical properties and high Tg	Fast Slow Ultra Slow	1-2 hrs 7 hrs 8-10 hrs	100:33.3	High performance large mouldings
Ampreg F230-1	3 component expanding epoxy system good for gap filling with consistent foam density	Standard Slow Extra Slow	Fully foamed less than 1 hr, Cure time varies with geometry	100:23 100:23 100:23	Rudder foils, crash bars

For more detailed product information please refer to the product datasheets on www.gurit.com

Laminating Systems

Ampreg 21

Epoxy Wet Laminating System (resin to hardener mix ratio 100:33 by weight)

Ampreg 21 has a low initial mixed viscosity makes this product ideal for wetting out heavyweight fibres/fabrics. It has been designed to give excellent mechanical and thermal properties from both ambient temperature cures and moderate temperature postcures (50°C). Ampreg 21 is available with a range of hardener speeds from Fast to Extra Slow and has been formulated to give significant improvements to Health and Safety. Ampreg 21 is Germanischer Lloyds approved for certified applications.

Resin / Hardener Pack	Order Code
3.6 kg Pack (2.7 kg Resin / 0.9 kg Fast Hardener)	F121-011
3.6 kg Pack (2.7 kg Resin / 0.9 kg Standard Hardener)	F121-012
3.6 kg Pack (2.7 kg Resin / 0.9 kg Slow Hardener)	F121-013
3.6 kg Pack (2.7 kg Resin / 0.9 kg Extra Slow Hardener)	F121-014

Resin Size	Order Code	Hardener Size*	Order Code
10 kg Resin	F121-034	3.33 kg Fast	F121-035
		3.33 kg Standard	F121-036
		3.33 kg Slow	F121-037
20 kg Resin	F121-002	6.66 kg Fast	F121-004
		6.66 kg Standard	F121-006
		6.66 kg Slow	F121-008
		6.66 kg Extra Slow	F121-010
216 kg Resin 4 x 18kg Ampreg 21 Hardener required for 216kg resin drum	F121-015 #	18 kg Fast	F121-017
		18 kg Standard	F121-018
		18 kg Slow	F121-019
		18 kg Extra Slow	F121-020
1000 kg Resin 2 x 165kg Ampreg 21 Hardener required for 1000kg resin IBC	F121-016	165 kg Fast	F121-021
		165 kg Standard	F121-022
		165 kg Slow	F121-023
		165 kg Extra Slow	F121-024

*Hardeners are blendable to achieve intermediate speeds

Laminating Systems

Ampreg F230-1

Three-part Foaming Epoxy System (resin to hardener mix ratio 100:23:1.3* by weight)

Foam expands approximately 4x by volume to create a foam of 220-250kg/m². Exact foaming density depends on moulding restraints and temperature. Please note that foaming agent is supplied along with the hardener.

<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
14.5 kg Resin	F113-007	3.53 kg Slow	F113-008
		3.53 kg Extra Slow	F113-009

(Hardener pack consists of 3.33 kg hardener with 0.2 kg foaming agent and 10cc syringe). Larger hardener packs available, contact your local customer support representative for more information.

Laminating Systems

Ampreg 22

Epoxy Laminating System (resin to hardener mix ratio 100:28 by weight)

Ampreg 22 is an established and widely used laminating system. It is intended for both wet lay-up and vacuum bagging processes. The long working time and low exotherm of Ampreg 22 make it ideal for manufacturing large, high performance composite structures. Ampreg 22 is both Germanischer Lloyds and Lloyds approved for certified applications.

Resin / Hardener Pack	Order Code
4.23 kg Pack (3.3 kg Resin / 0.93 kg Fast Hardener)	F118-020
4.23 kg Pack (3.3 kg Resin / 0.93 kg Standard Hardener)	F118-048
4.23 kg Pack (3.3 kg Resin / 0.93 kg Slow Hardener)	F118-037

Resin Size	Order Code	Hardener Size	Order Code
20 kg Resin	F118-061	5.6 kg Fast	F118-073
		5.6 kg Standard	F118-074
		5.6 kg Slow	F118-075
		5.6 kg Extra Slow	F118-076

Resin Size	Order Code		
193 kg Resin	F118-063 #	18 kg Fast	F118-062
3 x 18kg Ampreg 22 hardener required for 193kg drum of resin		18 kg Standard	F118-066
		18 kg Slow	F118-065
		18 kg Extra Slow	F118-064
		18 kg High Tg	F124-002

Resin Size	Order Code		
1000 kg Resin	F118-009 #	180.0 kg Fast	F118-018
280kg Ampreg 22 hardener required for 1000kg IBC of resin		180.0 kg Standard	F118-042
		180.0 kg Slow	F118-036
		180.0 kg Extra Slow	F118-019 #
		180 kg High Tg	F124-001 #
# = Stock usually available		900 kg Extra Slow	F118-031 *
* 900kg hardeners in IBC's are made to order		900 kg Slow	F118-051 *

Laminating Systems

Ampreg 26

Epoxy Laminating System (resin to hardener mix ratio 100:33 by weight)

Ampreg 26 is a premium epoxy laminating system, and is particularly suitable for the manufacture of large, high performance composite structures. The product's high laminate mechanical properties and high Tg's, achievable from modest postcures, make it well suited for heavily loaded applications.

Product Availability in Drums

<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
20 kg Resin	F116-035	6.66 kg Fast	F116-039
		6.66 kg Slow	F116-040
<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
216 kg Resin	F116-036 #	18 kg Fast	F116-037
4 x 18kg of Ampreg 26 hardener required for 216kg resin		18 kg Slow	F116-038
		18 kg Ultra Slow	F117-205
1000 kg Resin	F116-010	180.0 kg Slow	F116-030
333kg of Ampreg 26 hardener required for 1000kg resin			

= Stock usually available

Ampreg Thixotropic Pregel

Resin Additive

Ampreg Thixotropic Pregel is a resin additive with a grease-like consistency, which can be used with a variety of hardeners from the Gurit laminating resin range. It is used primarily as a thixotrope - to be added to low viscosity laminating resins for applications where resin drainage is a concern. It is therefore typically used in vertical and overhead laminating situations, particularly where heavy, open weave fabrics are being used, since these are the most prone to resin drainage.

<u>Resin Size</u>	<u>Order Code</u>
20 kg Resin	F120-008

Laminating Systems

Ampreg Adhesion Promoter

Modified Epoxy Resin System

Ampreg Adhesion Promoter is a unique resin system formulated to promote the adhesion between epoxy and vinylester resin. This allows it to be used with existing polyester gelcoats with higher performance epoxy resins supplied by Gurit.

Product Availability in Drums

Resin / Hardener Pack	Order Code
20 kg Ampreg Adhesion Promoter	F119-002

SP 115

Clear Epoxy Laminating System (resin to hardener mix ratio 100:33 by weight)

SP 115 is a low viscosity, ultra-clear epoxy laminating system. It has been designed for the manufacture of laminates which are to remain unpainted, and where a very clear finish is required. The material also contains blue UV filters which give the product its characteristic transparent pale violet/blue colour.

Resin / Hardener Pack	Order Code
SP 115 (Box of 5 x 0.75 kg Resin and 5 x 0.25 kg hardener)	F110-017
SP 115 5.0 kg Pack (3.75 kg Resin / 1.25 kg Hardener)	F110-020

Resin Size	Order Code	Hardener Size	Order Code
20 kg Resin	F110-023	6.66 kg Hardener	F110-026
198 kg Resin	F110-024	16.5 kg Hardener	F110-025
		4 x 16.5 kg Hardener required for 198 kg Resin	

Larger sizes are possible, please contact customer services for further information

Infusion Systems

Comparison of Infusion Systems

System	Description	Hardener	500g Pot Life (20°C)	Mix Ratio by weight	Intended Application
PRIME™ 20LV	Low fume, long working time vacuum infusion system	Fast	28 mins	100:26	Series build glass components large size
		Slow	1 hr 15 mins	100:26	
		Extra Slow	6 hrs	100:26	
		High Tg	3 hrs 20 mins	100:24	
PRIME™ 27	Low viscosity, good mechanical properties, very low exotherm in thick sections	Fast	20 mins	100:28	Suitable for the female moulding of large complex components
		Slow	1 hr	100:28	
		Extra Slow	4 hrs	100:28	
		High Tg	3 hrs 20 mins	100:25	

For more detailed product information please refer to the product datasheets on www.gurit.com

Infusion Systems

PRIME™ 20LV

Epoxy Infusion System (resin to hardener mix ratio 100:26 by weight)

PRIME™ 20LV is the next generation of PRIME™ 20 epoxy infusion resin, specifically designed for use in a variety of resin infusion processes including RTM, SCRIMP™ and RIFT. It has a very low mixed viscosity and long working time, allowing large parts with complex reinforcements to be infused successfully in one operation. It has an exceptionally low exotherm characteristic, which allows thick sections to be manufactured without risk of premature gelation due to exothermic temperature rises. PRIME™ 20LV is both Germanischer Lloyds and Lloyds approved for certified applications.

Product Availability in Drums

PRIME™ 20LV Resin	Order Code	PRIME™ Hardener Size	Order Code
20 kg Resin	F160-049	5.2 kg Fast	F160-053
		5.2 kg Slow	F160-054
		5.2 kg Extra Slow	F160-055
Resin Size	Order Code		
220 kg Resin	F160-034	19 kg Fast	F160-068
		19 kg Slow	F160-069
		19 kg Extra Slow	F160-070
		17.6 kg High Tg	F160-088 *
Resin Size	Order Code		
1000 kg Resin	F160-037	180 kg Fast	F160-018
3 x 17.6kg required to match 220kg resin		180 kg Slow	F160-032
		180 kg Extra Slow	F160-028
		178 kg High Tg	F160-089 *
		900 kg Slow	F160-045 *
		900 kg Extra Slow	F160-033

* Made to order

Infusion Systems

PRIME™ 27

Ultra Low Viscosity Epoxy Infusion System (resin to hardener mix ratio 100:28 by weight)

PRIME™ 27 is Gurits premium epoxy infusion system yielding laminates of excellent mechanical and thermal performance. Like PRIME™ 20LV it is designed for use in a variety of resin infusion processes including RTM, SCRIMP™ and RIFT. PRIME™ 27 has the lowest mixed viscosity and the longest working time of Gurits range of infusion products. It is particularly suitable for infusing large complex structures that utilise a variety of reinforcing fibres, such as carbon and aramid. PRIME™ 27 uses the same hardeners as PRIME™ 20LV - just at a different ratio of 100:28 rather than 100:26. PRIME™ 27 is Germanischer Lloyds approved for certified applications.

PRIME™ 27 Resin Size	Order Code	PRIME™ Hardener Size	Order Code
18.6 kg Resin	F160-057	5.2 kg Fast	F160-053
		5.2 kg Slow	F160-054
		5.2 kg Extra Slow	F160-055
214 kg Resin	F160-041	19 kg Fast	F160-068
		19 kg Slow	F160-069
		19 kg Extra Slow	F160-070
1000 kg Resin	F160-043	180 kg Fast	F160-018
		180 kg Slow	F160-032
		180 kg Extra Slow	F160-028
		900 kg Slow	F160-045 *
		900 kg Extra Slow	F160-033 *

* Made to order

Adhesives

Comparison of Adhesives

* M = Moderate, D = Difficult, E = Easy

	Description	Hardener (Colour)	Mix Ratio	Hand Mix*	Working Time	Clamp time	Sag	Max Temp
Spabond 340LV	High strength, rubber toughened, fast dispense. Uses: Industrial, wind energy and marine.	Fast (Red)	2:1 (by vol)	M	20-40mins	2-5hrs	20-25mm	68°C
		Slow (Purple)			1-2hrs	10-20hrs		
		Extra Slow (Blue)			2.5-6hrs	15-35hrs		
Spabond 345	Highly sag resistant. Uses: highest performance marine projects	Fast (Black)	2:1 (by vol)	D	20-40mins	3-8hrs	15-30mm	75°C
		Slow (Red)			2-3hrs	7-16hrs		85°C
		Extra Slow (Blue)			3-6hrs	10-25hrs		80°C
Spabond 540	High elongation, long bonding times.	Fast (Red)	1:1 (by vol)	M	30-40mins	2-5hrs	20 - 30mm	56°C
		Std (Purple)			1-2hrs	10-20mins		58°C
		Slow (Green)			3-6hrs	20-30mins		52°C
		Extra Slow (Blue)			6hrs 30mins	TBC		TBC
Spabond 370	Easy mixing/smooth spreading. Bonds all woods		1:1 (by vol)	M	90mins	10-15hrs	10-20mm	55°C
Spabond 5-Minute	Tacking and secondary bonding.		1:1 (by vol)	E	90secs	15mins	10-15mm	55°C
Spabond 730	High strength, rapid curing. General purpose adhesive.		1:1 (by vol)	E	3-5mins	30mins	10-15mm	60°C

Adhesives

Spabond 340LV

Epoxy Adhesive System (mix ratio 2:1 by weight and volume)

Spabond 340LV is a lower viscosity variant of Spabond 340. It has been designed for mixing/dispensing from cartridges and to provide higher dispense rates from machines. This product is ideal for bondline thicknesses up to 20mm. Spabond 340LV is Germanischer Lloyd's approved for certified applications.

Dual Cartridge

900ml Dual Cartridge	Resin / Hardener Size	Order Code
Box of 10 x 900ml dual cartridge	600ml Resin / 300ml Fast Hardener	F645-042
Box of 10 x 900ml dual cartridge	600ml Resin / 300ml Slow Hardener	F645-041
Box of 10 x 900ml dual cartridge	600ml Resin / 300ml Extra Slow Hardener	F645-043

400ml Dual Cartridge	Resin / Hardener	Order Code
Box of 20 x 400ml dual cartridge	266ml Resin / 134ml Fast Hardener	F645-033
Box of 20 x 400ml dual cartridge	266ml Resin / 134ml Slow Hardener	F645-034

Dispense Guns

900ml Dispense Guns	Order Code
PC Cox Gun, PPA 600A pneumatic, 900ml 2:1	K215-039

400ml Dispense Guns	Order Code
Metix Gun DM400-01 Manual, 400ml	K215-021
Metix Gun DM400-85-01 Pneumatic, 400ml	K215-022

Mix Heads

900ml Mix Heads	Order Code
Box of 20 x 16mm, 20 Element round mix head with screw connection	A640-021
Box of 20 x 13mm, 18 Element round mix head with bell inlet	A640-009

400ml Mix Heads	Order Code
Box of 20 x 10.7mm 20 Element	A640-022

Adhesives

Spabond 340LV - Continued

Product Availability in Drums			
Resin Size	Order Code	Hardener Size	Order Code
20 kg Resin	F645-053 #	10 kg Fast	F645-051 #
		10 kg Std	F645-064
		10 kg Slow	F645-052 #
		10 kg Extra Slow	F645-057
200 kg Resin	F645-049 #	200 kg Fast	F645-050
		200 kg Slow	F645-025
		200 kg Extra Slow	F645-029

= Stock usually available

Adhesives

Spabond 345

Epoxy Adhesive System (mix ratio 2:1 by volume)

Spabond 345 is a toughened high performance, adhesive system ideal for bonding large structures where substrate surfaces have uneven geometry. The product has a thick, paste-like consistency, and can be applied without sag in thicknesses of over 30mm at 15°C, making it ideal where large, uneven vertical gluelines are required. Spabond 345 has both higher thermal and higher mechanical properties than the other systems. Spabond 345/Fast Black has been formulated for carbon structures requiring an aesthetic finish.

400ml Dual Cartridge	Resin / Hardener Size	Order Code
Box of 20 x 400ml dual cartridges	266ml Resin / 134ml Fast Hardener	F646-016
Box of 20 x 400ml dual cartridges	266ml Resin / 134ml Fast Black Hardener	F646-024
Box of 20 x 400ml dual cartridges	266ml Resin / 134ml Slow Hardener	F646-014

Dispense Guns

400ml Dispence Guns	Order Code
Metix Gun DM400-01 Manual, 400ml	K215-021
Metix Gun DM400-85-01 Pneumatic, 400ml	K215-022

Mix Heads

400ml Mix Heads	Order Code
Box of 20 x 10.7mm 20 Element	A640-022

Product Availability in Drums

Resin Size	Order Code	Hardener Size	Order Code
20 kg Resin	F646-038 #	# 9.6 kg Fast	F646-041
		# 9.6 kg Fast Black	F646-042
		# 9.6 kg Slow	F646-043
		9.6 kg Extra Slow	F646-044

= Stock usually available

Adhesives

Spabond 368

Corebond Epoxy Adhesive (mix ratio 2:1 by volume)

Spabond 368 is a DNV approved corebond epoxy adhesive. It is a low density adhesive, with a simple 2:1 by volume mix ratio which is designed for bonding a wide range of core materials. The product has very good application characteristics and can be applied in thicknesses of up to 15mm at 20°C on vertical surfaces without the risk of drainage.

Product Availability in Drums

<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
10 kg Resin	F654-021	4.4 kg Extra Slow Hardener	F654-022
17.5 kg Resin	F654-023 #	7.7 kg Extra Slow Hardener	F654-024 #

= Stock usually available

Spabond 370

Epoxy Adhesive System (mix ratio 1:1 by weight and volume)

Spabond 370 epoxy adhesive has a simple 1:1 mix ratio, by weight and by volume, epoxy adhesive. Thicknesses of up to 20mm at 20°C can be applied on vertical surfaces without drainage. Spabond 370 is designed for use and cure at temperatures of 10-30°C making it suitable for use in covered outdoor applications, and its non-corrosive nature also makes it safer to use. Whilst being a good general purpose adhesive it is also especially well suited for bonding wooden substrates.

Product Availability in Drums

<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
5 kg Resin	F640-019	5 kg Std Hardener	F640-020
20 kg Resin	F640-021	20 kg Std Hardener	F640-022

Adhesives

Spabond 540

Modified Epoxy Adhesive System (mix ratio 1:1 by volume)

Spabond 540 is a modified ambient curing epoxy adhesive designed for bonding polyester or epoxy laminates. The adhesive system is available with two resins; Spabond 540 resin is designed for larger gaps up to 30mm and Spabond 540LV is a lower viscosity resin designed for thinner bondlines, <20mm. The high toughness and excellent gap filling properties make this adhesive ideal for stringers/bulkheads, frames and hull-to-deck joints on medium to large production boats.

Dual Cartridge

600ml Dual Cartridge	Resin / Hardener	Order Code
Box of 12 x 600ml dual cartridge	300ml Resin / 300ml Fast Hardener	F648-044
Box of 12 x 600ml dual cartridge	300ml Resin / 300ml Std Hardener	F648-045

Resin Size	Order Code	Hardener Size	Order Code
20 kg Spabond 540 Resin	F648-041 #	18.4 kg Fast	F648-010
20 kg Spabond 540LV Resin	F648-013	18.4 kg Std	F648-022
		18.4 kg Slow	F648-030 #
		18.4 kg Extra Slow	F648-048

= Stock usually available

Dispense Guns

600ml Dispense Guns	Order Code
PC Cox Gun, PPA 300A pneumatic, 600ml 1:1	K215-050

Mix Heads

600ml Mix Heads	Order Code
Box of 20 x 10.7mm, 19 Element square mix head with screw connection	A640-019

Adhesives

Spabond 5-Minute Adhesive

Rapid Cure Epoxy Adhesive (mix ratio 1:1 by weight and volume)

Spabond 5-Minute adhesive uses Gurits' fast-setting technology. It combines rapid bonding speed (bonds in 5 minutes, full handling strength in 15-20 minutes) with a simple 1:1 by weight and by volume mix ratio. Spabond 5-Minute is an ideal 'spot-weld' adhesive but it is not suitable for applications where a structural adhesive is required.

Description	Order Code
Box of 20 x 310ml Resin cartridge (un-pigmented)	F652-025
Box of 20 x 310ml Hardener cartridge (un-pigmented)	F652-027
Box 20x400ml 2 component cartridge (pigmented) 200ml Resin / 200ml Hardener	F652-021

Spabond 730 Adhesive

Rapid Structural Adhesive (mix ratio 1:1 by weight and volume)

Spabond 730 is a rapid setting structural epoxy adhesive. It gels in 10 minutes and has full handling strength after 2 hours. Optimum properties for this adhesive are achieved after an overnight cure at ambient.

Description	Order Code
Box 20x400ml 2 component cartridge (pigmented) 200ml Resin / 200ml Hardener	F650-007

Dispense Guns for Spabond 5 Minute and 730 Adhesives

400ml Dual Cartridge Dispense Guns	Order Code
Metix Gun DM400-01 Manual, 400ml	K215-021
Metix Gun DM400-85-01 Pneumatic, 400ml	K215-022

Mix Heads for Spabond 5 Minute and 730 Adhesives

Mix Heads not available for 310ml single component cartridges	Order Code
Box of 20 x 10.7mm, 19 Element square mix head with screw connection	A640-019

Filling and Fairing

S-Fair 600

Epoxy Fairing System (mix ratio 1:1 by volume, 100:64 by weight)

S-Fair 600 is a simple 1:1 by volume, two component filler designed for filling and fairing large composite and metal structures such as hulls and decks. It can be applied up to a thickness of 35mm on a vertical surface. It is easy to sand and is compatible with a wide range of primers and top coats typically used in the marine market for the finishing of yachts. It is available with two hardeners; Fast and Standard, which enables the customer to tailor the working/cure time to the ambient workshop temperature.

<u>Resin Size</u>	<u>Order Code</u>	<u>Hardener Size</u>	<u>Order Code</u>
2.5L Resin	F920-001	2.5L Fast	F920-111
		2.5L Std	F920-002
10L Resin	F920-003 #	10L Fast	F920-110
		10L Std	F920-004 #
190L Resin	F920-107	190L Fast	F920-109
		190L Std	F920-108

= Stock usually available

Coatings

SP 320

Solvent-Free Clear Epoxy Coating System (mix ratio 100:33 by weight)

SP 320 is a solvent-free, clear epoxy coating that provides a high clarity, tough finish to whatever it is applied to. When used for coating wood, just a few coats will provide a depth of clarity that can only otherwise be achieved with many more coats of a conventional varnish. The epoxy coating will protect most surfaces from moisture ingress, and will also add strength to softwood surfaces.

Resin / Hardener Packs	Order Code
5 x 1 kg Pack (0.75 kg Resin / 0.25 kg Fast Hardener)	F505-024
5 x 1 kg Pack (0.75 kg Resin / 0.25 kg Slow Hardener)	F505-025
4.0 kg Pack (3.0 kg Resin / 1.0 kg Fast Hardener)	F505-028
4.0 kg Pack (3.0 kg Resin / 1.0 kg Slow Hardener)	F505-029

Product Availability in Drums

Resin Size	Order Code	Hardener Size	Order Code
20.0 kg Resin	F505-035	6.66 kg Fast	F505-038
		6.66 kg Slow	F505-039

Gurit Pump Sets

Quantity	Description	Order Code
1 pair	Minipump pair any 1kg pack plastic	K216-318
1 pair	SP 320 Pump Set / 1kg pack (14ml dispense)	K216-313
1 pair	SP 320 Pump Set / 4kg pack (14ml dispense)	K216-314
1 pair	SP 320 Pump Set / 13.33 & 26.66 kg size (35ml dispense)	K216-312

Coatings

Eposeal 300 (SP 300)

Universal Epoxy Primer (mix ratio 1:1 by volume)

Eposeal 300 is a solvent-based, low viscosity epoxy primer. It has been developed primarily for use on wood but can also be used on other materials such as GRP, stone, ferrocement, brick, etc. Eposeal 300 has an extremely low viscosity which ensures that the product achieves rapid and deep penetration of porous surfaces.

Resin / Hardener Packs	Order Code
5 x 1 litre Pack (0.5 litre Resin / 0.5 litre Hardener) SP 300	F705-013
5.0 litre Pack (2.5 litre Resin / 2.5 litre Hardener) SP 300	F705-012



Multi-Purpose Systems

SP 106

Multi-purpose Epoxy System (mix ratio 5:1 by volume)

SP 106 is a simple to use, all-purpose epoxy which can be used unmodified as a protective primer, coating or laminating system. When modified with Gurit filler powders (see Ancillary Products) it can be used as an adhesive or filler system. Its various hardeners provide a range of working times and the Extra Slow hardener can also be used in hot or tropical conditions. SP 106 has been established for over 20 years as the primary epoxy system for a variety of woodworking applications.

Resin / Hardener Pack	Order Code
10xbox 5x1 kg pack (0.85 kg Resin with 0.15 kg Fast Hardener in a blister pack)	F510-039
10xbox 5x1 kg pack (0.85 kg Resin with 0.15 kg Slow Hardener in a blister pack)	F510-040
Box of 5 x 1 kg pack (0.85 kg Resin with 0.15 kg Fast Hardener in a blister pack)	F510-037
Box of 5 x 1 kg (0.85 kg Resin with 0.15 kg Slow Hardener in a blister pack)	F510-038
3.02 kg Pack (2.56 kg Resin / 0.46 kg Fast Hardener)	F510-041
3.02 kg Pack (2.56 kg Resin / 0.46 kg Slow Hardener)	F510-042

Resin Size	Order Code	Hardener Size	Order Code
10 kg Resin	F510-004	1.8 kg Fast (0.9 kg x 2)	F510-019
		1.8 kg Slow (0.9 kg x 2)	F510-031
20 kg Resin	F510-051	3.6 kg Fast	F510-018
		3.6 kg Slow	F510-053
216 kg Resin	F510-008	19.5 kg Fast	F510-020
		19.5 kg Slow	F510-032
1000 kg Resin	F510-034	180 kg Slow	F510-033 *

* Due to manufacturing restrictions lead times can vary. Please contact customer support for confirmation of availability.

Multi-Purpose Systems

SP 106 - Continued

Gurit Pump Sets

Quantity	Description	Order Code
1 pair	SP 106 Pump Set/12ml dispense (1kg pack)	K216-315
1 pair	SP 106 Pump Set/12ml dispense (3kg pack)	K216-316
1 pair	SP 106 Pump Set/30ml dispense (11.8kg pack)	K216-317
1 pair	SP 106 Pump Set / 30ml dispense (23.6 kg size)	K216-310

Handipack

Multi-purpose Epoxy System (mix ratio 2:1 by volume)

Handipack is a multi-purpose epoxy, supplied in a small pack designed for quick repair work and other small tasks. It has a simple 2:1 mix ratio and dispensing is made easy since pumps are supplied in the pack. Used as a coating, it cures rapidly to form a tough, clear film, with good moisture resistance. By adding the appropriate Gurit filler powder, adhesives and fillers can also be made. The medium-to-low viscosity of the material enables it to be used for small laminating tasks, using lightweight glass fabrics, such as those from the Gurit reinforcements range.

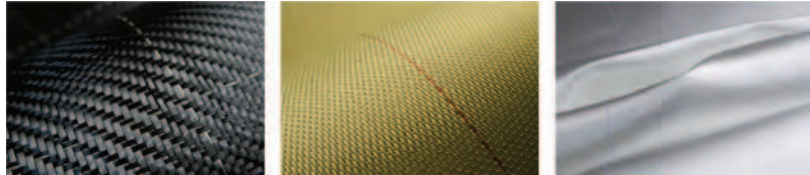
Resin / Hardener Packs	Order Code
10xbox 5x375 ml (250 ml Resin with 125 ml Hardener & Pumps in a blister pack)	F520-012

Epoxy Repair Kit

A handy self contained kit which contains all of the material required to carry out a full range of quick structural and sealing repairs on GRP, wood or steel boats. The kit comprises of 250ml Handipack Resin, 125ml Handipack Hardener, 2 calibrated mixing pots, 1 pot of Colloidal Silica, 1 pot of Microballoons, 1 pot of Microfibres, 2 glue brushes, 2 mixing sticks, 2 pairs of latex gloves and 1 metre of glass tape.

Description	Order Code
First aid for boats kit	A606-001

Reinforcement Materials



Gurit supplies an extensive range of reinforcements suitable for composite component manufacture and repair. These materials are based on the most widely used fibre types and fibre orientations and incorporate a variety of construction techniques in their manufacture.

Our range of Reinforcements is presented by fibre type:

- i) Glass Products – E Glass
- ii) Aramid Products
- iii) Carbon Products
- iv) Hybrid combinations of the above fibres

And sub-divided into the following categories, based on the orientations of the primary structural

- i) Unidirectional Fabrics – A variety of construction styles with all structural fibres running at 0° where optimum mechanical properties or local reinforcement is required. The Style is generally Unitex ('UT') which offers a balance of handling properties.
- ii) Woven Fabrics – A wide range of woven fabrics, available in plain, twill and satin weave formations with fibres at $0^\circ/90^\circ$.
- iii) Multiaxial Fabrics – Stitched construction with fibres at $\pm 45^\circ$ or $0^\circ/90^\circ$ (Double Bias), $0^\circ/+45^\circ/45^\circ$ (Triaxial) and $0^\circ/+45^\circ/-45^\circ/90^\circ$ (Quadraxial). These products offer excellent mechanical properties, and have optimised fibre spread for high laminate quality.
- iv) Tapes – Narrow (< 200mm) fabric versions of the above:

Gurit also supply shears to meet the specific requirements of cutting fibre types.

Reinforcement Materials

Availability

The supply of dry reinforcements is subject to a minimum single roll quantity per style for most items. Smaller quantities of fabric are available from Gurits' network of distributors, subject to cutting and handling charges.

This catalogue describes Gurits standard range of reinforcement materials. If your preferred reinforcement is not listed in the following pages, please contact Gurit, as we can offer alternative weaves, weights, fibres and fibre combinations in any style. Non-standard items may be subject to limited availability. Width availability may change from time to time.

For further information, confirmation of stock levels and technical advice on Gurits reinforcement materials - please contact your local Customer Support Team.

Reinforcement Nomenclature

1st Letter: General Construction of Reinforcement Fabric

WR = Woven rovings - (glass)

R = Woven fabric - yarn (glass/aramid) or tows (carbon)

X = Double bias ($\pm 45^\circ$) stitched fabric

Q = Quadraxial ($0^\circ/90^\circ/\pm 45^\circ$) stitched fabric

Y = Triaxial ($0^\circ/\pm 45^\circ$) stitched fabric

UT = Unitex woven low-crimp unidirectional fabric

UF = Unifibre non-woven unidirectional fabric

2nd Letter: Fibre Type (or Major Component in Hybrid)

E = E glass

S = S glass (or R glass)

A = Aramid

C = Carbon

3rd letter: 2nd Fibre Type - Minor Component in Hybrid (as above);

also: (when present) T = Tape version

Reinforcement Materials

Following the letters are 2, 3 or 4 digits which provide an indication of area weight in g/m². (Please note that the number shown in the fibre style is not the exact weight in grammes.)

Final digit: Identifier to distinguish otherwise similar fabrics.

Suffix letter: For woven fabrics, the following suffixes indicate the weave:

P = Plain

T = 2x2 twill

S = 3x1 twill

T4 = 4x4 twill

Hx = Satin (where x = harness number)

C = Crowsfoot

B = Basket

Q = Quadran

Examples: UT-C300/500

UD carbon in Unitex

Nominal weight 300g/m²

Width 500mm

RA320H5/1000

Woven aramid fabric, 5 Harness Satin

Nominal weight 320g/m²

Width 1000mm

QEA1204/1270

Quadraxial E-glass/aramid hybrid fabric

Nominal weight 1200g/m²

Width 1270mm

Reinforcement Materials

E-Glass Products

Uni-directional Reinforcement Fabrics

Please be advised that these materials may be subject to a minimum order quantity of greater than one roll. Please contact your Customer Support Representative for details.

Style	Width (mm)	Unit	Roll (m ²)	Order Code
UT-E250	500	sqm	100	R161-015
UT-E500	500	sqm	50	R161-021

0/90° Woven Yarn

RE86P	1050	sqm	105	R111-008
RE165T	1270	sqm	127	R111-203
RE210D	1300	sqm	139	R111-120
RE295H4	1240	sqm	130	R111-113
RE301H8D	1270	sqm	127	R111-117
RE400T	1250	sqm	133	R111-197

0/90° Woven Roving Yarn

WRE581T	1250	sqm	62.5	R111-116
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+45° Double Bias Stitched Fabrics

XE304	1270	sqm	127	R121-190
XE451	1270	sqm	107	R121-187
XE603	1255	sqm	62.8	R121-014
XE905	1270	sqm	50.8	R121-018

0/90/±45° Quadraxial Stitched Fabrics

QE624	1270	sqm	76.2	R121-151
QE1174	1270	sqm	44.4	R121-153

Reinforcement Materials

E-Glass Products

0/90° Woven Tapes

Typical uses for these tapes are in the reinforcement of the joint lines of thin, light panels bonded at their edges and the wrapping of tubular structures.

Style	Width (mm)	Unit	Order Code
RET160	50	50 lm roll	R111-053
RET160	100	50 lm roll	R111-055

±45° E-Glass Tapes

Stitched type in E-glass. Typical uses for these tapes are in the reinforcement of the joint lines of thick, heavy panels bonded at their edges.

Style	Width (mm)	Unit	Order Code
XET300	125	50 lm roll	R121-056

Infusion Materials

Gurit can offer a range of reinforcements that are optimised for infusion, by allowing greater resin penetration.

Some of the options available are listed below, but if you should have a particular requirement for a fabric which is not listed, then please contact your Customer Support or Sales Representative who can provide further information on other material options.

Unidirectional Fabric

Style	Width (mm)	Unit	Roll (m ²)	Order Code
UT-C300	500-i	sqm	62.5	R163-110
UT-C400	500-i	sqm	62.5	R163-111

0/90° Biaxial Fabric is available on request

Reinforcement Materials

Carbon Products

These products may be produced with either HSC or HEC carbon fibres.

Unidirectional Reinforcement Fabrics

Please be advised that these materials may be subject to a minimum order quantity of greater than one roll. Please contact your Customer Support Representative for details.

Style	Width (mm)	Unit	Roll (m ²)	Order Code
UT-C200	500	sqm	75	R163-039
UT-C300	500	sqm	62.5	R163-040
UT-C400	500	sqm	50	R163-043

0/90° Woven Reinforcements

Gurit reserve the right to interchange 1000mm and 1270mm alternatives without prior notice.

Style	Width (mm)	Unit	Roll (m ²)	Order Code
RC200T	1270	sqm	127	R113-134
RC303T	1270	sqm	133	R113-128
RC416T	1270	sqm	63.5	R113-083
RC660T	1270	sqm	63.5	R113-127

+ 45° Double Bias Stitched Fabrics

Style	Width (mm)	Unit	Roll (m ²)	Order Code
XC302	1270	sqm	127	R123-060
XC411	1270	sqm	127	R123-006
XC611	1270	sqm	63.5	R123-068

Additions and changes to our Reinforcements range may be made at any time. Please refer to our website (www.gurit.com), or contact your Customer Support Representative for latest information.

Reinforcement Materials

Carbon Products - continued

Unidirectional Reinforcement Tapes

Non-crimp plain weave type (Unix) in carbon. Typical uses for these tapes are in the local reinforcement of predominantly glass composite structures, where the load paths are known.

Style	Width (mm)	Unit	Order Code
RUCT500P	100	50 lm roll	R163-057

±45° Double Bias Stitched Tapes

Stitched type in carbon. Typical uses for this tape is in the reinforcement of the joint lines of thick, heavy panels bonded at their edges. Woven from HEC fibres.

Style	Width (mm)	Unit	Order Code
XCT411	120	50 lm roll	R123-017 *

* Alternative specialist widths are available on request

Aramid Products

0/90° Woven Reinforcements

Style	Width (mm)	Unit	Roll (m ²)	Order Code
RA175H4	1000	sqm	100	R112-004

+ 45° Double Bias Stitched Fabrics

Style	Width (mm)	Unit	Roll (m ²)	Order Code
XA450	1270	sqm	133	R122-002

Additions and changes to our Reinforcements range may be made at any time. Please refer to our website (www.gurit.com), or contact your Customer Support Representative for latest information.

NB. If you require any products which are not featured in the Product Catalogue, please contact your Customer Support or Sales Representative. Additions and changes to our Reinforcements range may be made at any time. Please refer to our website (www.gurit.com), or contact your Customer Support Representative for latest information.

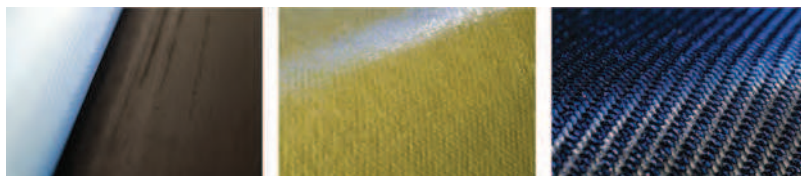
Reinforcement Materials

Shears

Aramid is a tough material requiring special cutting edges. Gurit aramid shears have serrated blades to prevent fibre slip while cutting and toughened steel edges for more effective cutting. The premium grade are a higher specification which last longer in use. The Teflon coating of the shears allows easy clean up when cutting resin-impregnated fabric.

Style	Unit of Sale	Order Code
Teflon coated aramid shears 10" round point	1 pair	A648-009

Prepreg Materials



Pre-impregnated materials (prepregs) are reinforcement fibres or fabrics into which a pre-catalysed resin system has been impregnated by a machine. The resin systems in these materials react only very slowly at room temperature, giving rise to working times of many days to several months. The prepreg resins can only be fully cured by heating them to the prescribed cure temperature. The accuracy of the machinery used to combine the fabric or fibre with the resin system ensures that laminates produced from prepregs have more consistent and higher fibre contents than can be achieved by wet lay-up techniques. Furthermore, this technology allows the use of very tough and strong resin systems that would be too high in viscosity to be impregnated by hand.

A range of Gurit prepregs use the latest solvent-free, hot-melt technology. This combines the prepreg resin system with the reinforcement using heat to reduce resin viscosity and pressure to assist resin impregnation. Besides producing a volatile-free product, the solvent-free nature of this process is far more environmentally acceptable than the more traditional 'solvent tower' process. Every prepreg product produced by Gurit is monitored on-line with sophisticated measuring equipment. This gives the products their highly accurate and consistent resin contents.

Although it is theoretically possible to produce an almost infinite number of resin and reinforcement permutations, wherever possible Gurit produces prepregs from a defined selection to ensure that each product provides the best combination of performance and cost. These standard items are listed in this product catalogue, and enquiries for other combinations should be made to a member of the Gurit Sales Team.

Prepreg Materials

Fibre Definitions of HSC, HEC, IMC and HMC

Fibre	Strength	Modulus
HSC	>3.8GPa	242 ±15GPa
HEC	>4.8GPa	242 ± 15GPa
IMC	>4.4GPa	295 ± 15GPa
HMC	>4.3GPa	385 ± 20GPa

Bespoke products are available for high-volume custom applications, where specific variants of width, resin content, fibre weight, tack levels and backers can be requested. For specific enquiries please contact your local customer support representative.

Product descriptions shown in the following pages are all structured according to the following systems:

Unidirectional prepregs: Resin systems and variant / fibre type (generic or mfrs. code) / fibre weight (g/sqm) / prepreg width (mm) / resin content (%) by weight (normally ±3%) / backer colour (normally embossed poly)

eg. PC53-4163 (SE84LV / HEC / 300g / 400mm / 35% / 1 blue poly, 1 paper)

Woven and Multiaxial prepregs: Resin system and variant / Gurit reinforcement designation / prepreg width (mm) / resin content (%) by weight (normally ±3%) / backer colour (normally embossed poly)

eg. PC22-1849 (SE84LV / XA450 / 1270mm / 46% / 1 blue)

Adhesive films: Resin systems and variant / carrier (S = scrim) / total weight (g/sqm) / film width (mm) / backer colour (normally paper)

eg. PC11-579 (SA80 / S / 250g / 1270mm / 1 paper)

A full description of the Gurit reinforcement designation system is given in the Reinforcement section of this Product Catalogue.

Gurit Prepreg Selector Guide

PRODUCT RANGE	RECOMMENDATIONS	LAYER CORE			PROTECT CORE			RECOMMENDED THROUGH THICKNESS	MATERIAL DENSITY	WEIGHT % UNIDIR. STRENGTH	IMPREGNATION	TYPICAL APPLICATIONS	TYPICAL FINISH PRODUCTS
		TOP	1/4	1/2	1/4	1/2	1/4						
SP 10	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	75	75	75	75	75	75	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 15	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	65	65	65	65	65	65	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 20	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	55	55	55	55	55	55	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 25	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	45	45	45	45	45	45	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 30	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	35	35	35	35	35	35	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 35	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	25	25	25	25	25	25	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 40	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	15	15	15	15	15	15	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 45	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	5	5	5	5	5	5	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	
SP 50	<ul style="list-style-type: none"> Carbon or Kevlar High modulus High strength High modulus 	0	0	0	0	0	0	0.16	14	100	High modulus, high strength, high modulus	Carbon, Kevlar, Fiberglass	

Prepreg Essentials

Gurit prepreg essentials are the commodity prepreg materials which we manufacture in large batches and hold in stock, in order to keep pricing and lead times as low as possible.

Description	Typical Roll Length (m ²)	Order Code
SE84LV/RC200T/1270/42+/-3%	63.5	PC13-2646
SE84LV/RC416T/1270/40+/-3%	63.5	PC13-2682
SE84LV/XC411/1270/40+/-3%	38.1	PC23-1738
SE84LV/HEC/300/400/35+/-3%/popa	60	PC53-4163
SE84LV/NPP80/1000/50+/-5%/1pa	100	PC15-1744
SA70/S/250g/1270mm	102	PP11-2279
SA80/S/250g/1270mm	102	PC11-579
SE84LV/XC305/1270/41+/-3%	63.5	PC23-4362
SE84LV/HEC/450/400/35+/-3%/popa	40	PC53-4159

SC110 Essentials

Description	Order Code
SC110/RC200T/1270/40±3%/2DPE	PA13-6091
SC110/RC660T/1270/35±2%/2DPE	PA13-6148
SC110/RC600T/1250/40±3%/2DPE	PA13-6161
SC110/RC200P/1270/40±3%/2DPE	PA13-6162
SC110/RC245T/1250/40±3%/2DPE	PA13-6207
SC110/RC380T/1250/40%/2DPE	PA13-6220

Prepreg Materials

SE 70

SE 70 is a family of hot melt, low temperature (70°C) cure, epoxy prepreg systems. They have been developed for use in the construction of large components using low energy cure cycles, and have an outlife of 30 days at 23°C. Excellent properties can be achieved at this cure temperature, particularly compressive and interlaminar shear strengths.

Woven Carbon

Description	Typical Roll Length (m ²)	Order Code
SE70/RC200T/1270/40+/-3%	76.2	PP13-3792
SE70/RC303T/1270/42%/2dpe	88.9	PP13-2823
SE70/RC660T/1270/40+/-3%	50.8	PP13-4746
SE70/RC203P/1270/42+/-3%/popa	63.5	PP13-4315

Unidirectional High Modulus Carbon (HMC)

Description	Typical Roll Length (m ²)	Order Code
SE70/HMC/150/400/36%/POPA	80	PP53-5784
SE70/HMC/300/400/33%/POPA	60	PP53-5783

Unidirectional High Elongation Carbon (HEC)

Description	Typical Roll Length (m ²)	Order Code
SE70/HEC/150/400/37+/-3%	80	PP53-3204
SE70/HEC/200/400/35+/-3%/popa	80	PP53-4164
SE70/HEC/300/400/35+/-3%/popa	60	PP53-4165

Biaxial ±45 Carbon

Description	Typical Roll Length (m ²)	Order Code
SE70/XC411/1270/40+/-3%	76.2	PP23-3410

Peel Ply

Description	Typical Roll Length (m ²)	Order Code
SE70LV/NPP80/1000/50+/-5%/1pa	50	PP15-5724

SE 70 is available in similar formats as SE 84LV please consult the appropriate sections of this catalogue.

Prepreg Materials

SE 84LV

SE 84LV is an exceptionally versatile hot-melt, epoxy prepreg, it can be cured at temperatures as low as 80°C, or it can be used for faster moulding of components at 120°C. This is achieved with an extremely good outlife of up to 56 days at 21°C. SE 84 is a tough system, and offers excellent mechanical properties on a wide variety of reinforcing fabrics and fibres. With its high compressive strength it is widely used in large heavily loaded components, including yacht hulls, and spars.

The SE 84LV resin system is Lloyds approved. Gurit has Lloyds and GL approval for SE 84LV with some multi-axial carbon, woven carbon and carbon UD products. Please contact your customer support representative for more information.

Unidirectional High Elongation Carbon (HEC)

Description	Typical Roll Length (m ²)	Order Code
SE84LV/HEC/150/400/37+/-3%/popa	80	PC53-4161
SE84LV/HEC/200/400/37+/-3%/popa	80	PC53-4160
SE84LV/HEC/300/400/35+/-3%/popa	60	PC53-4163 *
SE84LV/HEC/450/400/35+/-3%/popa	40	PC53-4159

Unidirectional Intermediate Modulus Carbon (IMC)

Description	Typical Roll Length (m ²)	Order Code
SE84LV/IMC/300/400/35%/popa	60	PC53-2306

*Part of prepreg essentials range.

Prepreg Materials

SE 84LV - Continued

Unidirectional High Modulus Carbon (HMC)

Description	Typical Roll Length (m ²)	Order Code
SE84LV/HMC/150/400/35+/-3%/popa	80	PC53-1807
SE84LV/HMC/300/400/35+/-3%/popa	60	PC53-1808
SE84LV/HMC/450/400/35%/popa	40	PC53-2305

Ultra High Modulus Carbon (UHMC)

Description	Typical Roll Length (m ²)	Order Code
SE84LV/UHMC/150/400/32%/2dpe	80	PC53-5802
SE84LV/UHMC/300/400/32+/-3%/popa	60	PC53-4544

Limited availability on ultra high modulus carbon

Woven High Strength Carbon

Description	Typical Roll Length (m ²)	Order Code
SE84LV/RC200T/1270/42+/-3%	63.5	PC13-2646 *
SE84LV/RC203P/1270/42+/-3%/popa	63.5	PC13-4314
SE84LV/RC303T/1270/42+/-3%/POPA	44.5	PC13-2710
SE84LV/RC416T/1270/40+/-3%	63.5	PC13-2682 *

Biaxial ±45 Carbon

Description	Typical Roll Length (m ²)	Order Code
SE84LV/XC305/1270/41+/-3%	63.5	PC23-4362
SE84LV/XC411/1270/40+/-3%	38.1	PC23-1738 *

*Part of prepreg essentials range.

Prepreg Materials

SE 84LV - Continued

Peel Ply

Description	Typical Roll Length (m ²)	Order Code
SE84LV/NPP80/1000/50+/-5%/1pa	100	PC15-1744 *

Woven Glass

Description	Typical Roll Length (m ²)	Order Code
SE84LV/RE165T/1270/41+/-3%	127	PC11-5754
SE84LV/RE295/1240/39+/-3%	62	PC11-4005

Multiaxial Glass

Description	Typical Roll Length (m ²)	Order Code
SE84LV/XE603/1250/36+/-3%	31.3	PC21-1747
SE84LV/XE905/1270/35+/-3%	19.1	PC21-1748

Woven and Multiaxial Aramid

Description	Typical Roll Length (m ²)	Order Code
SE84LV/RA320H5/1270/46+/-3%	63.5	PC12-1752

SE 84 Nano Ultra High Compression Prepreg

SE 84 Nano is a high performance hot-melt epoxy prepreg. When pressure moulded SE 84 Nano exhibits a 25% increase in compression strength vs SE 84LV.

Description	Typical Roll Length (m ²)	Order Code
SE84Nano/IMC/300/400/35+/-2%/popa	60	PC53-5811
SE84Nano/HEC/300/400/35+/-3%/popa	60	PA53-5609
SE84Nano/HMC/300/400/35+/-3%/popa	60	PA53-5663

*Part of prepreg essentials range.

Prepreg Materials

WE90 Structural Prepreg Range for Industrial Applications

Description	Order Code
WE91-1/XE600/1250/35+/-3	PA21-5319
WE91-1/EGL/1600/1000/32%+/-3%	PA51-5324
WE91-1/EGL/1200/900/32+/-3%	PA51-3984
WE91-1 80g peel ply	SA15-6090
SPRINT/600g/G/BIAX/1270mm/35%	SA41-4767

Prepreg Materials

Prepreg Materials for Automotive Applications

Gurits experience in the automotive market has led to the development of a range of composite materials for the industry and its suppliers. This new range provides manufacturers with composite materials designed for a variety of applications, both structural and cosmetic. The automotive materials range has been formulated by Gurit's technical team to offer the best solution for OEMs and third-party suppliers who are looking for a composite solution to their parts manufacturing process. These materials offer class leading performance along with the recognised benefits of composites; strength, lightness and the ability to fashion complex shapes.

SC 110 Cosmetic Carbon Prepreg

SC 110 is a new cosmetic grade prepreg that utilises a high clarity, versatile, hot-melt epoxy resin formulation. The unique formulation ensures that no dicy white-wash or spots are evident in the cured resin, reducing scrap rate by up to 20%. It is ideal for manufacturing high visual quality components using autoclave, press and vacuum-only processing. It can be cured at temperatures as low as 80°C, or it can be used for faster moulding of components at 120°C. Even faster cures are achievable using press moulding technologies at temperatures up to 150°C. This is achieved whilst maintaining a good out-life of up to 3 weeks at 21°C. It is a toughened system, and offers excellent mechanical properties on a wide variety of reinforcing fabrics and fibres.

Description	Order Code
SC110/RC200P/1270/40±3%/2DPE	PA13-6162
SC110/RC200T/1270/40±3%/2DPE	PA13-6091
SC110/RC245T(O)/1250/40±3%/2DPE	PA13-6105
SC110/RC245T/1250/40±3%/2DPE	PA13-6207
SC110/RC380T/1250/40%/2DPE	PA13-6220
SC110/RC600T/1250/40±3%/2DPE	PA13-6161
SC110/RC660T/1270/35±2%/2DPE	PA13-6148
SC110/XE603/1255/35%/2DPE	PA21-6241

Prepreg Materials

SE 200 Structural Epoxy Prepreg

SE 200 is a high strength toughened epoxy system that has a flexible cure envelope ranging from 135°C to 200°C. SE 200 has been developed to enable rapid part manufacture through a number of composite processing methods. The minimum cure temperature is 135°C from which SE 200 develops a T_g and mechanical properties associated with higher temperature curing systems. Higher temperature cures in excess of 180°C will achieve the best dry and wet thermal performance. Using the appropriate press moulding technology it is possible to achieve a 210°C T_g after a 15 minutes hot-in / hot-out cure at 195°C, making SE 200 suitable for the economic production of automotive parts. SE 200 structural prepreg can be used in the making of parts such as structural lower tubs, bulkheads, front and rear scuttles, gearbox tunnels and other structural components.

Description	Order Code
SE200/00/200G/1270MM ADH. FILM	SA00-6141
SE200/00/35G/1270MM ADH. FILM	SA00-6140
SE200/BC250/1270/48%/S/S	SA23-6136
SE200/IMC/124/400/36%/2DPE	PA53-6193
SE200/RC240P/1000/48%/S/S	SA13-6138
SE200/RC245T/1000/48%/S/S	SA13-6135
SE200/RC245T/1000/51%/2DPE	PA13-6201
SE200/RC245T/1250/40%/2DPE	PA13-6271
SE200/RC380T/1250/40%/2DPE	PA13-6273
SE200/RC400T/1270/40%/2DPE	PA13-6143
SE200/RCE240P/1000/51%/2DPE	PA13-6202
SE200/RCE245PUD/1270/48%/S/S	SA13-6139
SE200/RCIM200T/1000/40%/2DPE	PA13-6275
SE200/RCS245PUD/1270/48%/S/S	SA13-6137
SE200/T1000/124/400/36%/2DPE	PA53-6195
SE200/UHMC/124/400/36%/2DPE	PA53-6191

Prepreg Materials

PN901 High TG Prepregs

PN 901 is an ideal prepreg resin for high temperature composite applications, as it combines the ease of processing and handling convenience of epoxy resins, high temperature stability of polyimides, and flame / fire resistance of phenolics. A 120°C cure for 75 minutes combined with a post-cure, enables PN 901 to generate a Tg in excess of 300°C, making PN 901 ideal for applications in composite structures, which are exposed to very high temperatures for short durations. The flame and smoke characteristics of PN 901 composites show that this resin possesses superior flame retardant properties and holds a wide range of Aerospace grade FST (Fire/Smoke/Toxicity) standards.

Description	Order Code
PN901/RC660T/40%/1270MM	NN13-6301

Prepreg Materials

SparPreg™

SparPreg™ is an advanced UD prepreg, developed to enable to economic manufacture of unidirectional spar caps for more demanding spar designs. SparPreg™ is specifically formulated to produce low void content unidirectional prepreg from vacuum bag only processing.

Description	Typical Roll Length (m ²)	Order Code
Sparpreg/HSC/600/1240/34+3%/2DPE	Tbc	PA53-5995
Sparpreg/HSC/600/300/34+3%/2DPE	Tbc	PA53-5924

Intensifying Pastes

Gurits mono-component pastes are pre-catalysed adhesive/filler systems that can be used in conjunction with Gurit prepregs and SPRINT™. They are used as in-situ fillers to bridge corners or tight radii and can also be used as core splicing adhesives. The system range covers black and white variants in high and low densities. Being pre-catalysed system, they require freezer storage for long-term stock holding. Outlife at 20°C is about 20 days.

For use with SE 84 (or SPRINT™ at 80 degrees)

Description	Order Code
SP 4832 Black 15kg (22lt) pail for use with dispensing machines	FX4832-32
SP 9435 White - High density - mono-component intensifying paste 300ml Resin	FX9435-28
SP 4832 Black - low density - mono-component intensifying paste 300ml	FX4832-31

For use with SE 70

Description	Order Code
SPX11100 Dark Grey mono-component intensifying paste 300ml	FY1100-32

Please check availability with your Customer Support representative

Adhesive films

SA 70 is an adhesive film that is designed for secondary bonding, core-bonding and for co-curing with the range of Gurit prepregs. It can be cured at temperatures as low as 70° C, or can be more quickly cured at temperatures above 120°C. The product has an outlife of 28 days.

SA 80 is an adhesive film that is designed for secondary bonding, core-bonding and for co-curing with the range of Gurit prepregs. It can be cured at temperatures as low as 80°C, or can be more quickly cured at temperatures above 120°C. It has an outlife of 56 days at room temperature.

SA 70

Description	Carrier Type	Typical Roll Length (m ²)	Order Code
SA70/00/150g/1270mm	None	103	PP00-5549
SA70/00/250g/1270mm	None	63.5	PP00-2967
SA70/S/150g/1270mm	Glass	127	PP11-3420
SA70/S/250g/1270mm	Glass	102	PP11-2279 *
SA70/S/400g/1270mm	Glass	63.5	PP11-2278

SA 80

Description	Carrier Type	Typical Roll Length (m ²)	Order Code
SA80/00/150g/1270mm	None	127	PP00-5476
SA80/00/200g/1270mm	None	127	PC00-1778
SA80/S/150g/1270mm	Glass	127	PC11-666
SA80/S/250g/1270mm	Glass	102	PC11-579 *
SA80/S/400g/1270mm	Glass	63.5	PC11-580

Please check availability with your Customer Support representative

SPRINT™ Materials - for out of Autoclave Moulding



SPRINT™ - Film Infusion Technology – is a unique patented material and processing technology that allows high quality composite components, with high mechanical properties and very low void content, to be produced rapidly and economically.

SPRINT™ materials consist of a layer of fibre reinforcement either side of a pre-cast, precatalysed resin film with a very lightweight tack film on one face. The material therefore has the appearance of dry reinforcement, which has resin concealed at its center. SPRINT™ materials are produced by a process that differs from conventional prepreg so that the fibres in the reinforcements remain dry and unimpregnated by the resin.

SPRINT™ materials are laid up in a mould and vacuum bagged as for conventional prepreg. However, when the vacuum is applied, the air transport properties of the dry reinforcement enable air trapped in the fibre bundles and between layers to be easily removed. When the temperature is then raised for the cure, the resin film softens and flows into the air-free reinforcement. The void content of the resultant laminate is extremely low (typically 0-0.5%).

SPRINT™ is available in a number of resin and reinforcement combinations using woven and stitched carbon, glass, aramid and hybrids in a multitude of styles. These can be in the form of random mat, woven fabrics, stitched fabrics, or simple rovings.

Unlike conventional prepreg the fibres are not held rigidly by the resin, so the SPRINT™ prepreg is much more drapable. The technology has been successfully applied to a range of applications from large structures (with thick laminates) to small complex mouldings.

SPRINT™ is also Germanischer Lloyds approved for some products within the range. Please see the following pages for more information, or contact your customer support representative for more details.

SPRINT™ Materials

Product Descriptions

Surfacing Film Resin System / Carrier (if any) / Resin Weight / Surfacing Medium (if any) / Width

Structural SPRINT™ Resin System / Fabric / Resin Content / Fabric / Width

Single SPRINT™ Fabric / Resin Film

Description / Explanations

RC2 = RC200T 195gsm 3k Carbon, Twill Weave

RC303T 300gsm 12k Carbon, Twill Weave

RC6 = RC660T 660gsm 12k Carbon, Twill Weave

W5 = WRE581 580gsm Glass Woven Roving

SPRINT™ Materials

ST 95 - Structural SPRINT™

ST 95 is a toughened SPRINT™ system that offers an extremely good balance of mechanical properties. With a minimum cure temperature of 80°C (with a suitable post-cure), it is ideal for structural components where improved performance and resistance to micro-cracking is desired. ST 95 resin matrix has good flow resistant characteristics that make it stable at room temperature (21°C). The product has a light tack on one side which aids placement in a mould tool. For details of cure schedules, please refer to data sheet.

ST 95 is Germanischer Lloyds approved for some glass and carbon products. Please contact your customer support representative.

Carbon

Description	Typical Roll Length (m ²)	Order Code
ST95/RC303T/42%/RC303T/1270/T/popa	25.4	SL13-2826 †
ST95/RC303T/51%/RC303T/1270/T/popa	12.5	SL13-2878 *

Glass

Description	Typical Roll Length (m ²)	Order Code
ST95/RE301H8/46%/RE301H8/1270/T/popa	19.1	SL11-2891 *
ST95/WRE5/41%/W5/1250/T/popa	12.5	SL11-2560

ST 70 - Structural SPRINT™

This is a low temperature (70°C) cure, SPRINT™ system. They have been developed for use in the construction of large components using low energy cure cycles, and have an outlife of 30 days at 23°C. Excellent properties can be achieved at this cure temperature, particularly compressive and interlaminar shear strengths.

Description	Typical Roll Length (m ²)	Order Code
ST70/RC303T/42%/RC303T/1270/T /popa	19.1	SA13-4555 †
ST70/WRE581T/41%/WRE581T/1250/T	12.5	SA11-4399

Please check availability with your Customer Support representative

† This item may have a minimum order quantity of more than 1 roll. Please contact your Customer Support representative for details.

* Additional resin included for core-bonding.

SPRINT™ Materials

SPRINT™ Surfacing Materials

Gurit have a range of surfacing materials specific to a number of applications. SF 70 and 80 are pale green lightweight, sandable films curable at 70°C and 80°C respectively. It provides a pin-hole free surface to all marine mouldings with minimal print-through, onto which a paint finish can be applied.

SF 95VH is a silicon carbide filled surfacing system developed initially for the automotive sector to protect vulnerable underbody components of both GT racing and sports cars which minimises fibre damage from foreign object impacts. For details of cure schedules, please refer to data sheet.

SF 95PF is a grey filled epoxy film designed to enhance the surface finish of composite components. Curable at 85°C with a vacuum only process it provides an easy sanding pinhole free surface finish with minimal print through from the underlying laminate. SF 95PF provides a stable surface onto which a paint finish can be applied once lightly keyed.

Description	Typical Roll Length (m ²)	Order Code
SF70/S2/150g/1260	63	SC11-4405
SF80/S2/150g/1260	63	SC11-2829
SF95VH/S2/300g/1270	63.5	SA11-1654
SF95PF/S2/300g/1260/Black	50.4	SA11-2351

SPRINT™ Materials

Single SPRINT™

ST 94 is a toughened system offering a good balance of mechanical properties. It comprises of a single layer of reinforcement fabric plied against a resin filmed paper. The resin film has a medium tack that makes it ideal for vertical surface applications. Although moderately tacky, ST 94 can be repositioned once in place without disturbing the underlying single SPRINT™ layers.

ST 94 is Germanischer Lloyds approved for some glass and carbon products. Please contact your customer support representative for more information.

Carbon

Description	Typical Roll Length (m ²)	Order Code
ST94/RC660T/1270/42+/-3%/S/S	22.9	SR13-3109
ST94/XC411/1270/42+/-3%/S/S	31.8	SR23-3134
ST94/XC611/1270/40+/-3%/S/S	31.8	SR23-5358

Glass

Description	Typical Roll Length (m ²)	Order Code
ST94/WRE581T/1250/33%+/-3%/S/S	31.3	SR11-3219
ST94/QE1203/1270/35+/-3%/S/S	15.2	SR21-2850

These items may have a minimum order quantity of more than 1 roll. Similar format SPRINT™ materials are also available with ST 70 - 70°C curing system. Please contact your Customer Support representative for details.

S-Core

S-Core is a multi-layered moulding material consisting of a layer of polyester non-woven honeycomb material against a precatylsed resin film. It must be accompanied by a SPRINT™ laminate on both faces.

S-Core has a cured thickness of 4mm, making it ideal for bulking out laminates.

Description	Typical Roll Length (m ²)	Order Code
ST70/S-Core/4.0mm/1270	12.7	SA11-4522
ST94/S-Core/4.0mm/1270	10.2	SR11-3444

RENUVO™

RENUVO™ Prepreg System

RENUVO™ Prepreg (PP) is a breakthrough UV curing Prepreg system, developed by Gurit as a repair system for material for both hot and cold environments. Additionally both grades are available in unidirectional (UD) and biaxial (XE) formats.

RENUVO™ Prepreg - Available in a short roll format of 8sqm (400mm x 20lm)

Description	Order Code
RENUVO™ 5-18oC/XE600/35%/400/2dpe (Biaxial E-glass)	PA21-5532
RENUVO™ 15-30oC/XE600/35%/400/2dpe (Biaxial E-glass)	PA21-5531
RENUVO™ 5-18oC/EGL/600/400/35%/2dpe (Unidirectional E-glass)	PA51-5530
RENUVO™ 15-30oC/EGL/600/400/35%/2dpe (Unidirectional E-glass)	PA51-5529

RENUVO™ Multi-Purpose System

RENUVO™ Multi-Purpose System (MPS), is a breakthrough UV curing resin system, developed by Gurit as a repair system for turbine blades. The system can be used either as a stand alone spot repair or in combination with RENUVO™ Prepreg for a structural repair.

RENUVO™ Multi-Purpose System Resin - Available as a box of 20 cartridges (310ml each cartridge)**

Description	Order Code
5-18oC RENUVO™ MPS Box (20 x 310ml cartridges)	A525-001
15-30oC RENUVO™ MPS Box (20 x 310ml cartridges)	A525-002

** Calculating Quantities of MPS Required when used for laminate repair: The MPS should be used both between the prepreg repair patch and the surface (approximately 0.3mm - 1mm MPS thickness) as well as for providing a smooth surfacing layer on top of the repair patch (at approximately 1-2mm MPS application thickness). If used in these two places, 1 cartridge of MPS should be enough for a repair patch of about 0.5sqm. For calculation of the amount of MPS you need overall, the number of prepreg layers you use within that patch does not matter, unless you exceed three layers of prepreg. In this situation you will need to first cure the initial three layers and then use extra MPS resin to provide the interface for the next one or more layers. By these same calculations if you are only applying a single layer of prepreg as the patch, then you will need approximately 16 cartridges for every roll of prepreg (8sqm) you use. The exact MPS usage will of course depend on how rough the surface is after grinding, as well as how much you want to smooth the final patch surface, and whether you use MPS on its own for filling small areas of damage without adding repair laminate. However these quantity estimates should be a good starting point for ordering the correct amount of MPS and prepreg.

RENUVO™

RENUVO™ Ancillary Product and Equipment

RENUVO™ Heated Vacuum Consolidator - Device requires 240V AC supply.
Please note that vacuum pump is not included

Description	Order Code
RENUVO™ HVC	A521-004

RENUVO™ Lamp Technology - For use with RENUVO MPS and RENUVO PP

Description	Order Code
RENUVO™ LED400F	A521-001
RENUVO™ Neoelectron - 240v Version	A521-002
RENUVO™ Neoelectron - 110v Version	A521-003

Ancillary Equipment - For use in combination with RENUVO™ Product range

Description	Order Code
UV Blocking Backer material (600mm wide)	A522-001
UV Applicator Tool - 25mm roller	A523-001
RENUVO™ MPS Spreader, 70mm x 70mm	A523-002
Stitch Ply A	V620-001
UV Safety Specs - EN166-1F - Tinted	A524-003
Surface cleaning wipes (300 wipes per tub)	A524-001
Spare nozzles for MPS	K215-004

Fire Retardant Materials



Gurits range of Fire Retardant (FR) products are designed to deliver high performance laminates whilst meeting demanding fire requirements.

The ease of use and processing properties of these systems allow large parts to be manufactured in one operation using vacuum only consolidation.

The Fire Retardant range is available in a wide variety of formats from ambient curing liquid systems to elevated temperature curing SPRINT™ products.

Typical applications include cladding of buildings, interior and exterior train parts, commercial/military craft and fire protection on passenger ferries/superyachts.

- > Ambient Curing FR Products
 - > Ampreg 21FR
 - > Adhesives & Surfacing Materials

- > Elevated Temperature Curing
 - > ST 70FR
 - > SE 90FR
 - > ST 90FR
 - > SF 80FROBL
 - > SF 90FRBL

Fire Retardant Materials - Ambient Curing

Fire Retardant Surfacing Materials & Adhesives

Please contact a member of Gurits customer support team for information on fire retardant surfacing materials.

Ampreg 21FR

Fire Retardant Epoxy Wet Laminating System (resin to hardener mix ratio 100:21 by weight)

Ampreg 21FR has been optimised for the manufacture of large composite structures using hand layup, and vacuum bagging techniques. Ampreg 21FR has been designed to give excellent mechanical and thermal properties from both ambient temperature cures, and moderate temperature postcures (50°C). This system is available with a range of hardener speeds, from Fast to Ultra Slow. Ampreg 21FR Meets BS476 part 7 class 2 & UL94 V0 fire rating.

Product Availability in Drums

Ampreg 21FR Resin Size	Order Code	Hardener	Order Code
15.85 kg Resin	F122-004	3.33 kg Standard	F121-036
		3.33 kg Slow	F121-037
		3.33 kg Extra Slow	F121-038
257 kg Resin	F122-005	18 kg Standard	F121-018
3 x 18 kg hardener required to match 257 kg resin.		18 kg Slow	F121-019
		18 kg Extra Slow	F121-020
3 x 15.4kg hardener required to match 257kg resin		15.4 kg Ultra Slow	F122-006 *
		900 kg Ultra Slow	F122-007 *

900 kg hardeners in IBC's are made to order

* Please refer to datasheet for mix ratio

Fire Retardant Materials - Elevated Curing

ST 70FR

Fire Retardant Glass Structural SPRINT™

ST 70FR is a low temperature curing Fire Retardant Epoxy SPRINT™ product. The SPRINT™ format makes this product ideal for the manufacture of thick sections requiring a high level of fire protection. It can be cured at temperatures as low as 70°C. Meets BS476 Pt 6 and Pt 7 Class 0.

SE 90FR / ST 90FR

Fire Retardant Prepreg & SPRINT™ Systems

SE 90FR is a high performance fire-retardant, hot-melt, epoxy prepreg system. This product is ideal for customers requiring a fire retardant UD carbon prepreg product. It can be co-cured with ST 90FR to give high quality FR laminates with vacuum only processing. ST 90FR can be cured at 90°C, yet retains an outlife of up to 56 days at 23°C. These products are ideal for structural components where selfextinguishing fire performance and high load bearing capability are desired. Meets DIN4102 B-1 in conjunction with SF 80FROBL surface film.

Format	Fire Retardant Matrix Resin	Availability (fibre/fabric areal weight/m2)					
		Carbon			Glass		
		UD	Woven	Biaxial	Woven	Stitched Quadraxials	Biaxial
SPRINT™	ST 70FR	not typically supplied on carbon reinforcements			290g - 850g	600g - 800g	600g - 900g
	ST 90FR	n/a	200g - 670g	300g - 600g			
Prepreg	SE 90FR	150g - 600g	200g - 670g	300g - 600g	not typically supplied on glass reinforcements		
Surface Film	SF 80FROBL	N/A			50-140g		
FR Core Materials	G-PET 75FR G-PET 100FR	Excellent FST performance (Evaluated against DIN 5510, ASTM E1354, ASTM E662 & BSS7239)					

A range of fire retardant surface coatings, adhesives and infusion system solutions are available from Gurit. Please contact a member of your local customer support team for further information on these products.

Core Materials



Introduction

Cores in a sandwich construction are specified by designers and architects to increase stiffness and reduce the weight of a composite structure. Gurit has a range of core materials to fit any specification or manufacturing process.

Gurit® Corecell™ is a structural foam core material using a SAN polymer base featuring high toughness and impact resistant characteristics. Gurit® Corecell™ has become widely accepted for the construction of large, high performance structures. Although originally developed for the marine industry, it is now used in a range of other applications such as wind turbines and sub sea vessels. Gurit® Corecell™ grades have various type approvals including the American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Germanischer Lloyd (GL), Registro Italiano Navale (RINA) and Bureau Veritas (BV). Please check for additional product approvals.

Gurit® PVC is a closed cell, cross-linked PVC foam. It provides high strength to weight ratio for all composite applications. Other key features include outstanding chemical resistance, low water absorption and excellent thermal insulation capabilities.

Gurit® G-PET™ is a highly adaptable, recyclable, thermoplastic foam with a good balance of mechanical properties, temperature resistance, density and cost for a wide range of applications and production processes. Gurit® G-PET™ is approved by Germanischer Lloyd (GL) and American Bureau of Shipping (ABS). Gurit® G-PET™ is approved by Det Norske Veritas (DNV).

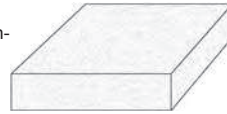
Gurit® Balsaflex™ is the classic end-grain balsa wood core, featuring highest strength and stiffness to weight ratio of all core materials. Gurit® Balsaflex™ is available in range of densities, thickness and format/finish. Gurit® Balsaflex™ is approved by Germanischer Lloyd (GL) and Lloyd's Register

Core Materials

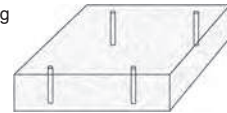
Forms of Supply

Gurit standard product forms are described below. Gurit can also tailor sheets to your own specification - please call to discuss your requirements.

PL – Plain Sheet – Optimum material properties. Limited bending in-mould.



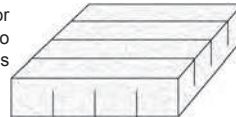
PH – Plain with Bleeder Holes – Assists air release in vacuum bag processes.



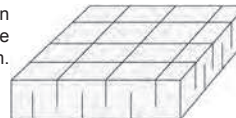
Cuts for conformability (Foam)

Gurit knife cut finish is standard on Gurit® Corecell™ and Gurit® G-PET™. Saw cut is standard for Gurit® PVC while knife cut finish on Gurit® PVC is limited. Knife cuts are not visible when the sheets lie flat and these narrow knife-cuts minimize unnecessary resin consumption compared to saw-cut core finishes. Please be advised that cuts are dependant upon the density and thickness of the material. Higher density and thickness materials may need to be saw cut. Maximum sheet size is half of a full-size sheet. Please contact your customer support representative for more information.

SC – Single Cut – Provides flexibility in a single direction on one or both sides of a sheet. If done on both sides, the cuts intersect so no bleeder holes are necessary for vacuum bagging. Max sheet size is half of a full-size sheet.



DC – Double Cut – Provides optimum flexibility in two directions on one or two sides of the sheets. If Double Cut on both sides, the intersecting cuts make DC a highly effective resin infusion medium. Max sheet size is half of a full-size sheet.



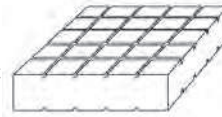
CS – Contour Scrim – Provides optimum flexibility in two directions. Sheets are cut in 30mm squares and bonded to a glass scrim. Available in half sheet size only.



Surface grooves for infusion – Available on all foam types

Core Materials

VIC – Vacuum Infusion Core – There are several VIC options and Gurit can customise grooving patterns and bleeder holes as required. For curved laminate sections, double-sided DC is very effective system for resin infusion with low weight gain. Heat forming VIC surface cut also useful for obtaining curved panels with minimal resin uptake.



Product Formats (Balsa)

Gurit® Balsaflex™ is available plain or with typical formats including perforations, microgrooves, with or without scrim, contour scrim and with optional coating.

Other Product Formats

Bead and Cove - Bead and cove strip planking aids the building of large, curved structures, in a mouldless build method.

Fillet strips – Triangular edge strips to create tapered panel edge drop-offs, or stringer base fillets.

Kits – Gurit has an extensive kitting capability to provide all the formats described here in customized, numbered, ready to use, CNC machined kits.

Core Materials Range

Gurit® Corecell™ M

Gurit® Corecell™ M is the next generation of Gurit® Corecell™. Combining high static properties, high toughness and compatibility with infusion and prepreg processes. Gurit® Corecell™ M benefits from American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Germanischer Lloyd (GL), Registro Italiano Navale (RINA) and Bureau Veritas (BV) certification.

Gurit® Corecell™ A

Corecell™ A is the original Gurit® Corecell™ material. The styrene acrylonitrile (SAN) base chemistry has inherent toughness and elongation far beyond that of core materials. Gurit® Corecell™ A is suitable for processing up to 60°C and has ABS, GL and DNV certification.

Gurit® Corecell™ S

Gurit® Corecell™ S has been developed primarily to resist hydrostatic pressures in sub-sea applications. It is manufactured in two densities, and buoyancy modules can therefore be designed to depths up to 1100 metres (averages). Gurit® Corecell™ S is only available in full thickness.

Gurit® Corecell™ T

Gurit® Corecell™ T is the lightest density Corecell™ foam available. T300 is an ideal choice for low density core applications. T400 provides improved compressive strength over M60 and is better suited for thin skinned laminates. Gurit® Corecell™ T has ABS, GL, and DNV certification.

Gurit® G-PET™

Gurit® G-PET™ is a highly adaptable, recyclable, thermoplastic foam with a good balance of mechanical properties, temperature resistance, density and cost for a wide range of applications and production processes. Gurit® G-PET™ has GL certification.

Gurit® PVC

Gurit® PVC is a closed cell, cross-linked PVC foam. It provides high strength to weight ratio for all composite applications. Gurit® PVC has DNV certification. The Gurit® PVC range also offers HT60 and HT80 with high temperature processing up to 140°C.

Gurit® Balsaflex™

Gurit® Balsaflex™ is the classic high quality end-grain balsa wood core. Rigid panels are available in higher thickness, flexible panels are available up to 55mm. Large flexible panels with 1220 x 1220mm are also available. Gurit® Balsaflex™ has GL certification

Gurit® Corecell™ available from the Gurit site in Magog (Canada)

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
Corecell	T400	White + Green	71	4.4	1285x1285	50.5x50.5	1285x2605	50.5x102.5	3-85	1/2 - 35/16
	T500	White + Blue	94	5.9	1195x1220	47x48	1195x2440	47x96	3-40	1/8 - 19/16
	T550	White + Yellow	104	6.5	1170x1170	46x46	1170x2360	46x93	3-35	1/8 - 13/8
	T600	White + Black	115	7.2	1130x1130	44.5x44.5	1130x2278	44.5x89.5	3-35	1/8 - 13/8
	T800	White + light brown	143	8.9	1015x1015	40x40	1015x2050	40x80.5	3-35	1/8 - 13/8
	M60	Yellow + Green	65	4.1	1285x1285	50.5x50.5	1285x2605	50.5x102.5	3-50	1/8 - 2
	M80	Yellow + Blue	85	5.3	1220x1220	48x48	1220x2440	48x96	3-50	1/8 - 2
	M100	Yellow + Black	107.5	6.7	1130x1130	44.5x44.5	1130x2275	44.5x89.5	3-48	1/8 - 17/8
	M130	Yellow + Light Brown	140	8.7	1015x1015	40x40	1015x2045	40x80.5	3-44	1/8 - 13/4
	M200	Yellow + Brown	200	12.5	915x915	36x36	915x1830	36x72	3-31	1/8 - 11/4
	A400	Green	69	4.3	1220x1220	48x48	1220x2440	48x96	3-40	1/8 - 19/16
	A450	Orange	81	5	1220x1220	48x48	1220x2440	48x96	3-34	1/8 - 15/16
	A500	Blue	92	5.7	1220x1220	48x48	1220x2440	48x96	3-50	1/8 - 115/16
	A550	Yellow	103	6.4	1180x1180	46.5x46.5	1180x2380	46.5x93.5	3-38	1/8 - 11/2

Essentials

Specialist

Gurit® Corecell™ available from the Gurit site in Magog (Canada) continued

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
Corecell	A600	Black	116.5	7.3	1130x1130	44.5x44.5	1130x2250	44.5x88.5	3-35	1/8 - 1 3/8
Corecell	A800	Pale Brown	150	9.3	1015x1015	40x40	1015x2045	40x80.5	3-32	1/8 - 1 3/8
Corecell	A1200	Brown	210	13.1	915x915	36x36	915x1830	36x72	3-30	1/8 - 1 1/4
Corecell	S1200	Red + Brown	210	13.1	890x890	35x35	890x1830	35x72	21-24	53/64 - 15/16
Corecell	S1800	Red + Mauve	315	19.7	785x785	31x31	785x1600	31x63	16-21	5/8 - 53/64

Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local sales representative for more information

Gurit® Corecell™ available from the Gurit site in Tianjin (China)

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
Corecell	T400	White + Green	71	4.4	1340x1310	52.8x51.6	1340x2620	52.8x103	3-56	1/8 - 2 3/17
Corecell	T500	White + Blue	94	5.9	1195x1220	47x48	1195x2440	48x96	3-40	1/8 - 1 1/2
Corecell	M60	Yellow + Green	65	4.1	1285x1285	50.5x50.5	1285x2605	50.5x102.5	3-44	1/8 - 1 3/4
Corecell	M80	Yellow + Blue	85	5.3	1220x1220	48x48	1220x2440	48x96	3-44	1/8 - 1 3/4
Corecell	M100	Yellow + Black	107.5	6.7	1130x1130	44.5x44.5	1130x2275	44.5x89.5	3-37	1/8 - 1/2

Gurit® Corecell™ available from the Gurit site in Tianjin (China) continued

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
Corecell	M130	Yellow + Light Brown	140	8.7	1015x1015	40x40	1015x2045	40x80.5	3-32	1/8 - 1 3/8
Corecell	M200	Yellow + Brown	200	12.5	915x915	36x36	915x1830	36x72	3-30	1/8 - 1/4
Corecell	A500	Blue	92	5.7	1220x1220	48x48	1220x2440	48x96	3-35	1/8 1 3/8
Corecell	A550	Yellow	103	6.4	1180x1180	46.5x46.5	1180x2380	46.5x93.5	3-38	1/8 - 1 1/2
Corecell	A800	Pale Brown	150	9.3	1015x1015	40x40	1015x2045	40x80.5	3-32	1/8 - 1 3/8
Corecell	A1200	Brown	210	13.1	915x915	36x36	915x1830	36x72	3-30	1/8 - 1/4

Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local sales representative for more information

Gurit® G-PET™ available from the Gurit site in Tianjin (China)

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
G-PET	80	Brown + Yellow	80	5	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET	90	Brown + Orange	94	5.9	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET	100	Brown + Green	104	6.5	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET	110	Brown + Blue	114	7.1	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET	135	Brown + Grey	135	8.4	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET	200	Brown + Black	200	12.5	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET FR	75	Blue + Yellow	75	4.7	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET FR	100	Blue + Green	100	6.2	1005/1220x	39.5/48x48	1005/1220 x	39.5/48x96	3-245	1/8 - 9 5/8
					1220		2440			
G-PET LITE										

Comment : LITE being available in all densities but only supplied in thickness range 10-150mm (3/8-6 inches)

Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local sales representative for more information

Gurit® PVC and Gurit® PVC HT

Core Type	Density	Short Edge Marking	Nominal Density		Half Sheet Size		Nominal Sheet Size		Unbonded Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
PVC	40	Azure	40	2.5			1330 x 2850	52.4x112.2	3-84	1/8 3 5/16
PVC	48	Lilac	48	3			1270 x 2730	50x107.5	3-80	1/8 3 5/32
PVC	60	Yellow	60	3.75			1150 x 2450	45.3x96.4	3-78	1/8 3 5/64
PVC	HT60	Pink	60	3.75			1120 x 2400	44.1x94.5	3-78	1/8 3 5/64
PVC	80	Green	80	5			1020 x 2180	40.2x85.8	3-72	1/8 - 2 53/64
PVC	HT80	Light Yellow	80	5			1005 x 2150	39.6x84.6	3-75	1/8 2 61/64
PVC	100	Red	100	6.24			950 x 2050	37.4x80.7	3-68	1/8 2 43/64
PVC	130	Blue	130	8.12			850 x 1900	33.5x74.8	3-58	1/8 2 9/32
PVC	200	Brown	200	12.5			750 x 1600	29.5x63	3-48	1/8 - 1 57/64
PVC	250	Green	250	15.6			700 x 1500	27.6x59	3-47	1/8 - 1 27/32

Essentials

Please contact your local Gurit representative

Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local sales representative for more information

Gurit® Balsaflex™ available from the Gurit site in Ecuador

Core Type	Density	Short Edge Marking	Nominal Density		Special Sheet Size (Flexible panels only)		Nominal Sheet Size		Thickness Range	
			kg/m ³	lb/ft ³	mm	inches	mm	inches	mm	inches
Balsaflex	110	Written	110	6.9	1220x1220	48x48	610x1220	24x48	6.35-55	1/4 - 2
Balsaflex	150	Written	155	9.7	1220x1220	48x48	610x1220	24x48	6.35-55	1/4 - 2
Balsaflex	220	Written	220	13.7	1220x1220	48x48	610x1220	24x48	6.35-55	1/4 - 2

Essentials

Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local sales representative for more information

Core Materials

Core Kitting

Core kitting by Gurit offers the following benefits to customers:

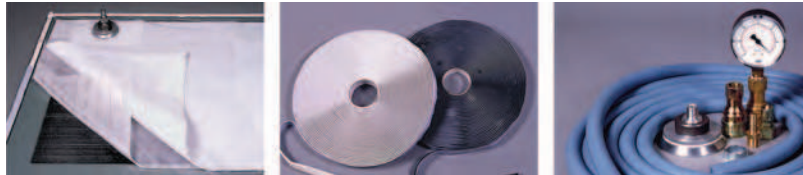
- Reduced labour time
- Reduced waste levels
- High level of accuracy
- Improved overall quality

Wherever they are in the world, Gurit provides a local kitting service to its industrial and marine customers. Using either 5-Axis, or 3-Axis CNC machines, along with a range of semi-automatic machines and manual tools, the company's full range of core materials - Gurit® Corecell™, Gurit® G-PET™, Gurit® PVC or Gurit® Balsaflex™ - can be converted into customised, labelled and ready-to-use kits, based on the customer's drawings or 3D model.

Gurit has developed specific knowledge and experience of correct flute and clearance angles to provide optimum cutting conditions. This allows for quick cutting to minimise cost, accurate cutting for component dimensions, and fine cutting to allow the best nesting routines, so maximising yield rates and minimising waste.

Gurit stocks its range of core materials in each region, reducing the leadtime to supply cost-effective and flexible kitting solutions to meet every customer's requirements.

Vacuum Consumables



The range of vacuum consumables has been designed for use in a wide range of vacuum bag processes. Such processes include autoclave/ prepreg curing, wet lay-up, low temperature oven/ prepreg processes and infusion processes. Gurit has selected a specific range of products which are particularly suitable for working with Gurit's epoxy prepreg and laminating systems where they are regularly used for the curing of large composite structures at temperatures up to 150°C.

Vacuum Consumables

Sealant Tapes

Sealant tape is used to seal the tool to the vacuum bag in order to provide an airtight seal. The tapes are tacky to ensure a positive seal is achieved against a variety of tool surfaces.

Description	Notes	Width (mm)	Rolls/Box	Order Code
AT90	black, high tack	12 x 3 x 15,000	30 roll box	V700-001
AT140	white, medium tack	12 x 3 x 15,000	30 roll box	V700-002

Peel Plies

Peel plies are fine weave fabrics which are applied to the laminate stack to provide a clean, contaminant-free textured surface, suitable for secondary bonding, filling or painting.

Description	Order Code
Peelply 80gsm/100mm/100m Roll	V620-027
Peelply 80gsm/150mm/100m Roll	V620-028
Peelply 80gsm/200mm/100m Roll	V620-029
Peelply 80gsm/250mm/100m Roll	V620-030
Peelply 80gsm/500mm/100m Roll	V620-031
Peelply 80gsm/750mm/100m Roll	V620-032
Peelply 80gsm/1000mm/100m Roll	V620-033
Peelply 80gsm+5g/1610mm/100m Roll	V620-034

Release Films

Release films are used to separate and release the laminate from the vacuum stack following the cure of the component. These films are perforated to allow a certain bleed of resin from the laminate into a breather material such as Econoweave 44W.

Description	Order Code
Release Film 125°C/P1/1000mm/400LM Roll	V600-026
Release Film 125°C/P3/1000mm/200LM Roll	V600-027

Vacuum Consumables

Breather Fabrics / Meshes

Breather fabrics are used to absorb excess resin (bleed) from a laminate which is being cured under vacuum. The fabric also allows the air, or any volatiles, to be evacuated prior to, and during the cure cycle.

Description	Order Code
Breather Mesh/150gsm/1550mm/100LM Roll	V660-008
Breather Mesh/340gsm/1550mm/50LM Roll	V660-009

Vacuum Bagging Films

Vacuum bagging films are used to effectively seal the whole of the area of the composite laminate to be cured.

Description	Order Code
Vacuum Bag 180°C/300mm/250LM Roll	V680-014
Vacuum Bag 180°C/4000mm/200LM Roll	V680-015
Vacuum Bag 120°C/8000mm/105LM Roll	V680-016
Vacuum Bag 120°C/10000mm/105LM Roll	V680-017
Vacuum Bag 120°C/12000mm/75LM Roll	V680-018

Self Adhesive Mould Release Materials

Self-adhesive mould release materials are used to cover moulds as an effective alternative to the use of release wax or liquids.

Description	Notes	Width (mm)	Unit of Sale	Order Code
Tooltec A007	adh. backed PTFE on glass carrier	1000	20sqm	V750-001

Spray Contact Adhesive

Description	Order Code
Spray Contact Adhesive (691ml can)	V840-004

Vacuum Consumables

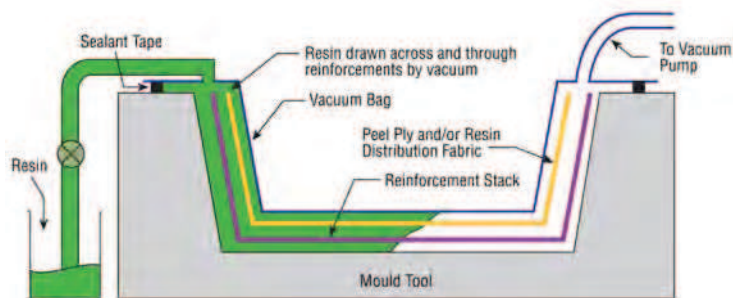
Flash / Release / Shrink Tapes

Flash tapes are used to locate vacuum consumable materials or to mask off areas to be painted, sanded or to prevent damage. Some of these tapes have release qualities so they can be used as tool repair tapes if necessary. Shrinktapes are used to consolidate specific components.

Description	Notes	Width (mm)	Unit of Sale	Order Code
Flashbreaker 1	adhesive backed flash tape	25	66 lm roll	V720-001
Flashbreaker 1	adhesive backed flash tape	50	66 lm roll	V720-002
A575RC	release coated shrink tape	32	91 lm roll	V740-001
A575RC	release coated shrink tape	64	91 lm roll	V740-002

Infusion

Gurit have selected a range of infusion materials which can be used from the simplest test panel to the largest constructions. Resin infusion is very similar to vacuum bagging in that differences in air pressure consolidate the laminate stack and control the resin content of the composite. The main difference is that the reinforcement fibre is introduced into the mould dry not wetted out with resin. A peel ply and infusion mesh are then introduced, the mould is then sealed using a vacuum bag and tacky tape. The mould is then evacuated of air very like vacuum bagging. Once the vacuum bag has been sealed and the vacuum level maintained the resin system is introduced through inlet pipes. The resin then flows / is sucked into the mould over the infusion mesh and down into the laminate. This generates very repeatable, in weight and strength, mouldings by a clean and controllable production method. For further details visit www.gurit.com or contact your local Gurit office for full details on the Gurit infusion component range.



Ancillary Products



In order to assist in the use of the wide range of materials manufactured and supplied by Gurit, a range of Ancillary Products are also available. These have been refined over many years to enable users to handle products safely and to obtain the very best results from Gurit materials. The Ancillary Products are grouped together into three main categories:

- > Filler Powders – This section includes a range of filler powders which are designed to modify the properties of some of the Gurit liquid solvent-free resin systems, and so create resin mixes for use as fillers and adhesives. The fillers form three distinct categories: hollow spheres, short fibres, and flow modifiers.
 - > Hollow spheres - Increase the volume and reduce the density of any resin system and are used to make adhesive mixes and filling & fairing mixes.
 - > Short Fibres - For adding strength to a resin and hardener mix used as a structural adhesive, short reinforcing fibres are often added which act in a similar strengthening way to the long reinforcing fibres used in composite construction.
 - > Flow Modifiers - The most common material for modifying the flow properties of a resin mix is colloidal silica. This is a very fine powder which is added in conjunction with other fillers to 'thicken' mixes and reduce their flow on vertical surfaces (increase thixotropy).
- > Solvents – This section includes a range of solvents for cleaning tools and surfaces. Due to the very different chemistry of some of the Gurit products from each other, it is important that the correct solvents are selected for the intended application.
- > Application, Processing and Sundry items – This section includes pumps and dispense equipment, application and processing items and pigments

Ancillary Products

Filler Powders

Microballoons

Brown microsphere filler powder used to make glues or paste fillers.

Size	Order Code
0.3 kg (approx. 3 litres)	A225-003
5.0 kg (approx. 50 litres)	A225-005
12.0 kg (approx. 120 litres)	A225-007

Glass Bubbles

White microsphere filler powder used to make glues or paste fillers.

Size	Order Code
0.12 kg (approx. 1-1.5 litre) (minimum order 5 units)	A230-005
0.3 kg (approx. 2-3 litres)	A230-001
5.0 kg (approx. 30-50 litres)	A230-003

Microfibres

Cellulose fibres used to make adhesive mixes.

Size	Order Code
0.5 kg (approx. 5 litres)	A215-003
5.0 kg (approx. 50 litres)	A215-005
10.0 kg (approx. 100 litres)	A215-008

Colloidal Silica

Fine, anti sag, filler powder. Use in combination with other filler powders.

Size	Order Code
0.25 kg (approx. 5 litres)	A220-003
2.5 kg (approx. 50 litres)	A220-005
10.0 kg (approx. 200 litres)	A220-006

Ancillary Products

Ancillary Kit

For use with Handipack and small packs of products for filling, gluing and laminating.

Quantity	Description	Order Code
10 x Box of 5	Each pack contains: 1 x pot Microballoons, 1 x pot Colloidal Silica, 1 x pot Microfibres, 4 x pairs Disposable Gloves, 2 x 1/2" Brushes, 5 x Mixing Sticks, 2 x Mixing Pots, 1 x 1 metre Woven Glass Tape, Filler Guide	A300-003

Cleaning Solvents

Fast Epoxy Solvent (Solvent A) Surface Degreaser

Size	Order Code
1.0 litre	A105-002

Standard Solvent (Solvent B) Tool Cleaner

Size	Order Code
1.0 litre OBS/SP STD Epoxy Solvent 1 litre	A108-002

Cleaning Fluid (Solvent C) By-Product Remover

Size	Order Code
1.0 litre	A110-003

Please note, Gurit's solvent-free epoxies such as SP 106, Ampreg 22 should never have solvent added to them to 'thin them down'. If a lower viscosity, thinner epoxy product is required then this should be achieved by gentle warming of the product, or warming the surface to which the product is applied. Note that any extra heat applied will also accelerate the product's rate of cure. Alternatively, there may be a different Gurit epoxy product with a more suitable viscosity for the intended application. For the correct solvent for a given application, please see the resin systems data sheet for details.

Ancillary Products

Pumps

Pump Code	Pump Description	Product to be used with	Product Code
K216-318	Minipump pair for any 1kg pack	SP115 RES/HARD BOX 5x1KG PACK	F110-017
		SP320 RES/HARD FAST 5x1KG PACK	F505-024
		SP320 RES/HARD SLOW 5x1KG PACK	F505-025
		SP106 RES/HARD FAST 5x1KG PACK	F510-037
		SP106 RES/HARD SLOW 5x1KG PACK	F510-038
		SP106 R/H FAST 1KG 10xBOX 5	F510-039
		SP106 R/H SLOW 1KG 10xBOX 5	F510-040
K216-313	Pump set SP320/Plas 14ml dispense (1KG)	SP320 RES/HARD FAST 5x1KG PACK	F505-024
		SP320 RES/HARD SLOW 5x1KG PACK	F505-025
K216-314	Pump set SP320/Plas 14ml dispense (4kg)	SP320 RESIN/HARD FAST 4KG PACK	F505-028
		SP320 RESIN/HARD SLOW 4KG PACK	F505-029
K216-312	Pump set SP320/Large 35ml dispense	SP320 RESIN 20KG	F505-035
		SP320 HARD FAST 6.66KG	F505-038
		SP320 HARD SLOW 6.66KG	F505-039
K216-315	Pump set SP106/Plas 12ml dispense (1kg)	SP106 RES/HARD FAST 5x1KG PACK	F510-037
		SP106 RES/HARD SLOW 5x1KG PACK	F510-038
		SP106 R/H FAST 1KG 10xBOX 5	F510-039
		SP106 R/H SLOW 1KG 10xBOX 5	F510-040
K216-316	Pump set SP106/Plas 12ml dispense (3kg)	SP106 RES/HARD FAST 3.02KG PACK	F510-041
		SP106 RES/HARD SLOW 3.02KG PACK	F510-042
K216-317	Pump set SP106/Plas 30ml dispense	SP106 RESIN 10.0KG	F510-004
		SP106 HARD FAST 1.8 KG (0.9x2)	F510-019
		SP106 HARD SLOW 1.8KG (0.9x2)	F510-031
K216-310	Pump set SP106/Metal 30ml dispense	SP106 RESIN 20KG	F510-051
		SP106 HARD SLOW 3.6KG	F510-053
		SP106 HARD FAST 3.6KG	F510-018
		SP106 HARD EXTRA-SLOW 3.6KG	F510-052

Ancillary Products

Dispense Equipment

50 cc & 10 cc Syringe

Quantity	Description	Order Code
Each	10cc Syringe (1cc graduations)	A660-001 **
Each	50cc Syringe (10cc graduations)	A660-002 **

Drum Taps

Quantity	Description	Order Code
Each	200 litre Drum Tap (large metal)	K342-003
Each	25 litre Drum Tap (small plastic)	K342-005
Each	200 litre Drum Tap (large plastic)	K342-010

Application and Processing Items

Re-useable Mixing Pot

Quantity	Description	Order Code
Each	Reusable Mixing Pots 0.5L (0.8L max)	A640-013 *
Each	Clear lid for Mixing Pots	A640-014

Shaped Mixing Sticks

Quantity	Description	Order Code
1 box	Mixing Sticks (box 100 sticks)	A640-004

Brushes

Quantity	Description	Order Code
1	Brush for coating / laminating - 2" (50mm)	A635-003

* Minimum order of 100 Reusable Mixing Pots.

** Syringes should be washed with warm water and a mild detergent, then flushed with clean water and allowed to air dry before use.

Ancillary Products

Pigments

Epoxy Pigment

Quantity	Description	Order Code
0.5kg	Pigment - white	A445-002
0.5kg	Pigment - grey	A445-003
0.5kg	Pigment - black	A445-004

Spiked Roller

Quantity	Description	Order Code
1	Spiked roller for de-aeration of prepreg laminates - 5" with frame & handle	A610-001

Contact

In an effort to answer incoming telephone calls more promptly and to improve the service to our customers, we operate an automated attendant telephone system. The main benefit of the system is that multiple calls are answered simultaneously thus reducing customer waiting time, and individuals can be contacted directly, even outside of the switchboard open hours (Monday - Friday, 08.30 - 17.00).

Begin by dialling the Gurit (UK) Ltd main number (see below). Providing you have a touch-tone phone (your key pad should have a * or #), you are able to dial the extension number of the person you require as soon as the call is answered by the Automated Attendant. If the person at the extension you have dialled is not available you will be given the option of leaving a message in their voice mail. If you choose to leave a message then you can either hang up when done, or press zero to get to another extension. If you do not wish to leave a message at all but would instead like to speak to someone else, then press zero as soon as the message begins. This will put you through to the operator or, out of hours, the main Gurit (UK) Ltd answering service.

If you do not have a touch-tone phone, or you do not know to whom you wish to speak, then simply remain on the line during the welcoming message and during office hours (08.30 - 17.00) your call will be answered by the operator.

Outside office hours you will be invited to record a message.

Email and Website

All personnel list can be contact directly by email. The format for each e-mail address is: firstname.surname@gurit.com. If you are not sure who to contact email contact@gurit.com. Information on products can be found at our website www.gurit.com. The site contains the most up to date information on all products, available to download in PDF format.

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