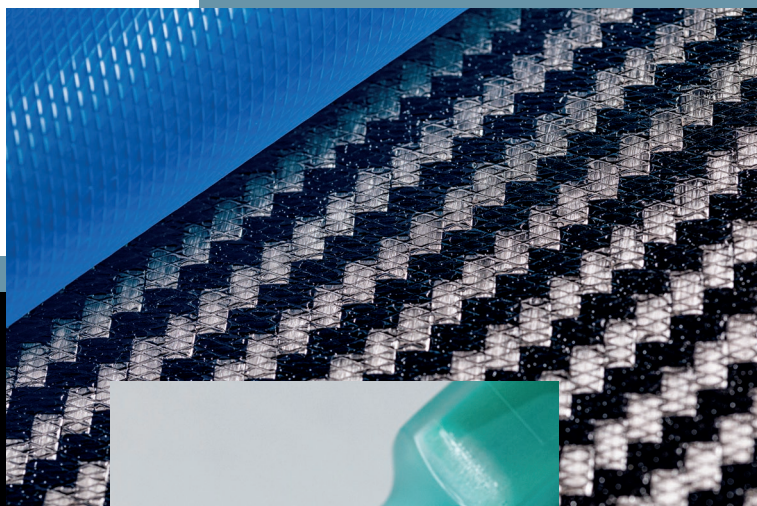


GURIT PRODUCT CATALOGUE

Core, Prepreg, SPRINT™,
Fire Retardant & Formulated Materials



About Gurit



Gurit is a leading global manufacturer of advanced composite materials. Gurit integrates structural design, materials science and process engineering to offer a complete turnkey composite solution.

Gurit is specialised in the development and manufacture of advanced composite materials. The comprehensive product range comprises fibre reinforced prepregs, structural core products, process coats, adhesives and laminating resins. Gurit supplies global growth markets with composite materials, composite tooling equipment, core material wind turbine blade kits and structural engineering. Gurit operates production sites and offices in Australia, Canada, China, Denmark, Ecuador, France, India, Italy, Mexico, New Zealand, Poland, Spain, Switzerland, Turkey, United Kingdom and the United States.

This catalogue covers Gurit's Marine and Industrial Business Unit, providing a comprehensive range of core, formulated and prepreg materials. Read more on www.gurit.com

How to use this Product Catalogue

This catalogue provides information on our core, prepreg, and formulated product portfolio of the Marine and Industrial Business Unit. Products from the Wind Business Units are not covered in this catalogue.

Gurit is well served by a network of representatives who hold stocks of Gurit products locally, and who act as a local point of contact for technical information and sales. A list of these representatives is given at the end of this publication.

Brief descriptions of each product and product group are given throughout to facilitate product selection, with full information on any product obtainable from the relevant technical datasheet. These are available on 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. Please use the order codes provided to ensure that you obtain the correct products.

Some Gurit products are subject to export control restrictions and destinations subject to trade restrictions. Please contact your local Gurit Customer Support office for details.

Gurit Marine and Industrial Product Portfolio



The product portfolio for the Gurit Marine and Industrial Business Unit comprises of 4 product categories and 15 key products. These products are all manufactured in volume and therefore have short lead times and/or have certain product codes held in stock. Additional specialist products are available and can be obtained via contacting Gurit sales and customer service representatives



- 75 RANGE** High performance, versatile curing system from 70°C
- 90 RANGE** Fast curing system for large industrial structures
- 140 RANGE** High performance, fast curing for press and autoclave
- 180 RANGE** High Tg Hot-in Hot-out capability in 5-10 minutes
- 130 FR RANGE** Non-halogen fire retardant system



- Corecell™ M Foam** for high performance applications
- Corecell™ I Foam** for general applications
- Corecell™ S Foam** for subsea applications
- Gurit PVC** for general applications



- KERDYN™ GREEN** recycled sandwich foam
- KERDYN™ GREEN FR** recycled sandwich foam for fire retardant applications



- Ampreg™** Laminating Systems
- PRIME™** Infusion Systems
- AMPRO™** Multi-Purpose Systems
- Spabond™** Adhesive Systems

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Prepreg & SPRINT™ Materials



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 very slowly at room temperature, giving rise to working times of many days or months. 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 ensures that laminates produced from prepregs have more consistent and higher fibre contents than can be achieved by wet lay-up techniques. This allows the use of tough, strong resin systems that would be too high in viscosity to be impregnated by hand.

SPRINT™ Materials

SPRINT™ materials are essentially the same as a prepreg material but the reinforcement remains unimpregnated by the resin film. SPRINT™ comes in 2 formats:

- 1) A single fabric reinforcement attached to a resin film on one side; or
- 2) Two dry fabrics either side of a resin film.

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%).

Fibre Definitions of HEC, IMC, HMC and UHMC









| Fibre | Description | Strength (MPa) | Modulus (GPa) |
|--------------|-----------------------------|-----------------------|----------------------|
| HEC | High Elongation Carbon | > 4000 | 227 to 257 |
| IMC | Intermediate Modulus Carbon | > 4400 | 275 to 310 |
| HMC | High Modulus Carbon | > 4300 | 365 to 405 |
| UHMC | Ultra-High Modulus Carbon | > 4000 | 420 to 455 |

The table above provides indicative values and does not constitute a specification. 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.

Gurit prepreg product formats are described as one of the following:

| | | | |
|------|--|------|--|
| SE | Prepreg material | ST | SPRINT format, single or double fabric |
| SA | Adhesive film | SF | Surfacing film |
| 1PA | Single release paper applied to one side | 1PO | Single poly backer applied to one side |
| POPA | 1 poly backer & 1 paper applied to either side | 2DPE | two poly backers applied to each side |

Product Selector

| Prepreg Resin System | Process / Cure Schedule | System Name | Max Temp | Technical Datasheet | |
|--|---|-------------|----------|---|---|
| 75 Range <ul style="list-style-type: none"> High performance system Versatile fast curing from 70 to 120 °C Optimised handling and out life for large structure manufacture | Vacuum Bag: 35 mins at 120°C 12 hrs @ 70°C | SE 75 | 125 °C |  Download PDF | |
| 90 Range <ul style="list-style-type: none"> Fast curing system for large industrial composite structures. Available in prepreg and semi-preg formats Optimised for heavy weight glass and carbon reinforcements (300 – 1800gsm) | Vacuum Bag: 12 hrs @ 70°C 45 mins at 120°C | SE 90 | 120 °C |  Download PDF | |
| | | SA 75-90 | 125 °C | |  Download PDF |
| | | SF 75-90 | 125 °C | | |
| 75 & 90 Ancillaries <ul style="list-style-type: none"> Toughened epoxy adhesive film SPRINT™ sandable surfacing film Mono-component epoxy system | Vacuum Bag: Fully compatible with the 75 and 90 ranges | MP 75-90 | 125 °C |  Download PDF | |
| 140 Range <ul style="list-style-type: none"> High performance fast curing systems for press and autoclave applications Flow controlled to produce high quality parts with high cosmetic finish 10 minute Hot in Hot Out (HiHo) capability | Press (HiHo): 10 mins at 135°C Autoclave: 20 mins at 135°C | SE 140 | 140 °C |  Download PDF | |
| 180 Range <ul style="list-style-type: none"> High performance fast curing system for press applications Flow controlled to produce high quality parts with high cosmetic finish 5 minute Hot in Hot Out (HiHo) capability | Press (HiHo): 5 mins at 150°C | SE 180 | 175 °C | | |
| | | SE 130FR | 120 °C | |  Download PDF |
| 130FR Range <ul style="list-style-type: none"> Non halogen fire retardant system capable of meeting stringent fire standards. Fast curing and optimised with ancillary products to manufacture high quality monolithic and sandwich structures at lowest total manufacturing cost | Vacuum Bagging, Autoclave, or Compression Moulding: 6 hrs @ 85°C 45 mins at 120°C | ST 130FR | 120 °C |  Download PDF | |
| | | SF 130FR | 120 °C |  Download PDF | |

75 Range

SE75 is a new generation, hot melt, performance epoxy prepreg for large open mould structures. SE75 builds on the established heritage and performance of SE84LV, with more versatile cure possibilities: 12 hours at 70°C (158°F), 6 hours at 80°C (176°F) or 35 minutes at 120°C (248°F).

SE75 has exceptional mechanical and thermal performance and an 8-week shelf life at 18-22°C. It is suitable for a wide range of Marine and Industrial applications and is specifically formulated for large open mould vacuum processes.

Product Code Selector (Consult local sales teams for full product code listings)

| SE75-T1 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Unidirectional High Elongation Carbon (HEC) | | | | | | | | |
| HEC | 150 | 400 | 37% | POPA | 200 | 80 | PC53-7448 | |
| HEC | 200 | 400 | 37% | 2DPE | 200 | 80 | PC53-7708 | |
| HEC | 300 | 400 | 35% | POPA | 150 | 60 | PC53-7450 | |
| HEC | 450 | 400 | 35% | 2DPE | 100 | 40 | PC53-7822 | |
| HEC | 600 | 1200 | 34% | 2DPE | 150 | 180 | PC53-7823 | |
| Unidirectional Intermediate Modulus Carbon (IMC) | | | | | | | | |
| IMC | 150 | 400 | 37% | 2DPE | 200 | 80 | PC53-7826 | |
| IMC | 300 | 400 | 35% | POPA | 150 | 60 | PC53-7715 | |
| IMC | 450 | 400 | 35% | 2DPE | 100 | 40 | PC53-7828 | |
| Unidirectional High Modulus Carbon (HMC) | | | | | | | | |
| HMC | 150 | 400 | 37% | 2DPE | 200 | 80 | PC53-7824 | |
| HMC | 300 | 400 | 35% | POPA | 150 | 60 | PC53-7737 | |
| Woven Products | | | | | | | | |
| NPP80 | 80 | 1000 | 50% | 1PA | 100 | 100 | PC15-7719 | |
| RC200T | 200 | 1270 | 42% | 1PO | 50 | 63.5 | PC13-7458 | |
| RC416T | 415 | 1270 | 42% | 2DPE | 30 | 38.1 | PC13-7531 | |
| RC660T | 660 | 1270 | 42% | 2DPE | 20 | 25.4 | PC13-7659 | |
| RE295 | 295 | 1240 | 40% | 1PO | 50 | 62 | PC11-7717 | |
| RE301H8 | 300 | 1270 | 37% | 2DPE | 50 | 63.5 | PC11-7462 | |
| RF300T | 300 | 1270 | 56% | POPA | 50 | 63.5 | PC17-7842 | |
| Multi-axial Stitched Products | | | | | | | | |
| XC305 | 300 | 1270 | 40% | 1PO | 50 | 63.5 | PC23-7838 | |
| XC411 | 410 | 1270 | 40% | 1PO | 30 | 38.1 | PC23-7687 | |
| XC611 | 610 | 1270 | 42% | 2DPE | 25 | 31.7 | PC23-7588 | |
| XF350 | 350 | 1270 | 56% | POPA | 50 | 63.5 | PC27-7843 | |

90 Range

The 90 range is a hot melt, industrial epoxy prepreg optimised for very large open mould structures. It is a cost-effective solution where heavy weight reinforcements are key for high deposition rates for large structural components. The range is available in prepreg (SE) and SPRINT™ (ST) formats. The SE90-T0 is a low tack resin that is optimised for thick section uni-directional laminates and builds on the heritage of the Sparpreg™ range.

The 90 range delivers good mechanical and thermal performance with flexible curing characteristics combining fast cure times and low exotherms, even in thick sections. It has an 8-week shelf life at 18-22°C and is suitable for a wide range of Marine and Industrial applications and is specifically formulated for large open mould vacuum processes and for use with heavy weight reinforcements.

Product Code Selector (Consult local sales teams for full product code listings)

| SE90-T0 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Unidirectional High Elongation Carbon (HEC) and Glass (EGL) | | | | | | | | |
| HEC | 450 | 400 | 34% | 2DPE | 125 | | PA53-7852L | |
| HEC | 600 | 400 | 34% | 2DPE | 100 | | PA53-7853L | |
| EGL | 1200 | 1200 | 34% | 2DPE | 200 | | PA51-7856L | |

| SE90-T1 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Woven Products | | | | | | | | |
| WRE581T | 580 | 1250 | 35% | 2DPE | 200 | | PA11-7860L | |
| WRE850T | 850 | 1250 | 35% | 2DPE | 200 | | PA11-7861L | |
| Multi-axial Stitched Products made with SE90 T1 | | | | | | | | |
| XE603 | 600 | 1255 | 35% | 2DPE | 300 | | PA21-7857L | |
| XE905 | 900 | 1270 | 43% | 2DPE | 200 | | PA21-7858L | |
| QE1200 | 1200 | 1270 | 42% | 2DPE | 100 | | PA21-7859L | |

| ST90-T1 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|-------------------------------|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Woven Products | | | | | | | | |
| RC303T | 300 | 1270 | 42% | 1PA | 100 | 127 | SA13-7960L | |
| RC416T | 415 | 1270 | 42% | 1PA | 100 | 127 | SA13-7912L | |
| RC660T | 660 | 1270 | 42% | 1PA | 103 | 130.8 | SA13-7962L | |
| RE400T | 400 | 1250 | 35% | 1PA | 100 | 125 | SA11-7973 | |
| WRE581T | 580 | 1250 | 35% | 1PA | 100 | 125 | SA11-7910L | |
| WRE850T | 850 | 1250 | 35% | 1PA | 100 | 125 | SA11-7975L | |
| Multi-axial Stitched Products | | | | | | | | |
| XC411 | 410 | 1270 | 42% | 1PA | 100 | 127 | SA23-7968L | |
| XC611 | 610 | 1270 | 42% | 1PA | 125 | 158.8 | SA23-7969L | |
| XE603 | 600 | 1255 | 35% | 1PA | 150 | 188.3 | SA21-7909L | |
| QE600 | 600 | 1200 | 33% | 1PA | 50 | 60 | SA21-7984L | |
| QE1200 | 1200 | 1270 | 42% | 1PA | 80 | 117 | SA21-7990L | |

SA75-90 and SF75-90 Range

The SA75-90 and SF75-90 range of adhesive and surfacing films have been created for use with the 75 and 90 prepreg ranges. SA75-90 adhesive film is designed for sandwich laminate manufacture, bonding prepreg skins to structural cores.

SF75-90 is available as filled surface films to offer an improved surface for painting or as a lighter weight toughened film to protect the underlying laminate and ideally suited to parts which do not require such a high-quality finish. Both adhesive and surfacing films have flexible curing behaviour to compliment the 75 and 90 prepreg and SPRINT™ products.

Product Code Selector (Consult local sales teams for full product code listings)

| SA75 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|------------------------------------|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|--------|
| SA75 Adhesive Film | | | | | | | | |
| SA75-90 | Scrim | 1270 | 150 gsm | 1PA | 100 | 127 | PC11-7658 | |
| SA75-90 | No Scrim | 1270 | 150 gsm | 1PA | 50 | 63.5 | PC00-7815 | |
| SA75-90 | Scrim | 1270 | 250 gsm | 1PA | 80 | 101.6 | PC11-7575 | |
| SA75-90 | No Scrim | 1270 | 250 gsm | 1PA | 75 | 95.2 | PC00-7667 | |
| SA75-90 | Scrim | 1270 | 300 gsm | 1PA | 80 | 101.6 | PC11-7664 | |
| SA75-90 | No Scrim | 1270 | 300 gsm | 1PA | 80 | 101.6 | PC00-7784 | |
| SF75 Surfacing Film | | | | | | | | |
| SF75-90 | 2 Scrim | 1260 | 150 gsm | 1PA | 50 | 63 | SA11-7577 | |
| SF75-90 | 2 Scrim | 1260 | 300 gsm | 1PA | 40 | 50.4 | SA11-7595 | |
| SFG75-90 | 2 scrim | 1255 | 150 gsm | 1PA | 50 | 62.8 | SC11-7576 | |
| Mono-component Intensifying Pastes | | | | | | | | |
| MP75-90 | | | | | | | FZ7355-32 | Box 20 |

140 Range

SE140 has been developed specifically for compression moulding and autoclave applications where cycle time is critical. Typical cure cycles are as follows:

Press - 10 minutes Hot-in Hot-out (HiHo) at 135 °C (275 °F)

Autoclave – 20 minutes dwell at 130 °C (266 °F)

SE140 is a VOC free, low toxicity formulation with controlled flow to maximise part quality in matched tooling compression moulding and autoclave curing. It has excellent mechanical properties and thermal performance suitable for off-line paint processes with a Tg of 140 °C. It has a 4-week shelf life at 18-22 °C and is suitable for a wide range of applications that utilise compression moulding for high volume component manufacture.

Product Code Selector (Consult local sales teams for full product code listings)

| SE140 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Unidirectional High Elongation Carbon (HEC) | | | | | | | | |
| HEC | 150 | 1250 | 35% | POPA | 150 | 187.5 | PA53-7761 | |
| HEC | 300 | 1250 | 35% | POPA | 150 | 187.5 | PA53-7762 | |
| Woven Products | | | | | | | | |
| RC245T | 245 | 1250 | 40% | 2DPE | 50 | 62.5 | PA13-7647 | |
| RC380T | 380 | 1250 | 40% | 2DPE | 46 | 57.5 | PA13-7648 | |
| RC660T | 660 | 1270 | 38% | POPA | 34 | 43.2 | PA13-8045 | |
| RF300T | 300 | 1270 | 56% | POPA | 50 | 63.5 | PA17-7650 | |
| Short Fibre Products | | | | | | | | |
| SFP | 300 | 1250 | 45% | POPA | 46 | 57.5 | PA33-7685 | |
| SFP | 450 | 1250 | 45% | POPA | 33 | 41.3 | PA33-7340 | |
| SFP | 600 | 1250 | 45% | POPA | 26 | 32.5 | PA33-7489 | |
| Woven Products | | | | | | | | |
| SF 140 | 2 Scrim | 1260 | 300 gsm | 1PA | 40 | 50.4 | SA11-7763 | |

180 Range

SE180 has been developed specifically for compression moulding applications where high Tg and fast processing times are required: Press 5 minutes HiHo at 150 °C (302 °F)

SE180 has excellent mechanical and thermal performance with a Tg = 175 °C (347 °F)

Product Code Selector (Consult local sales teams for full product code listings)

| SE 180 | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Unidirectional High Elongation Carbon (HEC) and Glass (EGL) | | | | | | | | |
| HEC | 150 | 600 | 39% | POPA | 150 | 90 | PA53-7800 | |
| HEC | 200 | 600 | 39% | POPA | 125 | 75 | PA53-7802 | |
| HEC | 300 | 600 | 35% | POPA | 95 | 57 | PA53-7804 | |
| Woven Products | | | | | | | | |
| RC245T | 245 | 1250 | 42% | 2DPE | 50 | 62.5 | PA13-7297 | |
| RC380T | 380 | 1250 | 42% | POPA | 32 | 40 | PA13-6630 | |

130FR Range

130FR is a low smoke halogen free epoxy prepreg system designed for structural applications. It has been tested to the stringent European standard EN45545 with a rating of HL2 in R1, R7 and R17 for monolithic laminates. 130FR is designed for use in open moulding and autoclave processing with low temperature and fast cure characteristics:

- 6 hrs at 85 °C (185 °F),
- 45 minutes at 120 °C (248 °F)

130FR is suitable for use with fire retardant structural cores to manufacture sandwich structures.

The 130FR range also contains a fire-retardant adhesive film for core bonding and a fire-retardant surfacing film to provide a high-quality surface for paint application.

Product Code Selector (Consult local sales teams for full product code listings)

| SE130FR | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
|---|-------------------------------|-------------|-----------------------|--------|--------------|-----------------------------|------------|-------|
| Unidirectional High Elongation Carbon (HEC) | | | | | | | | |
| HEC | 300 | 400 | 45% | POPA | 100 | 40 | PA53-7134 | |
| RC416T | 415 | 1270 | 48% | 2DPE | 25 | 31.8 | PA13-7940 | |
| XC411 | 410 | 1270 | 48% | 2DPE | 40 | 50.8 | PA23-7948 | |
| ST130FR | Reinf. Wt g/m ² | Width mm | Resin Content % | Format | Length lm | Roll Size m ² | Order Code | Notes |
| Woven Products | | | | | | | | |
| RC416T | 415 | 1270 | 48% | 1PA | 66 | 83.8 | SA13-7945L | |
| WRE581T | 580 | 1250 | 42% | 1PA | 100 | 125 | SA11-7950 | |
| WRE850T | 850 | 1250 | 42% | 1PA | 20 | 25 | SA11-7951 | |
| Multi-axial Stitched Products | | | | | | | | |
| XC411 | 410 | 1270 | 48% | 1PA | 100 | 127 | SA23-7947L | |
| XE603 | 600 | 1255 | 42% | 1PA | 25 | 31.4 | SA21-8014L | |
| Adhesive Films | | | | | | | | |
| SA130FR | scrim | 1270 | 250 gsm | 1PA | 80 | 101.6 | PA11-7954 | |
| SA130FR | scrim | 1270 | 400 gsm | 1PA | 60 | 76.2 | PA11-7955 | |
| Surface Film | | | | | | | | |
| SF130FR | 2 scrim | 1255 | 200 gsm | 1PA | 50 | 62.7 | SA11-7953 | |








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.

Product Selector

| Type | Product | Typical Applications | Technical Datasheet |
|------|------------------|---|---|
| SAN | Corecell™ I | <ul style="list-style-type: none"> • General-purpose SAN core for marine and industrial application • Superior stiffness for high in-plane compressive loads • Compatible with prepreg processing • Cost-effective |  Download PDF |
| | Corecell™ M | <ul style="list-style-type: none"> • High performance foam, ideal for marine applications • High shear strength and low density • Compatible with prepreg processing • High elongation for toughness |  Download PDF |
| | Corecell™ S | <ul style="list-style-type: none"> • Sub-sea buoyancy foam • High hydrostatic crush strength and water resistance • High impact resistance/damage tolerance • Ultra-fine cell size |  Download PDF |
| PET | Kerdyn™ Green | <ul style="list-style-type: none"> • Up to 100% recycled PET content • All-purpose foam • Suitable for all sandwich applications • Superior strength & stiffness : weight ratio • Outstanding chemical resistance • High thermal insulation properties • Water resistant |  Download PDF |
| | Kerdyn™ Green FR | <ul style="list-style-type: none"> • Fire retardant version available |  Download PDF |
| PVC | Gurit PVC | <ul style="list-style-type: none"> • All-purpose foam • Suitable for all sandwich applications • Superior strength & stiffness:weight ratio • Outstanding chemical resistance |  Download PDF |
| | Gurit PVC HT | <ul style="list-style-type: none"> • High temperature processing up to 140°C |  Download PDF |

Core Kitting

Core kitting by Gurit offers the following benefits to customers:


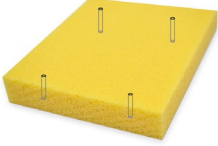



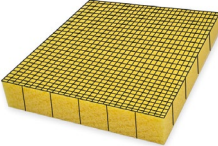
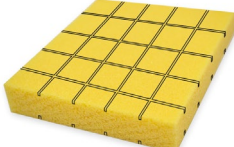
- Reduced labour time
- Reduced waste levels
- High level of accuracy
- Improved overall quality

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 Kerdyn™ Green or Gurit PVC 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.

Forms of Supply

Gurit standard product forms are described below. Gurit can also tailor sheets to your own specification.

| REF | Description | |
|-----|--|--|
| PL | Plain Sheet – Optimum material properties. Limited bending in-mould. |  |
| PH | Plain with Bleeder Holes – Assists air release in vacuum bag processes. |  |
| SC | Single Cut – Provides flexibility in a single direction on one or both sides. If on both sides, the cuts intersect so no bleeder holes are necessary. |  |
| DC | Double Cut – Provides optimum flexibility in two directions on one or two sides. If Double-Cut on both sides, the intersecting cuts make DC a highly effective resin infusion medium. |  |
| TC | Triple Cut – Provides maximum flexibility. On the top side of the sheets, cuts are performed in the transverse direction, in equally separated groups of 3 lines. On the reverse side, the style used is the double-cut. |  |
| CS | Contour Scrim – Provides optimum flexibility in two directions. Sheets are cut in 30mm squares and bonded to a glass scrim. |  |
| VIC | Vacuum Infusion Core – There are several VIC options and Gurit can customise grooving patterns and bleeder holes as required. Heat-forming of the VIC surface cut is also useful for obtaining curved panels with minimal resin uptake. |  |

Structural Foam

Gurit Corecell™ is a structural foam core material made using a SAN polymer base. It features high toughness and impact resistant characteristics combined with very low resin absorption. 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, sub-sea vessels and industrial. Gurit Corecell™ grades have various approvals including the American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Registro Italiano Navale (RINA), Bureau Veritas (BV), Lloyd's Register (LR) and Indian Register of Shipping (IRS). Please check for additional product approvals. Please note: Maximum unbonded thicknesses can vary across Gurit sites. Please contact your local Gurit representative for more information

[Gurit Corecell™ I](#)

Gurit Corecell™ I is a general purpose SAN foam for marine and industrial applications. Providing well balanced mechanical properties with high shear modulus and inherent toughness. Its fine cell size reduces the resin absorption, saving both weight and cost. It is suitable for all composite processes including prepreg and is compatible with epoxy, polyester and vinylester resin systems. Gurit Corecell™ I benefits from DNV and ABS certifications.

Product Code Selector

| Corecell™ I | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|-------------|--------------------|-------------------|-----------------|--------------------|--------------------------|------------------|
| | | kg/m ³ | mm | mm | mm | |
| I60 | Green | 65 | 1285x1285 | 1285x2605 | 3-55 | Pink foam colour |
| I80 | Blue | 85 | 1220x1220 | 1220x2440 | 3-53 | |
| I100 | Black | 105 | 1130x1130 | 1130x2275 | 3-48 | |

Gurit Corecell™ M

Gurit Corecell™ M is a high-performance foam, featuring extremely high resistance to impact, slamming and fatigue, suitable for all marine applications across all sectors. Combining high static properties, unmatched toughness and compatibility with infusion, prepreg, SPRINT™ and wet lamination processes. Gurit Corecell™ M benefits from American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Registro Italiano Navale (RINA), Lloyd's Register (LR), Indian Register of Shipping (IRS) and Bureau Veritas (BV) certification.

Product Code Selector

| Corecell™ M | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|-------------|----------------------|-------------------|-----------------|--------------------|--------------------------|-------|
| | | kg/m ³ | mm | mm | mm | |
| M60 | Yellow + Green | 65 | 1285x1285 | 1285x2605 | 3-55 | |
| M80 | Yellow + Blue | 85 | 1220x1220 | 1220x2440 | 3-53 | |
| M100 | Yellow + Black | 107.5 | 1130x1130 | 1130x2275 | 3-48 | |
| M130 | Yellow + Light Brown | 140 | 1015x1015 | 1015x2045 | 3-46 | |
| M200 | Yellow + Brown | 200 | 915x915 | 915x1830 | 3-32 | |

Gurit Corecell™ S

Gurit Corecell™ S has been developed primarily to resist hydrostatic pressures in sub-sea applications. It is manufactured in two densities, ideal for the manufacture of buoyancy modules designed for depths of up to 1100 metres. It offers superior uniformity and more consistent density compared to resin-based syntactics.

Product Code Selector

| Corecell™ S | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|--------------|--------------------|-------------------|-----------------|--------------------|--------------------------|-------|
| | | kg/m ³ | mm | mm | mm | |
| S210 (S1200) | Black(Red)+Brown | 210 | 890x890 | 890x1830 | 32 (25) | |
| S250 | Black+Green | 250 | 825x850 | 825x1750 | 31 | |
| S315 (S1800) | Black (Red)+Mauve | 315 | 785x785 | 785x1600 | 29 (21-23) | |
| S350 | Black+Yellow | 350 | 750x750 | 750x1524 | 28 | |
| S400 | Black+Red | 400 | 715x720 | 715x1473 | 26.5 | |
| S450 | Black+Blue | 450 | 685x700 | 685x1422 | 25 | |

Gurit PVC

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. Also offered is an HT version with increased heat resistance. Gurit PVC is approved by Det Norske Veritas (DNV), Registro Italiano Navale (RINA) and Lloyd's Register (LR)

Product Code Selector

| Gurit PVC | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|-----------|--------------------|-------------------|-----------------|--------------------|--------------------------|-------|
| | | kg/m ³ | mm | mm | mm | |
| 40 | Azure | 40 | 945 x 1330 | 1330 x 2850 | 3-84 | |
| 48 | Lilac | 48 | 910 x 1270 | 1270 x 2730 | 3-80 | |
| 60 | Yellow | 60 | 1150 x 1120 | 1150 x 2450 | 3-78 | |
| 80 | Green | 80 | 1020 x 1080 | 1020 x 2180 | 3-72 | |
| 100 | Red | 100 | 950 x 1020 | 950 x 2050 | 3-68 | |
| 130 | Blue | 130 | 850 x 950 | 850 x 1900 | 3-58 | |
| 200 | Brown | 200 | 750x800 | 750 x 1600 | 3-48 | |
| 250 | Green | 250 | 700x750 | 700 x 1500 | 3-47 | |

| Gurit PVC HT | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|--------------|--------------------|-------------------|-----------------|--------------------|--------------------------|-------|
| | | kg/m ³ | mm | mm | mm | |
| HT60 | Pink | 60 | 1120 x 1200 | 1120 x 2400 | 3-78 | |
| HT80 | Light Yellow | 80 | 1005 x 1070 | 1005 x 2150 | 3-75 | |
| HT100 | Light Orange | 100 | 940 x 1015 | 940 x 2030 | 65 | |
| HT130 | Orange | 130 | 850 x 950 | 850 x 1900 | 58 | |

PET Foam

Gurit Kerdyn™ Green is a recyclable, thermoplastic foam, produced with up to 100% recycled PET sourced from recycled plastic bottles. It features good mechanical properties, outstanding thermal resistance and stability, good behaviour in thermoforming and compatibility with all types of all types of composite processing. Gurit Kerdyn™ Green offers a cost-efficient solution compared to higher performance cores. The range offers both standard and fire-retardant versions.

Gurit Kerdyn™ Green is approved by Det Norske Veritas (DNV).

[Gurit Kerdyn™ Green](#)

Product Code Selector

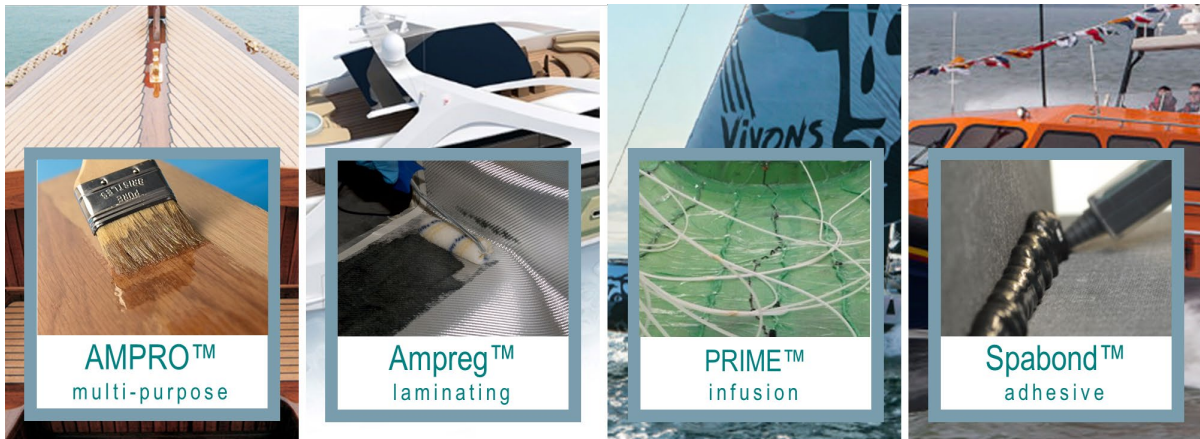
| Kerdyn™ Green | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|------------------|-----------------------|--------------------|--------------------|-----------------------|--------------------------------|--|
| | | kg/m ³ | mm | mm | mm | |
| 80 | Blue | 80 | 1005 x 1220 | 1005 x 2440 | 5-250 | |
| 100 | Green | 100 | 1005 x 1220 | 1005 x 2440 | 5-250 | Sheet sizes in APAC and NA are as follows: |
| 115 | Black | 115 | 1005 x 1220 | 1005 x 2440 | 5-250 | |
| 135 | Black + Green | 135 | 1005 x 1220 | 1005 x 2440 | 5-200 | 1220 x 2240 |
| 150 | Orange | 150 | 1005 x 1220 | 1005 x 2440 | 5-200 | |
| 200 | Black + Yellow | 200 | 1005 x 1220 | 1005 x 2440 | 5-100 | In 2023 sheet sizes in EMEA will also be: |
| 235 | Black + Brown | 235 | 1005 x 1220 | 1005 x 2440 | 5.100 | |
| 250 | Black + Blue | 250 | 1005 x 1220 | 1005 x 2440 | 5-100 | 1220 x 2440 |

[Gurit Kerdyn™ Green FR](#)

Product Code Selector

| Kerdyn™ Green FR | Short Edge Marking | Nominal Density | Half Sheet Size | Nominal Sheet Size | Unbonded Thickness Range | Notes |
|---------------------|-----------------------|--------------------|--------------------|-----------------------|--------------------------------|-------|
| | | kg/m ³ | mm | mm | mm | |
| 80 | Blue + Red | 80 | 1005 x 1220 | 1005 x 2440 | 5-250 | |
| 115 | Black + Red | 115 | 1005 x 1220 | 1005 x 2440 | 5-250 | |
| 180 | Brown + Red | 180 | 1005 x 1220 | 1005 x 2440 | 5-100 | |

Epoxy Resins & Adhesives



Gurit manufactures a wide range of formulated resin products, based on epoxy chemistry. These formulations are unique combinations of chemicals that have been blended to yield products with characteristics optimised for their intended application.

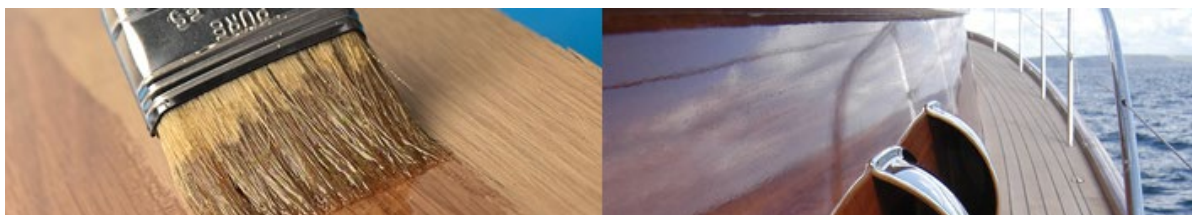
The characteristics of thermosets mean that they can be formulated into a wide variety of forms, with many different liquid-state properties and cured properties.

There are 4 key formulated epoxy systems manufactured by Gurit:

- **AMPRO™ Multi-purpose:** Epoxy based, capable of performing as adhesives, coatings, filling compounds and laminating systems
- **Ampreg™ Laminating:** Epoxy based liquids, low viscosity for good wet-out, high strength and stiffness
- **PRIME™ Infusion:** Low viscosity, high performance epoxy-based liquids ideal for vacuum bag infusion and resin transfer moulding processes
- **Spabond™ Adhesive:** Epoxy based semi-liquids and pastes, high strength and durability

Gurit formulated products can be supplied in a wide range of formats, depending on customer needs.

AMPRO™ Multi-Purpose Systems

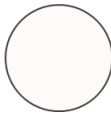







AMPRO™ is a simple to use, all-purpose epoxy which can be used for gluing, coating, laminating and filling. With its fast, low temperature curing hardener and easy 3:1 mix ratio by volume, AMPRO™ provides a quick and convenient way of using one epoxy system for a wide range of tasks.





- Professional boat-builder's choice for gluing, laminating and filling
- Superior protection for coating a wide range of woods
- Low toxicity, solvent-free formulation to protect the user
- Proprietary formulation, using next generation bio-based chemistry
- Superior properties: Improved flexibility & tack-free surface after cure
- Wide working window as low as +5°C and simple 3:1 mix ratio, helps to increase productivity

PRODUCT SELECTOR

The table below summarises all of the compatible AMPRO™ resins and hardeners.

| System | Speed | Cured Colour | Mixed Viscosity** | 150g Pot-Life** | Earliest Sanding Time** | Technical Datasheet |
|--|------------|---|-------------------|-----------------|-------------------------|---|
| AMPRO™ ↳ For bonding, laminating & filling ↳ Cures at low temperatures (+5°C) ↳ 3 : 1 mix ratio by volume ↳ No surface residue after cure | Fast |  | 970 cP | ½ hour | 12 hours |  Download (PDF) |
| | Slow | | 740 cP | 1 ¼ hours | 16 hours | |
| | Extra-Slow | | 690 cP | 1 ½ hours | 16 hours | |
| | | | | | | |
| AMPRO™ BIO ↳ Accredited 40-60% bio-content ↳ For bonding, laminating & filling ↳ 3 : 1 mix ratio by volume ↳ No surface residue after cure | Fast |  | 1260 cP | ½ hour | 16 hours |  Download (PDF) |
| | Slow | | 1100 cP | ¾ hours | 20 hours | |
| | Extra-Slow | | 1050 cP | 1 hours | 20 hours | |
| | | | | | | |
| AMPRO™ Handipack ↳ Ideal for repairs & other small tasks ↳ Cures at low temperatures (+5°C) ↳ 3 : 1 mix ratio by volume ↳ No surface residue after cure | Fast |  | 1000 cP | ½ hour | 12 hours |  Download (PDF) |
| | | | | | | |
| | | | | | | |
| | | | | | | |

AMPRO™ is designed to be used as a laminating or coating resin, or it can be modified using the following additives into a filler or adhesive mix.

| Additives & Fillers (all quantities by weight) | Filler Mixes | | Adhesive Mixes | | | Technical Datasheet |
|--|-----------------------|-----------------------------|------------------|------------------|------------------|---|
| | Easy To Sand Brown | Water Resistant White | General Brown | General White | High Strength | |
| AMPRO™ Silica ↳ Waterproof resin thickener ↳ Fine waterproof, white powder, used to thicken the epoxy system ↳ Can be used with Glass Bubbles, Microballoons and Microfibres ↳ Refer to the AMPRO™ datasheet for recommended mixes | 2 – 3% | 3 – 5% | 3 – 5% | 4 – 6% | 2 – 4% |  Download (PDF) |
| Glass Bubbles ↳ Waterproof filling & bonding ↳ White, hollow glass spheres for waterproof filling and bonding ↳ Ideal as a finishing filler for hard wearing edges & surfaces ↳ Refer to the AMPRO™ datasheet for recommended mixes | | 35 – 40% | | 15 – 20% | |  Download (PDF) |
| Microballoons ↳ Wood filling & bonding ↳ Brown, hollow phenolic resin spheres ideal for wood applications ↳ Easy to profile and sand for filling, filleting and bonding ↳ Refer to the AMPRO™ datasheet for recommended mixes | 25 – 30% | | 15 – 20% | | |  Download (PDF) |
| Microfibres ↳ Structural bonding ↳ Opaque, very fine cellulose wood fibres for structural bonding ↳ Suitable for both wood and GRP ↳ Refer to the AMPRO™ datasheet for recommended mix | | | | | 7 – 10% |  Download (PDF) |

***working time properties are highly subjective to ambient conditions and should be used as an approximate guideline for all AMPRO™ systems at 25°C. Please refer to the corresponding page of this document for specific testing methods used.*

Product Code Selector

| System | Size | Units | Description | Order Code | Notes |
|---------------------------------|----------|-------|---|------------|-------|
| AMPRO™ Packs | 6 x 1.33 | kg | AMPRO RES/HARD FAST 6x1.33KG PACK | F530-063 | |
| | 4.2 | kg | AMPRO R/H FAST 4.2KG PACK | F530-050 | |
| | 6 x 1.33 | kg | AMPRO RES/HARD SLOW 6x1.33KG PACK | F530-064 | |
| | 4.2 | kg | AMPRO R/H SLOW 4.2KG PACK | F530-052 | |
| | 6 x 1.33 | kg | AMPRO RES/HARD EX-SLOW 6x1.33KG PACK | F530-065 | |
| | 4.2 | kg | AMPRO R/H EXTRA-SLOW 4.2KG PACK | F530-054 | |
| AMPRO™ BIO Packs | 6 x 1.3 | kg | AMPRO BIO RES/HARD FAST 6x1.30KG PACK | F530-060 | |
| | 4.1 | kg | AMPRO BIO R/H FAST 4.1KG PACK | F530-032 | |
| | 6 x 1.3 | kg | AMPRO BIO RES/HARD SLOW 6x1.30KG PACK | F530-061 | |
| | 4.1 | kg | AMPRO BIO R/H SLOW 4.1KG PACK | F530-034 | |
| | 6 x 1.3 | kg | AMPRO BIO RES/HARD EX-SLOW 6x1.30KG PACK | F530-062 | |
| | 4.1 | kg | AMPRO BIO R/H EXTRA-SLOW 4.1KG PACK | F530-036 | |
| Handipack | 0.375 | kg | AMPRO HANDIPACK R/H+PUMPS 375g, BOX OF 12 | F530-071 | |
| AMPRO™ Resins | 1000 | kg | AMPRO RESIN 1000KG | F530-008 | |
| | 206 | kg | AMPRO RESIN 206KG | F530-007 | |
| | 20 | kg | AMPRO RESIN 20KG A/F | F530-081 | |
| | 10 | kg | AMPRO RESIN 10KG A/F | F530-080 | |
| AMPRO™ BIO Resins | 1000 | kg | AMPRO BIO RESIN 1000KG | F530-012 | |
| | 200 | kg | AMPRO BIO RESIN 200KG | F530-011 | |
| | 20 | kg | AMPRO BIO RESIN 20KG A/F | F530-083 | |
| | 10 | kg | AMPRO BIO RESIN 10KG A/F | F530-082 | |
| AMPRO™ BIO Fast Hardeners | 900 | kg | AMPRO BIO HARD FAST 900KG | F530-074 | |
| | 200 | kg | AMPRO BIO HARD FAST 200KG | F530-016 | |
| | 20 | kg | AMPRO BIO HARD FAST 20KG A/F | F530-087 | |
| | 6 | kg | AMPRO BIO HARD FAST 6KG A/F | F530-086 | |
| | 3 | kg | AMPRO BIO HARD FAST 3KG A/F | F530-013 | |
| AMPRO™ BIO Slow Hardeners | 900 | kg | AMPRO BIO HARD SLOW 900KG | F530-075 | |
| | 200 | kg | AMPRO BIO HARD SLOW 200KG | F530-020 | |
| | 20 | kg | AMPRO BIO HARD SLOW 20KG A/F | F530-091 | |
| | 6 | kg | AMPRO BIO HARD SLOW 6KG A/F | F530-090 | |
| | 3 | kg | AMPRO BIO HARD SLOW 3KG A/F | F530-017 | |
| AMPRO™ BIO Extra-Slow Hardeners | 900 | kg | AMPRO BIO HARD EXTRA-SLOW 900KG | F530-076 | |
| | 200 | kg | AMPRO BIO HARD EXTRA-SLOW 200KG | F530-024 | |
| | 20 | kg | AMPRO BIO HARD EXTRA-SLOW 20KG A/F | F530-095 | |
| | 6 | kg | AMPRO BIO HARD EXTRA-SLOW 6KG A/F | F530-094 | |
| | 3 | kg | AMPRO BIO HARD EXTRA-SLOW 3KG A/F | F530-021 | |
| AMPRO™ Fast Hardeners | 900 | kg | AMPRO HARD FAST 900KG | F530-077 | |
| | 200 | kg | AMPRO HARD FAST 200KG | F530-040 | |
| | 20 | kg | AMPRO HARD FAST 20KG A/F | F530-085 | |
| | 6 | kg | AMPRO HARD FAST 6KG A/F | F530-084 | |
| | 3 | kg | AMPRO HARD FAST 3KG A/F | F530-037 | |
| AMPRO™ Slow Hardeners | 900 | kg | AMPRO HARD SLOW 900KG | F530-078 | |
| | 200 | kg | AMPRO HARD SLOW 200KG | F530-044 | |
| | 20 | kg | AMPRO HARD SLOW 20KG A/F | F530-089 | |
| | 6 | kg | AMPRO HARD SLOW 6KG A/F | F530-088 | |
| | 3 | kg | AMPRO HARD SLOW 3KG A/F | F530-041 | |
| AMPRO™ Extra-Slow Hardeners | 900 | kg | AMPRO HARD EXTRA-SLOW 900KG | F530-079 | |
| | 200 | kg | AMPRO HARD EXTRA-SLOW 200KG | F530-048 | |
| | 20 | kg | AMPRO HARD EXTRA-SLOW 20KG A/F | F530-093 | |
| | 6 | kg | AMPRO HARD EXTRA-SLOW 6KG A/F | F530-092 | |
| | 3 | kg | AMPRO HARD EXTRA-SLOW 3KG A/F | F530-045 | |

AMPRO™ packs are compatible with the following calibrated pump sets:

| Description | 1.3 kg Packs | 4 kg Packs | 13 kg Packs | 26 kg Packs |
|-----------------|--------------|------------|-------------|-------------|
| AMPRO™ Pump Set | K216-320 | K216-324 | K216-325 | K216-326 |

AMPRO™ resins and hardeners are compatible with the following dispense taps:

| Description | 10 – 20 kg Resins | 200 kg Resins | 3 – 6 kg Hardeners | 20 kg Hardeners | 200 kg Hardeners |
|--------------|-------------------|---------------|--------------------|-----------------|------------------|
| Dispense Tap | K342-016 | K342-010 | K342-016 | K342-015 | K342-010 |

Ordering Quantity Guidelines

Note that relative ordering quantities are as follows:







| System | Resin | Hardener |
|------------|---------------------------------|------------------------------------|
| AMPRO™ | 2 x 1000KG IBC AMPRO™ Resin | 3 x 200KG drum AMPRO™ Hardener |
| | 3 x 200KG drum AMPRO™ Resin | 1 x 200KG drum AMPRO™ Hardener |
| | 1 x 200KG drum AMPRO™ Resin | 3 x 20KG pail AMPRO™ Hardener |
| | 1 x 20KG pail AMPRO™ Resin | 1 x 6KG pail AMPRO™ Hardener |
| | 1 x 10KG pail AMPRO™ Resin | 1 x 3KG pail AMPRO™ Hardener |
| AMPRO™ BIO | 2 x 1000KG IBC AMPRO™ BIO Resin | 3 x 200KG drum AMPRO™ BIO Hardener |
| | 3 x 200KG drum AMPRO™ BIO Resin | 1 x 200KG drum AMPRO™ BIO Hardener |
| | 1 x 200KG drum AMPRO™ BIO Resin | 3 x 20KG pail AMPRO™ BIO Hardener |
| | 1 x 20KG pail AMPRO™ BIO Resin | 1 x 6KG pail AMPRO™ BIO Hardener |
| | 1 x 10KG pail AMPRO™ BIO Resin | 1 x 3KG pail AMPRO™ BIO Hardener |

Ampreg™ Laminating Systems



The Ampreg™ Series is Gurit's range of wet laminating systems for the manufacture of large composite structures in the marine, wind and construction industries.

Product Selector

| System | Speed | Mix Ratio | Mixed Viscosity** | 150g Pot-Life** | Max Temp** | Technical Datasheet | |
|---|---|------------|-------------------|-----------------|------------|---|---|
| Structural Laminating Systems | Ampreg™ 30 Low initial mixed viscosity & good cure progression from ambient only cures. | Fast | | 900 cP | ½ hour | 74 °C |  Download (PDF) |
| | | Standard | | 750 cP | 1 hour | 73 °C | |
| | | Slow | 100 : 26 | 350 cP | 4 hours | 71 °C | |
| | | Extra-slow | | 300 cP | 7 hours | 70 °C | |
| | | Ultra-Slow | 100 : 29 | 300 cP | 9 ¾ hours | 66 °C | |
| | Ampreg™ 31 Viscosity optimised for good fabric wet-out and drainage resistance. | Fast | | 1300 cP | ½ hour | 76 °C |  Download (PDF) |
| | | Standard | | 1000 cP | 1 hour | 73 °C | |
| | | Slow | 100 : 26 | 500 cP | 3 ½ hours | 73 °C | |
| | | Extra-slow | | 400 cP | 6 hours | 72 °C | |
| | | Ultra-Slow | 100 : 29 | 375 cP | 7 ¾ hours | 66 °C | |
| Ampreg™ 36 Improved fabric impregnation, Faster mechanical property generation, High flexural properties. | Fast | 100 : 29 | 700 cP | ½ hour | 75 °C |  Download (PDF) | |
| | Standard | | 450 cP | 1 hour | 73 °C | | |
| | Slow | | 275 cP | 3 ½ hours | 70 °C | | |
| | Extra-slow | | 200 cP | 6 hours | 69 °C | | |
| | | | | | | | |
| Speciality Laminating Systems | Ampreg™ 21FR Fire retardant epoxy wet laminating system, with indicative FST performance evaluated FAR Part 25 (60s flame applied). | Fast | | - | ½ hour | - |  Download (PDF) |
| | | Standard | | - | 1 ¼ hours | - | |
| | | Slow | 100 : 17 | - | 2 ¾ hours | - | |
| | | Extra-slow | | - | 6 ¼ hours | - | |
| | | Ultra-Slow | 100 : 18 | - | 7 hours | 75.6 | |
| | Ampreg™ AP Adhesion promoter improves improves vinylester/epoxy adhesion & to enable use of polyester gelcoats. | Slow | 100 : 26 | 600 cP | 3-4 hours | 66.7 |  Download (PDF) |
| | | Extra-slow | | 500 cP | 6-7 hours | 63.2 | |
| Ampreg™ TP Thixotropic Pregel is a resin additive, which is used primarily as a thixotrope - to be added to low viscosity laminating resins for applications where resin drainage is a concern. | Fast | 100 : 24 | - | ½ hour | - |  Download (PDF) | |
| | Standard | | - | 1 hour | - | | |
| | Slow | | - | 3 ½ hours | - | | |
| | Extra-slow | | - | 6 hours | - | | |

**working time properties are highly subjective to ambient conditions and should be used as an approximate guideline for all Ampreg™ 3X systems at 25°C. Please refer to the corresponding page of this document for specific testing methods used.

Product Code Selector

| Packs | Size | Units | Description | Order Code | Notes |
|---------------|-------|-------|-------------------------------------|------------|-------|
| Ampreg 30 | 1.26 | kg | AMPREG30 R/H FAST 1.26KG PACK | F127-035 | |
| | 4.66 | kg | AMPREG30 R/H FAST 4.66KG PACK | F127-034 | |
| | 1.26 | kg | AMPREG30 R/H STANDARD 1.26KG PACK | F127-037 | |
| | 4.66 | kg | AMPREG30 R/H STANDARD 4.66KG PACK | F127-036 | |
| | 1.26 | kg | AMPREG30 R/H SLOW 1.26KG PACK | F127-039 | |
| | 4.66 | kg | AMPREG30 R/H SLOW 4.66KG PACK | F127-038 | |
| | 1.26 | kg | AMPREG30 R/H EXTRA-SLOW 1.26KG PACK | F127-041 | |
| | 4.66 | kg | AMPREG30 R/H EXTRA-SLOW 4.66KG PACK | F127-040 | |
| Ampreg 31 | 1.26 | kg | AMPREG31 R/H FAST 1.26KG PACK | F127-071 | |
| | 4.66 | kg | AMPREG31 R/H FAST 4.66KG PACK | F127-072 | |
| | 1.26 | kg | AMPREG31 R/H STANDARD 1.26KG PACK | F127-075 | |
| | 4.66 | kg | AMPREG31 R/H STANDARD 4.66KG PACK | F127-076 | |
| | 1.26 | kg | AMPREG31 R/H SLOW 1.26KG PACK | F127-073 | |
| | 4.66 | kg | AMPREG31 R/H SLOW 4.66KG PACK | F127-074 | |
| | 1.26 | kg | AMPREG31 R/H EXTRA-SLOW 1.26KG PACK | F127-069 | |
| | 4.66 | kg | AMPREG31 R/H EXTRA-SLOW 4.66KG PACK | F127-070 | |
| Ampreg 36 | 1.16 | kg | AMPREG36 R/H FAST 1.16KG PACK | F127-083 | |
| | 4.26 | kg | AMPREG36 R/H FAST 4.26KG PACK | F127-084 | |
| | 1.16 | kg | AMPREG36 R/H STANDARD 1.16KG PACK | F127-087 | |
| | 4.26 | kg | AMPREG36 R/H STANDARD 4.26KG PACK | F127-088 | |
| | 1.16 | kg | AMPREG36 R/H SLOW 1.16KG PACK | F127-085 | |
| | 4.26 | kg | AMPREG36 R/H SLOW 4.26KG PACK | F127-086 | |
| | 1.16 | kg | AMPREG36 R/H EXTRA-SLOW 1.16KG PACK | F127-081 | |
| | 4.26 | kg | AMPREG36 R/H EXTRA-SLOW 4.26KG PACK | F127-082 | |
| Ampreg 30 | 1000 | kg | AMPREG30 RESIN 1000KG | F127-001 | |
| | 219 | kg | AMPREG30 RESIN 219KG | F127-002 | |
| | 18 | kg | AMPREG30 RESIN 18KG | F127-003 | |
| Ampreg 31 | 1000 | kg | AMPREG31 RESIN 1000KG | F127-077 | |
| | 219 | kg | AMPREG31 RESIN 219KG | F127-079 | |
| | 18 | kg | AMPREG31 RESIN 18KG | F127-078 | |
| Ampreg 36 | 900 | kg | AMPREG36 RESIN 900KG | F127-096 | |
| | 197 | kg | AMPREG36 RESIN 197KG | F127-090 | |
| | 16.2 | kg | AMPREG36 RESIN 16.2KG | F127-089 | |
| Ampreg 21FR | 257 | kg | AMPREG 21FR RESIN 257KG | F122-005 | |
| | 15.85 | kg | AMPREG 21FR RESIN 15.85KG | F122-004 | |
| Adh. Promoter | 20 | kg | AMPREG ADHESION PROMOTER 20KG A/F | F127-117 | |
| Thix. Pregel | 195 | kg | AMPREG THIXOTROPIC PREGEL 195KG | F127-092 | |
| | 19.5 | kg | AMPREG THIXOTROPIC PREGEL 19.5KG | F127-091 | |

| Hardeners | Size | Units | Description | Order Code | Notes |
|-------------------|------|-------|-------------------------------------|------------|---|
| Fast | 900 | kg | AMPREG3X HARD FAST 900KG | F127-093 | |
| | 174 | kg | AMPREG3X HARD FAST 174KG | F127-006 | |
| | 19 | kg | AMPREG3X HARD FAST 19KG A/F | F127-008 | |
| | 4.68 | kg | AMPREG3X HARD FAST 4.68KG A/F | F127-010 | |
| Standard | 900 | kg | AMPREG3X HARD STANDARD 900KG | F127-097 | |
| | 174 | kg | AMPREG3X HARD STANDARD 174KG | F127-013 | |
| | 19 | kg | AMPREG3X HARD STANDARD 19KG A/F | F127-015 | |
| | 4.68 | kg | AMPREG3X HARD STANDARD 4.68KG A/F | F127-017 | |
| Slow | 900 | kg | AMPREG3X HARD SLOW 900KG | F127-098 | |
| | 174 | kg | AMPREG3X HARD SLOW 174KG | F127-020 | |
| | 19 | kg | AMPREG3X HARD SLOW 19KG A/F | F127-022 | |
| | 4.68 | kg | AMPREG3X HARD SLOW 4.68KG A/F | F127-024 | |
| Extra-slow | 900 | kg | AMPREG3X HARD EXTRA-SLOW 900KG | F127-094 | |
| | 174 | kg | AMPREG3X HARD EXTRA-SLOW 174KG | F127-027 | |
| | 19 | kg | AMPREG3X HARD EXTRA-SLOW 19KG A/F | F127-029 | |
| | 4.68 | kg | AMPREG3X HARD EXTRA-SLOW 4.68KG A/F | F127-031 | |
| Ampreg Ultra-Slow | 194 | kg | AMPREG HARD ULTRA-SLOW 194KG | F127-107 | Only to be used with Ampreg 21FR, 30 or 31 resins |
| | 16 | kg | AMPREG HARD ULTRA-SLOW 16KG A/F | F127-108 | |
| | 5.22 | kg | AMPREG HARD ULTRA-SLOW 5.22KG A/F | F127-109 | |

Ampreg™ and PRIME™ resins and hardeners are compatible with the following dispense taps:

| Description | 16 – 19 kg Resins | 160 – 200 kg Resins | 4 – 19 kg Hardeners | 160 – 200 kg Hardeners |
|--------------|-------------------|---------------------|---------------------|------------------------|
| Dispense Tap | K342-016 | K342-010 | K342-016 | K342-010 |

Ordering Quantity Guidelines

Note that relative ordering quantities are as follows:

| System | Resin | Hardener |
|-----------------|----------------------------------|--|
| Ampreg™ 30 / 31 | 2 x 1000kg Ampreg™ 30 / 31 Resin | 3 x 174kg Ampreg™ 3X Fast – Ex-Slow Hardeners |
| | 1 x 219kg Ampreg™ 30 / 31 Resin | 3 x 19kg Ampreg™ 3X Fast – Ex-Slow Hardeners |
| | 1 x 18kg Ampreg™ 30 / 31 Resin | 1 x 4.68kg Ampreg™ 3X Fast – Ex-Slow Hardeners |
| Ampreg™ 36 | 2 x 900kg Ampreg™ 36 Resin | 3 x 174kg Ampreg™ 3X Fast – Ex-Slow Hardeners |
| | 1 x 197kg Ampreg™ 36 Resin | 3 x 19kg Ampreg™ 3X Fast – Ex-Slow Hardeners |
| | 1 x 16.2kg Ampreg™ 36 Resin | 1 x 4.68kg Ampreg™ 3X Fast – Ex-Slow Hardeners |

For guidance on correct ordering quantities for speciality systems, please refer to the product datasheet or contact the Gurit technical support team.

PRIME™ Infusion Systems



PRIME™ infusion systems applications range from single-operation moulding of carbon yacht masts, yacht hulls up to 80', and wind turbine blades. PRIME™ epoxy infusion systems have been used successfully for over 20 years and today are at the forefront of the development of liquid epoxies for "under the bag" infusion processes, including:

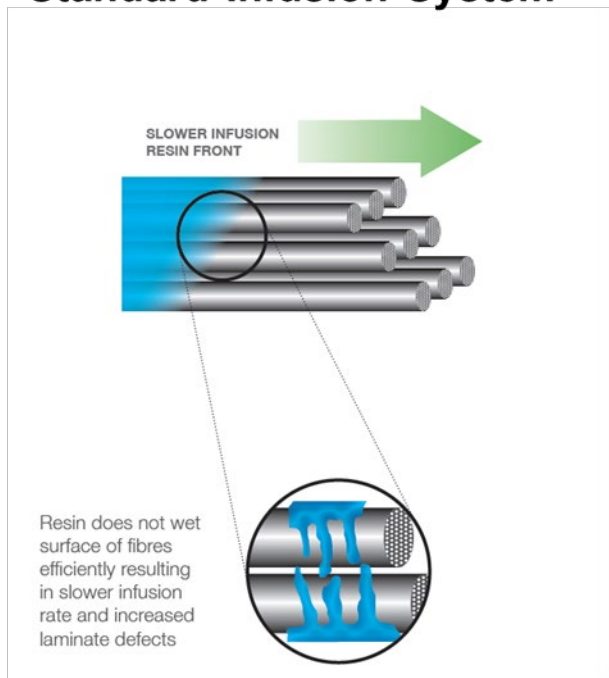
- SCRIMP™
- RIFT (resin infusion under flexible tooling)
- RTM / VARTM (vacuum assisted resin transfer moulding)

Versatile systems for a range of applications:

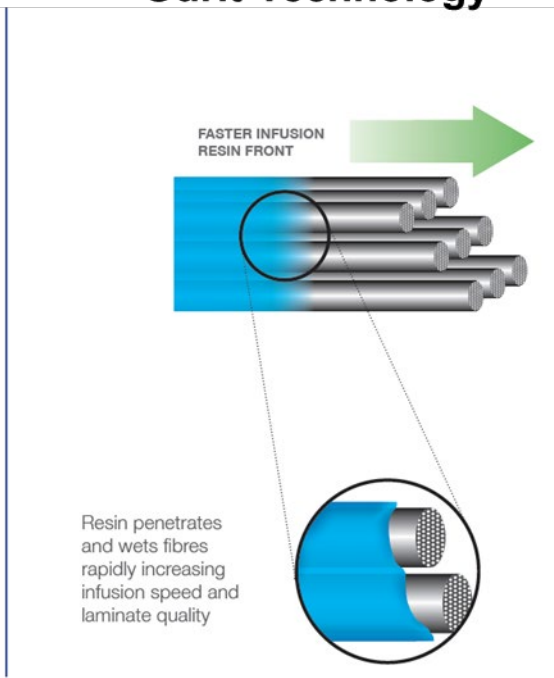
- PRIME™ 37 & A3X Hardeners – premium resin, bio-based as standard
- PRIME™ 37 & High Tg Hardener - print-resistant, cost-effective tooling solution
- PRIME™ 38 & High Tg Hardener – built-in UV & yellowing resistance
- PRIME™ 130 – preformable, rapid curing compression moulding resin
- PRIME™ 180-1 - high clarity resin & temperature resistance
- T-PRIME™ 130-1 - infusable tooling solution for most composite applications
- T-PRIME™ 160 - high temperature tooling resin

DNV & Lloyds Register Certified formats available

Standard Infusion System




Gurit Technology



Application Selector

| | PRIME™ 37 | PRIME™ 37 (+ High Tg) | PRIME™ 38 | PRIME™ 130 | PRIME™ 180-1 | T-PRIME™ 130-1 | T-PRIME™ 160 |
|-----------------------------|------------------------------------|--|----------------------|----------------------------|---------------------------------------|----------------------------|--------------------------------|
| System Properties | | | | | | | |
| Mixed Viscosity (25°C) | 150 - 500 cP | 320 cP | 320 cP | 590 cP | 280 cP | 250 cP | 390 cP |
| Typical Post-cure | 16 hrs @ 50°C | 5 hrs @ 100°C | 5 hrs @ 100°C | ¼ hr @ 130°C | 1 hr @ 180°C | 2 hrs @ 120°C | 2 hrs @ 150°C |
| Maximum Tg | 75°C | 110°C | 110°C | 130°C | 200°C | 130°C | 160°C |
| Resin Bio-based content | Up to 15% | Up to 15% | Up to 15% | - | - | - | - |
| Relative Cost per KG | € | €€ | €€€ | €€€ | €€€€€ | €€€€ | €€€€€ |
| USP | Bio-based, versatile A3X Hardeners | Print-resistant, cost-effective tooling solution | Yellowing Resistance | Fast Liquid Press Moulding | High clarity & Temperature resistance | Infusible Tooling solution | High Temperature Tooling Resin |
| Typical Applications | | | | | | | |
| Monolithic Laminates | ●●●●● | ●●●●● | ●●●●● | ●●●●● | ●●●●● | ●●●●● | ●●●●● |
| Sandwich Laminates | ●●●●● | ●●●●● | ●●●●● | | | ●●●●● | ●●●●● |
| Composite Tooling | ●●●●● | ●●●●● | ●●●●● | | | ●●●●● | ●●●●● |
| Cosmetic / Low Print | ●●● | ●●●● | ●●●●● | ●●●● | ●●●● | ●●● | ● |
| Processing Method | | | | | | | |
| Vacuum Infusion | ●●●●● | ●●●● | ●●●● | ● | ●● | ●●●●● | ●●●● |
| RTM / VARTM | ●●●●● | ●●●●● | ●●●●● | ●● | ●●●●● | ●●●●● | ●●●● |
| Compression Moulding | ●● | ●● | ●● | ●●●●● | ●● | ●● | ●● |

System Selector

| System | Speed | Mix Ratio | Mixed Viscosity** | 150g Pot-Life** | Max Temp** | Technical Datasheet |
|---|---|-----------|-------------------|-----------------|------------|---|
| PRIME™ 37 Resin Premium performance infusion system with excellent fibre wetting and bio-based content as standard. DNV & Lloyd's Register certified. | Fast | | 500 cP | ½ hour | 72 °C |  Download PDF |
| | Standard | 100 : 29 | 200 cP | 1 hour | 72 °C | |
| | Slow | | 200 cP | 4 hours | 74 °C | |
| | Extra-Slow | | 150 cP | 10 ½ hours | 64 °C | |
| | High Tg | 100 : 25 | 320 cP | 5 hours | 120 °C | |
| PRIME™ SYSTEMS | PRIME™ 38 Yellowing resistant, UV stable infusion resin system for high clarity applications. Contains bio-based content as standard. | 100 : 24 | 320 cP | 5 hours | 120 °C | Please contact technical support |
| | PRIME™ 130 Designed for compression moulding applications where flexible working times are required for preforming followed by fast cure times. | 100 : 26 | 590 cP | ½ hour | 130 °C | Please contact technical support |
| | PRIME™ 180-1 Designed for RTM processes for manufacturing high quality structural carbon components. | 100 : 100 | 280 cP | 1 ½ hours | 160 °C | Please contact technical support |

**working time properties are highly subjective to ambient conditions and should be used as an approximate guideline for all systems at 25°C. Please refer to the corresponding page of this document for specific testing methods used.

Product Code Selector

| PRIME™ Systems | Size | Units | Description | Order Code | Notes |
|--------------------------------|------|-------|-------------------------------------|------------|---|
| PRIME™ 37 Packs | 4 | Kg | PRIME37 R/H FAST 4KG PACK | F160-122 | |
| | 4 | Kg | PRIME37 R/H STANDARD 4KG PACK | F160-123 | |
| | 4 | Kg | PRIME37 R/H SLOW 4KG PACK | F160-108 | |
| | 4 | Kg | PRIME37 R/H EXTRA-SLOW 4KG PACK | F160-109 | |
| PRIME™ 37 Resins | 1000 | Kg | PRIME37 RESIN 1000KG | F160-105 | |
| | 197 | Kg | PRIME37 RESIN 197KG | F160-106 | |
| | 16.2 | Kg | PRIME37 RESIN 16.2KG A/F | F160-115 | |
| Ampreg™ 3X Fast Hardener | 900 | kg | AMPREG3X HARD FAST 900KG | F127-093 | Mix ratio is 100:29 (by weight) |
| | 174 | kg | AMPREG3X HARD FAST 174KG | F127-006 | |
| | 19 | kg | AMPREG3X HARD FAST 19KG A/F | F127-008 | |
| | 4.68 | kg | AMPREG3X HARD FAST 4.68KG A/F | F127-010 | |
| Ampreg™ 3X Standard Hardener | 900 | kg | AMPREG3X HARD STANDARD 900KG | F127-097 | Mix ratio is 100:29 (by weight) |
| | 174 | kg | AMPREG3X HARD STANDARD 174KG | F127-013 | |
| | 19 | kg | AMPREG3X HARD STANDARD 19KG A/F | F127-015 | |
| | 4.68 | kg | AMPREG3X HARD STANDARD 4.68KG A/F | F127-017 | |
| Ampreg™ 3X Slow Hardener | 900 | kg | AMPREG3X HARD SLOW 900KG | F127-098 | Mix ratio is 100:29 (by weight) |
| | 174 | kg | AMPREG3X HARD SLOW 174KG | F127-020 | |
| | 19 | kg | AMPREG3X HARD SLOW 19KG A/F | F127-022 | |
| | 4.68 | kg | AMPREG3X HARD SLOW 4.68KG A/F | F127-024 | |
| Ampreg™ 3X Extra-slow Hardener | 900 | kg | AMPREG3X HARD EXTRA-SLOW 900KG | F127-094 | Mix ratio is 100:29 (by weight) |
| | 174 | kg | AMPREG3X HARD EXTRA-SLOW 174KG | F127-027 | |
| | 19 | kg | AMPREG3X HARD EXTRA-SLOW 19KG A/F | F127-029 | |
| | 4.68 | kg | AMPREG3X HARD EXTRA-SLOW 4.68KG A/F | F127-031 | |
| PRIME™ High Tg Hardener | 900 | kg | PRIME HIGH Tg HARDENER 900KG | F160-116 | Only to be used with PRIME™ 37 resin Mix ratio is 100:25 (by weight) |
| | 167 | kg | PRIME HIGH Tg HARDENER 167KG | F160-120 | |
| | 16.4 | kg | PRIME HIGH Tg HARDENER 16.4KG A/F | F160-119 | |
| | 4.1 | kg | PRIME HIGH Tg HARDENER 4.1KG A/F | F160-121 | |

PRIME™ resins and hardeners are compatible with the following dispense taps:

| Description | 16 – 20 kg Resins | 160 – 200 kg Resins | 3.4 – 19 kg Hardeners | 160 – 200 kg Hardeners |
|--------------|-------------------|---------------------|-----------------------|------------------------|
| Dispense Tap | K342-016 | K342-010 | K342-016 | K342-010 |

Note that relative ordering quantities are as follows:

| System | Resin | Hardener |
|-----------|----------------------------|---|
| PRIME™ 37 | 3 x 1000kg PRIME™ 37 Resin | 1 x 900kg Ampreg™ 3X Fast / Standard / Slow / Ex-slow Hardener |
| | 2 x 1000kg PRIME™ 37 Resin | 3 x 174kg Ampreg™ 3X Fast / Standard / Slow / Ex-slow Hardener |
| | 2 x 1000kg PRIME™ 37 Resin | 3 x 167kg PRIME™ High Tg Hardener |
| | 1 x 197kg PRIME™ 37 Resin | 3 x 19kg Ampreg™ 3X Fast / Standard / Slow / Ex-slow Hardener |
| | 1 x 197kg PRIME™ 37 Resin | 3 x 16.4kg PRIME™ High Tg Hardener |
| | 1 x 18.6kg PRIME™ 37 Resin | 1 x 4.68kg Ampreg™ 3X Fast / Standard / Slow / Ex-slow Hardener |
| | 1 x 18.6kg PRIME™ 37 Resin | 1 x 4.1kg PRIME™ High Tg Hardener |

Spabond™ Adhesive Systems

















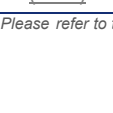











Spabond™ adhesives offer outstanding performance in high-stress, high-load applications for Marine, Wind Energy and Civil Engineering applications.

- Spabond™ 400 Series: structural, high dynamic load applications
- Spabond™ 500 Series: specialist substrate and applications
- Spabond™ 700 Series: rapid structural adhesives

Adhesive Chemistry Selector

| | Epoxy | Polyurethane | Acrylic | Cyanoacrylate | Methacrylates | Hot-melt | Silicone |
|--|---------------------------|----------------------------------|--------------------------------------|---|--|-------------------------|----------------------------------|
| Key Benefits | High strength & stiffness | Excellent toughness & durability | Good impact resistance & flexibility | Excellent adhesion to rubber & plastics | Excellent adhesion to plastics & polyester GRP laminates | Fast, large gap-filling | Excellent temperature resistance |
| Temperature Range | -55 to +180°C | -50 to +120°C | -50 to +120°C | -50 to +80°C | -55 to +120°C | -50 to +120°C | -50 to +200°C |
| Substrate Adhesion ★★★★★ = Excellent ★★★★ = Very Good ★★★ = Good ★★ = Fair ★ = Poor | | | | | | | |
| Metal | ★★★★★ | ★★★ | ★★★★★ | ★★★★ | ★★★ | ★★★ | ★★★ |
| Plastic | ★★ | ★★★★ | ★★★★★ | ★★★★★ | ★★★★★ | ★★★★ | ★★ |
| Glass | ★★★★★ | ★★★ | ★★★ | ★ | ★★★ | ★★★ | ★★★★★ |
| Rubber | ★★ | ★★★ | ★ | ★★★★ | ★ | ★★ | ★★★ |
| Wood | ★★★★ | ★★ | ★★★ | ★★★ | ★★ | ★★★★★ | ★★ |
| Mechanical Performance ●●● = High ●● = Medium ● = Low | | | | | | | |
| Shear Strength | ●●● | ●● | ●● | ●●● | ●● | ● | ● |
| Peel Strength | ●● | ●● | ●●● | ● | ●●● | ●● | ●● |
| Elongation | ● | ●●● | ●●● | ● | ●●● | ●●● | ●●●● |
| Stiffness / Modulus | ●●● | ● | ●● | ●●● | ● | ●● | ● |
| Environmental Resistance ★★★★★ = Excellent ★★★★ = Very Good ★★★ = Good ★★ = Fair ★ = Poor | | | | | | | |
| Polar Solvents (water, ethylene, acetone, glycol) | ★★★★ | ★★★ | ★★★ | ★ | ★★★ | ★★★ | ★★★ |
| Non-polar Solvents (motor oil, petrol) | ★★★★★ | ★★★ | ★★★★ | ★★★ | ★ | ★★★ | ★ |
| Overall | ★★★★ | ★ | ★★★ | ★★★ | ★★ | ★ | ★ |

System Selector

| System | Speed | Cured Colour | Mix Ratio | Working Time* | Clamp Time* | Gap Filling* | Max Temp | Technical Datasheet | | | | |
|--|---|---|---|-----------------|-------------|--------------|------------|---|---|--|------|---|
| 400 Series | Spabond™ 435 Ideal for thin bondlines such as core bonding, large surface areas and detailed work. | Fast |  | 3:1 (by volume) | ½ hour | 4 hrs | 5 – 10 mm |  Download PDF | | | | |
| | | Slow |  | | 3 ½ hrs | <16 hrs | | | 81°C | | | |
| | Spabond™ 440 Optimised for rapid dispense from cartridges or automated mixing machines. | Fast |  | 3:1 (by volume) | ½ hour | 4 hrs | 10 – 20 mm | |  Download PDF | | | |
| | | Slow |  | | 3 ¼ hrs | <16 hrs | | | | 84°C | | |
| | Spabond™ 445 For large gap filling & filleting applications as well as high performance projects, with a black resin option available | Fast |  | 3:1 (by volume) | ½ hour | 4 hrs | 20 – 30 mm | | |  Download (PDF) | | |
| | | Slow |  | | 3 ½ hrs | <16 hrs | | | | | 87°C | |
| | Spabond™ 400FR Structural fire retardant epoxy adhesive. | Fast |  | | ½ hour | 2 ½ hrs | 10 – 20 mm | | | | 90°C |  Download PDF |
| | Spabond™ 5 Minute Tacking and secondary bonding. | |  | 1:1 (by volume) | 5 mins | 20 mins | 10 - 15mm | | | | 55°C |  Download (PDF) |
| Spabond™ 540 High elongation, long bonding times. Low viscosity resin option for easier application in cartridges. | Standard |  | 1:1 (by volume) | 2 hrs | 15 hrs | | 58°C |  Download (PDF) | | | | |
| | Slow |  | | 4 hrs | 25 hrs | 20 – 30mm | 52°C | | | | | |
| | Extra Slow |  | | 6 ½ hrs | tbc | | 58°C | | | | | |
| 500 Series | Spabond™ 545 Bonds multiple substrates found in general applications. | Fast |  | 2:1 (by volume) | 25 mins | 5 hrs | 0.2 - 20mm |  Download (PDF) | | | | |
| | | Slow |  | | 90 mins | 10 hrs | | | 61°C | | | |
| Spabond™ 568 Low density core bonding adhesive. | |  | 2:1 (by volume) | 5 ½ hrs | 24 hrs | 10mm | 65°C |  Download (PDF) | | | | |
| Spabond™ 570 Bonds all woods. Easy mixing/smooth spreading, can be used with automated mixing machines. | |  | 1:1 (by volume) | 1 ½ hrs | - | 10 - 20mm | 55°C |  Download (PDF) | | | | |
| 700 Series | Spabond™ 730 High strength, rapid curing. General purpose adhesive. |  | 1:1 (by volume) | 10 mins | 1 hr | 10 - 15mm | 60°C |  Download (PDF) | | | | |

**working time properties are highly subjective to ambient conditions and should be used as an approximate guideline for all Spabond™ systems at 20°C. Please refer to the corresponding page of this document for specific testing methods used.

Product Code Selector

| Spabond™ | Type | Size | Units | Description | Order Code | Notes |
|----------|--------------|--------|-------|--|------------|----------------------------------|
| 435 | R/H Fast | 20x385 | ml | SP435 R/HF 385ml CART/BOX OF 20 | F647-020 | |
| | R/H Slow | 20x385 | ml | SP435 R/HSL 385ml CART/BOX OF 20 | F647-021 | |
| | Resin | 200 | kg | SPABOND 435 RESIN 200KG | F647-022 | |
| | Resin | 20 | kg | SPABOND 435 RESIN 20KG S/S | F647-023 | |
| | Resin | 10 | kg | SPABOND 435 RESIN 10KG | F647-007 | |
| | Resin | 5 | kg | SPABOND 435 RESIN 5KG | F647-024 | |
| 440 | R/H Fast | 20x385 | ml | SP440 R/HF 385ml CART/BOX OF 20 | F647-025 | |
| | R/H Fast | 10x800 | ml | SP440 R/HF 800ml CART/BOX OF 10 | F647-037 | |
| | R/H Slow | 20x385 | ml | SP440 R/HSL 385ml CART/BOX OF 20 | F647-026 | |
| | R/H Slow | 10x800 | ml | SP440 R/HSL 800ml CART/BOX OF 10 | F647-038 | |
| | Resin | 200 | kg | SPABOND 440 RESIN 200KG | F647-027 | |
| | Resin | 20 | kg | SPABOND 440 RESIN 20KG S/S | F647-028 | |
| | Resin | 10 | kg | SPABOND 440 RESIN 10KG | F647-008 | |
| | Resin | 5 | kg | SPABOND 440 RESIN 5KG | F647-029 | |
| 445 | R/H Fast | 20x385 | ml | SP445 R/HF 385ml CART/BOX OF 20 | F647-030 | |
| | R/H Fast | 20x385 | ml | SP445 RBL/HF 385ml CART/BOX OF 20 | F647-048 | Black version |
| | R/H Slow | 20x385 | ml | SP445 R/HSL 385ml CART/BOX OF 20 | F647-031 | |
| | Resin | 200 | kg | SPABOND 445 RESIN BLACK 200KG | F647-049 | Black version |
| | Resin | 20 | kg | SPABOND 445 RESIN BLACK 20KG S/S | F647-050 | Black version |
| | Resin | 10 | kg | SPABOND 445 RESIN BLACK 10KG | F647-046 | Black version |
| | Resin | 5 | kg | SPABOND 445 RESIN BLACK 5KG | F647-051 | Black version |
| | Resin | 200 | kg | SPABOND 445 RESIN 200KG | F647-032 | |
| | Resin | 20 | kg | SPABOND 445 RESIN 20KG S/S | F647-033 | |
| | Resin | 10 | kg | SPABOND 445 RESIN 10KG | F647-009 | |
| | Resin | 5 | kg | SPABOND 445 RESIN 5KG | F647-034 | |
| 400 Fast | Fast | 186 | kg | SPABOND 400 FAST HARDENER 186KG | F647-013 | |
| | Fast | 20.7 | kg | SPABOND 400 FAST HARDENER 20.7KG S/S | F647-014 | Use with Spabond™ 435, 440 & 445 |
| | Fast | 6.2 | kg | SPABOND 400 FAST HARDENER 6.2KG | F647-010 | |
| | Fast | 3.1 | kg | SPABOND 400 FAST HARDENER 3.1KG | F647-015 | |
| | Fast | 1.6 | kg | SPABOND 400 FAST HARDENER 1.6KG | F647-012 | |
| 400 Slow | Slow | 180 | kg | SPABOND 400 SLOW HARDENER 180KG | F647-017 | |
| | Slow | 20 | kg | SPABOND 400 SLOW HARDENER 20KG S/S | F647-018 | Use with Spabond™ 435, 440 & 445 |
| | Slow | 6 | kg | SPABOND 400 SLOW HARDENER 6KG | F647-011 | |
| | Slow | 3 | kg | SPABOND 400 SLOW HARDENER 3KG | F647-019 | |
| | Slow | 1.5 | kg | SPABOND 400 SLOW HARDENER 1.5KG | F647-016 | |
| 400FR | R/H | 20x385 | ml | SPABOND 400FR R/HF 385ml CART/BOX OF 20 | F695-008 | |
| | Resin | 20 | kg | SPABOND 400FR RESIN 20KG S/S | F695-006 | |
| | Fast | 5.4 | kg | SPABOND 400FR FAST HARDENER 5.4KG | F695-007 | |
| 5 Min | R/H | 20x400 | ml | SP 5-MIN.ADH.R/H 400ml CARTRIDGE/BOX 20 | F652-021 | |
| | Resin | 20x310 | ml | SP 5-MIN.ADH.RES.310ml N/ PIGCART/BOX 20 | F652-025 | |
| | Fast | 20x310 | ml | SP 5-MIN.ADH.HARD.310ml N/PIGCART/BOX 20 | F652-027 | |
| 540 | R/H Standard | 12x600 | ml | SP540LV R/HSTD 600ml CART/BOX OF 12 | F648-045 | |
| | R/H Slow | 12x600 | ml | SP540LV R/HSL 600ml CART/BOX OF 12 | F648-054 | |
| | Resin | 200 | kg | SP540 RESIN 200KG | F648-042 | |
| | Resin | 20 | kg | SP540 RESIN 20KG S/S | F648-055 | |
| | Standard | 18.4 | kg | SP540 STANDARD HARDENER 18.4KG S/S | F648-009 | |
| | Standard | 184 | kg | SP540 HARD STD 184KG | F648-033 | |
| | Slow | 18.6 | kg | SP540 SLOW HARDENER 18.6KG S/S | F648-051 | |
| | Slow | 186 | kg | SP540 SLOW HARDENER 186KG | F648-038 | |
| | Extra-slow | 18.2 | kg | SP540 HARD EXTRA SLOW 18.2KG S/S | F648-056 | |
| 545 | R/H Fast | 20x400 | ml | SPABOND 545 R/HF 400ml CARTS/BOX OF 20 | F675-003 | |
| | R/H Slow | 20x400 | ml | SPABOND 545 R/HSL 400ml CARTS/BOX OF 20 | F675-004 | |
| | Resin | 20 | kg | SPABOND 545 RESIN 20KG S/S | F675-005 | |
| | Fast | 18.8 | kg | SPABOND 545 FAST HARD 18.8KG S/S | F675-006 | |
| | Slow | 18.4 | kg | SPABOND 545 SLOW HARD 18.4KG S/S | F675-007 | |
| 568 | Resin | 17.5 | kg | SP568 RESIN 17.5KG | F654-023 | |
| | Hardener | 7.7 | kg | SP568 HARD EXTRA-SLOW 7.7KG S/S | F654-025 | |
| 570 | Resin | 20 | kg | SP570 RESIN 20KG S/S | F640-023 | |
| | Resin | 5 | kg | SP570 RESIN 5KG | F640-019 | |
| | LV Hardener | 20 | kg | SP570LV HARD STANDARD 20KG S/S | F640-026 | |
| | LV Hardener | 5 | kg | SP570LV HARD STANDARD 5KG | F640-025 | |
| 730 | R/H Fast | 20x400 | ml | SP730 R/H 400ml CART/BOX 20 | F650-007 | |

Spabond™ Ancillary Products & Ordering Quantities

Spabond™ cartridges are compatible with the following dispensers and mix-heads:

| Description | 310ml (mono-component) | 385ml (3:1 by volume) | 400ml (1:1 by volume) | 400ml (2:1 by volume) | 600ml (1:1 by volume) | 800ml (3:1 by volume) | 900ml (2:1 by volume) |
|--------------------------|--|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Spabond™ | 5-Min | 435 440 445 400FR | 5-Min 730 | 340 345 545 | 540 | 440 | 340 |
| Manual Dispenser | | K215-079 | K215-081 | K215-081 | K215-080 | K215-044* | K215-044 |
| Pneumatic Dispenser | Please contact Gurit Technical Support | K215-082 | K215-022 | K215-022 | K215-050 | K215-039* | K215-039 |
| Individual Mix-head(s)** | | K215-034 K215-087 | K215-034 K215-087 | K215-088 | K215-034 K215-087 | K215-038 | K215-038 |
| Mix-heads (bag of 20) | | A640-019 | A640-019 | A640-037 | A640-019 | A640-021 | A640-021 |

*guns require minor modification, please contact Gurit Technical Support for further information

**for information only – not available to order

Note that relative ordering quantities are as follows:

| System | Resin | Hardener |
|--|---|---|
| Spabond™ 435 Spabond™ 440 Spabond™ 445 | 3 x 200KG drum Spabond™ 400 Resin | 1 x 186/180KG drum Spabond™ 400 Fast/Slow Hardener |
| | 1 x 200KG drum Spabond™ 400 Resin | 3 x 20.7/20KG drum Spabond™ 400 Fast/Slow Hardener |
| | 3 x 20KG drum Spabond™ 400 Resin | 1 x 20.7/20KG pails Spabond™ 400 Fast/Slow Hardener |
| | 1 x 20KG drum Spabond™ 400 Resin | 1 x 6.2/6KG pails Spabond™ 400 Fast/Slow Hardener |
| | 1 x 10KG pails Spabond™ 400 Resin | 1 x 3.1/3KG pail Spabond™ 400 Fast/Slow Hardener |
| | 1 x 5KG pails Spabond™ 400 Resin | 1 x 1.6/1.5KG pail Spabond™ 400 Fast/Slow Hardener |
| Spabond™ 400FR | 1 x 20KG drum Spabond™ 400FR Resin | 1 x 5.4KG pails Spabond™ 400FR Fast Hardener |
| Spabond™ 5 Minute | F652-025 & F652-027 are supplied non-pigmented in individual 310ml tubes. Please contact Gurit Technical Support for further information on dispensers for this item. | |
| Spabond™ 540 | 1 x 200kg pail Spabond™ 540 Resin | 1 x 184kg pail Spabond™ 540 Standard Hardener |
| | 1 x 200kg pail Spabond™ 540 Resin | 1 x 186kg pail Spabond™ 540 Slow Hardener |
| | 1 x 200kg pail Spabond™ 540 Resin | 10 x 18.2kg pail Spabond™ 540 Ex-Slow Hardener |
| Spabond™ 545 | 2 x 20kg pail Spabond™ 545 Resin | 1 x 18.8kg pail Spabond™ 545 Fast Hardener |
| | 2 x 20kg pail Spabond™ 545 Resin | 1 x 18.4kg pail Spabond™ 545 Slow Hardener |
| Spabond™ 568 | 1 x 17.5kg pail Spabond™ 568 Resin Spabond™ 568 is not supplied in cartridges | 1 x 7.7kg pail Spabond™ 568 Ex-slow Hardener |
| Spabond™ 570 | 1 x 20kg pail Spabond™ 570 Resin | 1 x 20kg pail Spabond™ 570LV Hardener |
| | 1 x 5kg pail Spabond™ 570 Resin Spabond™ 570 is not supplied in cartridges. | 1 x 5kg pail Spabond™ 570LV Hardener |
| Spabond™ 730 | Spabond™ 730 is only supplied in cartridges. | |

Contacts by Region

The most up to date contact information for Gurit global sites and distributors can be found at www.gurit.com/contact

Gurit Contacts for Europe, Middle East and Africa (EMEA)

EMEA Sales contacts

| Region | Sales contact | Contact Details |
|-----------------------------------|---------------------|------------------------------|
| Middle East, South Africa, Turkey | Phil Aikenhead | phil.aikenhead@gurit.com |
| Southern Europe inc. Italy | Francesco De Giorgi | francesco.degiorgi@gurit.com |
| Central & Eastern Europe | Piet Heydorn | piet.heydorn@gurit.com |
| France, Spain & Portugal | Yannick Le Morvan | yannick.lemorvan@gurit.com |
| PET Business Development | Giulia Gramellini | giulia.gramellini@gurit.com |
| UK & Scandinavia | Phil Aikenhead | phil.aikenhead@gurit.com |

EMEA Customer Support, Technical Support, Engineering & Marketing Contacts

| Department | Site | Email Address | Information |
|--------------------|---------------------------|-------------------------------|--|
| Customer Support | UK Site | uk-customer.support@gurit.com | Contact for sales of prepreg, epoxy resins & adhesives |
| Customer Support | Gurit Composite Materials | ch-customer.service@gurit.com | Contact for sales of core materials including Corecell, PVC & Kerdyn Green PET |
| Technical Services | EMEA | technical.support@gurit.com | |
| | Rod Fogg | rod.fogg@gurit.com | Marine Practice Leader |
| Engineering | Paolo Manganelli | paolo.manganelli@gurit.com | Head of Engineering |
| | Tony Stanton | tony.stanton@gurit.com | Engineering Manager– APAC & Civil Practice |
| Marketing | EMEA | marcom@gurit.com | |

Gurit Distributors for Europe, Middle East and Africa

| Country | Company & Contact | Contact Details | Products |
|-------------------------------|--|--|------------------------------------|
| Austria | Fixotherm Fensterbank-Dichtsysteme GmbH | T: +43 7262 54 446 W: www.fixotherm.at E: office@fixotherm.at | Kerdyn Green PET |
| Balearics | BM Composites Contact: Catrin Bassett | T: +34 971 254 181 W: www.bmcomposites.com E: catrin@bmcomposites.com | Full range |
| Balkans | Avio Commerciale S.r.l Contact: Enrico Savorani | T: T: +39 0377 830209 W: http://aviocommercialesrl.com E: e.savorani@aviocommercialesrl.com | Full range |
| Denmark | HF Industri & Marine Contact: Hans Fokdal | T: + 45 62 20 13 12 W: www.hfmarine.dk E: hf@hfmarine.dk | Wind Repair products only / RENUVO |
| Finland | Kevra Oy Contact: Jukka Leinonen | T: +358 9 6126 820 W: www.kevra.fi E: kevra@kevra.fi | Full range |
| France | Composites Distribution Contact: Jean-Francois Buleon | T: +33 228 01 7020/ +33 609 73 72 77 W: www.composites-distribution.com E: jf.buleon@composites-distribution.com | Full range |
| Germany | CTM GmbH Contact: Lars Thomsen | T: +49 46 21 955 33 W: www.ctmat.de E: info@ctmat.de | Full range |
| | HALARIT Composites GmbH Contact: Dirk Lange | T: +49 7156 2006 431 W: www.lange-ritter.de E: d.lange@halarit.com | Core and Formulated |
| Greece | Andreou I.K.E Contact: Panos Andreou | T: +30 210 4833000 W: www.andreou.gr E: info@andreou.gr | Full range |
| Italy | Resintex Technology S.r.l Contact: Laura Fabi | T: +39 0775 898 099 W: www.resintex.it E: laura@resintex.it | Full range |
| Latvia & Lithuania | SIA Kompozitmateriali Contact: Matīss Alviķis | T: +371 28001121 W: www.chemify.com E: info@chemify.com | Core and Formulated |
| Netherlands | Bouwmeester Advanced Composites Contact: Jaco Bouwmeester | T: +31 20 665 2452 W: www.sp-bac.nl E: info@sp-bac.nl | Full range |
| Norway | Hans Claussen AS Contact : Jonas Claussen | T: +47 671 19400 W: www.hc-as.no E: jc@hc-as.no | Full range |
| Poland | CHEM4POL Contact: Tomasz Kaniewski | T: +48 505 453325 W: www.chem4pol.pl E: tomasz.kaniewski@chem4pol.pl | Full range |

| Country | Company & Contact | Contact Details | Products |
|----------------------|---|--|---------------------|
| South Africa | CHEMRITE EQUIPMENT SYSTEMS (PTY) LTD Contact: John Soper | T: +27 21 511 2669 or +27 (0)82 801 1118 W: www.amtcomposites.co.za E: john.soper@amtcomposites.co.za | Full range |
| | | T: +34 (0) 961241032 W: www.gazechim.es E: ja.berja@gazechim.es | |
| Spain | Gazechim Iberica Contact: Jose Antonio Berja | T: +41 44 833 6386 W: www.schiffsfarben.ch E: info@schiffsfarben.ch | Formulated |
| Switzerland | VC Vertriebs AG Contact: Thomas Brunart | T: +90 216 447 0600 W: www.nevacomposites.com E: info@nevacomposites.com | Full range |
| Turkey | Neva Composites Contact: Nurettin Caliskan | T: +971 4341 7000 W: www.masaoood.com E: mike@mtm-industrial.com | Full range |
| United Arab Emirates | MTM Marine and Industrial Contact: Mike Powell | T: +9716 542 4116 W: www.khowahir.com/ E: info@khowahir.com | Core and Formulated |
| | Al Khowahir Contact: Leejo Philip | T: +44 (0) 2380 624555 W: www.marineware.com E: sales@marineware.com | Full range |
| United Kingdom | Marineware Ltd Contact Sales | T: +44 1638 750679 W: www.mouldlife.co.uk E: info@mouldlife.co.uk | Full range |
| | Mouldlife Contact: Sales | T: + 44 (0)2392 454509 W: https://grp-solutions.com/ E: sales@grp-solutions.com | Core and Formulated |
| | GRP Solutions Ltd Contact: Sales | | |

Gurit Contacts for North & South America

| Region | Sales Contact | Contact Details |
|-------------------------|------------------|--|
| Gurit (USA) Inc | Main Switchboard | T: +1 401 396 5008 |
| US NorthEast | Colin Kelley | T: +1 401 259 2858 E: colin.kelley@gurit.com |
| US South Central | Jacob Kimbrough | T: +1 218 409 1395 E: jacob.kimbrough@gurit.com |
| US Southeast | Dan Chamberlain | T: +1 904 471 7042 E: dan.chamberlain@gurit.com |
| US Midwest | Dan Licata | T: +1 309 241 9301 E: dan.licata@gurit.com |
| US Mid-Atlantic | Eric Miller | T: +1 704 685 3840 E: eric.miller@gurit.com |
| Wind Energy Products | Max Kipp | T: +1 512 426 1875 E: max.kipp@gurit.com |

Gurit Distributors for North & South America

| Country | Company & Contact | Contact Details |
|-------------------------|----------------------|--|
| Canada | CCP | T: +1 905 495 0606 W: www.ccpcomposites.ca |
| Mexico | Poliformas Plasticas | T: +1 800 56 19 101 E: servicio_clientes@poliformasplasticas.com.mx W: www.poliformas.com.mx |
| USA & Canada | Composites One | T: +1 800 621 8003 E: information@compositesone.com W: www.compositesone.com |
| USA | Fiberlay Inc. | E: sales@fiberlay.com W: www.fiberlay.com |
| USA | Revchem Composites | T: +1 909 877 8477 E: dgallegos@revchem.com W: www.revchem.com |

Gurit Contacts for Asia Pacific

Gurit New Zealand, Australia

| Region | Department | Contact Details |
|-------------|-------------------|---|
| New Zealand | Main Switchboard | T: +64 (0)9 415 6262 E: info-nz@gurit.com |
| | Customer Services | T: +64 (0)9 415 6262 E: customerservicenz@gurit.com |
| | Sales | T: +64 (0)9 415 6262/ +64 (0)9 415 7262 E: info-nz@gurit.com |
| | Engineering | T: +64 (0)9 970 2942 E: tony.stanton@gurit.com |
| | Marketing | E: marcom.apac@gurit.com T: +64 (0)9 970 2943 |
| Australia | Main Switchboard | T: +61 (0)7 3807 3118 E: info-au@gurit.com |
| | Customer Services | +61 (0)7 3807 3118 customerserviceau@gurit.com |
| | Sales | T: +61 (0)7 3807 3118 E: info-au@gurit.com |

South East Asia

| Region | Department | Contact Details |
|---------|----------------------------|---|
| India | Main Switchboard | T: +91 20 40059583 E: gurit.india@gurit.com |
| | Customer Support | T: +91 20 40059583 E: gurit.india@gurit.com M: +91 9867645753 |
| | Sales: Prashant Kshirsagar | E: prashant.kshirsagar@gurit.com |
| | Marketing Communications | T: +64 (0)9 970 2943 E: marcom.apac@gurit.com |
| | Engineering | +64 (0)9 970 2942 E: tony.stanton@gurit.com |
| | Main Switchboard | T: +86 (22)8210 6850 |
| China | Customer Support | T: +86 (22)8210 6850 ext 686 E: tj-customer.service@gurit.com |
| | Sales | T: +86 (22)2320 1175 E: china.sales@gurit.com |
| SE Asia | Sales | T: +64 (0)9 415 6262 / +64 (0)9 415 7262 |

GLOBAL PRESENCE

Gurit is headquartered in Switzerland, listed on the Swiss stock exchange and operates over 20 production sites and offices in Australia, Canada, China, Denmark, Ecuador, France, India, Italy, Mexico, New Zealand, Poland, Spain, Switzerland, Turkey, United Kingdom and the United States.

