



DELIVERING THE FUTURE OF COMPOSITE SOLUTIONS

ADHESIVES

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INTRODUCTION

Gurit is a technical leader in the formulation of advanced epoxy resins, and offers a range of two component epoxy adhesives and adhesive films.

SPABOND TWO COMPONENT EPOXY ADHESIVES

Spabond adhesives offer outstanding performance in numerous composite and non-composite bonding applications, and are perfect partners for Gurit's laminating products. Spabond adhesives offer ease of use, durability and a consistently high quality.

The Spabond range is supplied in various formats to suit different requirements. Cartridge applicators provide perfectly mixed adhesive to the joint, cleanly and with a minimum of waste. For larger volume applications Spabond adhesives can be mixed and dispensed using a range of mixing machines.

- Spabond™ 300 Series: structural, high dynamic load applications
- Spabond™ 500 Series: specialist substrate and applications
- Spabond™ 700 Series: rapid structural adhesives

ADHESIVE FILMS

Gurit adhesive films are designed for secondary bonding, core-bonding and for co-curing with Gurit's range of preregs and SPRINT™. They are toughened for impact resistance and peel strength, and are subject to controlled flow for maximum bond integrity.

Gurit's adhesive films are available at various weights, with or without a carrier, and are divided into SA 70 films, (for use with the SE 70 range of preregs) and SA 80 films, (for use with the SE 84 range of preregs), and can be supplied pre-coated on to Gurit preregs.

GURIT’S RANGE OF ADHESIVE MATERIALS

| SYSTEM | DESCRIPTION | TYPICAL APPLICATIONS | HARDENER | MIX RATIO | WORKING TIME | CLAMP TIME* | SAG | MAX TEMP | PAGE |
|---|--|--|--|-----------------|---------------------------------------|--------------------------------------|-----------|----------------------|------|
| Spabond™ 300 Series: structural, high dynamic load applications | | | | | | | | | |
| Spabond 335 | Toughened gap filling epoxy adhesive system. | Thin bond-lines and gap-filling | Fast (Black) Slow (Grey) Extra Slow | 2:1 (by volume) | 10 - 30 mins 1 – 2hrs 6 – 10hrs | 3 - 6hrs 8 – 9hrs 10 – 25hrs | 5 - 10mm | 65°C | 4 |
| Spabond 340LV HT | High strength, rubber toughened, fast dispense. | Bonding of Hull-to-deck, bulkheads & frames, Wind Energy and Industrial | Fast (Red) Slow (Purple) Extra Slow (Blue) | 2:1 (by volume) | 20 – 40mins 1 - 2hrs 2.5 – 6hrs | 2 – 5hrs 10 – 20hrs 15 – 35hrs | 20 – 25mm | 68°C | 4 |
| Spabond 345 | Highly sag resistant. | For highest performance marine projects | Fast (Black) | 2:1 (by volume) | 20 – 40mins 2 - 3hrs 3 – 6hrs | 3 – 8hrs 7 – 16hrs 10 – 25hrs | 15 – 30mm | 75°C 85°C 80°C | 5 |
| Spabond™ 500 Series: specialist substrate and applications | | | | | | | | | |
| Spabond 5 Minute | Tacking and secondary bonding. | Used to tack panels in place whilst the structural adhesive is curing | | 1:1 (by volume) | 90 seconds | 15 mins | 10 - 15mm | 55°C | 5 |
| Spabond 540 | High elongation, long bonding times. | General purpose adhesive for bonding polyester FRP boats | Fast (Red) | 1:1 (by volume) | 30 - 40mins | 2 – 5mins | 20 – 30mm | 56°C | 6 |
| | Standard (Purple) | | 1 – 2hrs | | 10 – 20mins | 58°C | | | |
| | Low viscosity resin option for easier application. | | Slow (Green) | | 3 – 6hrs | 20 – 30mins | | 52°C | |
| | | | Extra Slow (Blue) | | 6.5hrs | tbc | | TBC | |
| Spabond 568 | Core bonding adhesive | Core Bonding & Splicing for hull and deck sandwich panels. Bonding bead & cove cores | | 2:1 (by volume) | 5 – 6 hrs | 24 hrs | 10mm | 65°C | 6 |
| Spabond 570 | Easy mixing/smooth spreading. Bonds all woods | General purpose adhesive for bonding wood and aged polyester FRP | | 1:1 (by volume) | 90 mins | 10 - 15 hrs | 10 -20mm | 55°C | 7 |
| Spabond™ 700 Series: rapid structural adhesives | | | | | | | | | |
| Spabond 730 | High strength, rapid curing. General purpose adhesive. | Small bond areas and repairs | | 1:1 (by volume) | 3 – 5 mins | 1 – 2 hrs | 10 - 15mm | 60°C | 7 |

*Clamp time is determined as the time to reach a cleavage strength of 2kN

| PRODUCT NAME | MAIN FEATURES | TYPICAL APPLICATIONS | LOWEST CURE | | RECOMMENDED PROCESSING METHOD | MAX T _{g1} BY DMA (°C) | SHELF-LIFE | | TOUGHENED | PAGE |
|---------------|--|---|-------------|------------|----------------------------------|---------------------------------|--------------|--------------|-----------|------|
| | | | TEMP (°C) | TIME (HRS) | | | MTHS @ -18°C | DAYS @ +21°C | | |
| Adhesive Film | | | | | | | | | | |
| SA 70 | ↪ Consistent bond-line thickness and weight | Co-cure with 70°C prepregs for core and high strength adhesive bonding applications | 70 | 16 | Autoclave Pressed Vacuum Bagging | 110 | 24 | 30 | Highly | 8 |
| SA 80 | ↪ High strain to failure, high toughness ↪ Handling & no mixing convenience | Co-cure with 80°C prepregs for core and high strength adhesive bonding applications | 80 | 12 | | 100 | 24 | 60 | Highly | 8 |

Spabond 335
Epoxy Adhesive System

High strength 

Simple mix ratio (volume) **2:1**

- Temperature performance up to 110°C
- Formulated for bond lines up to 5mm
- High Strength & Toughness
- Available in drums and cartridges

INTRODUCTION

Spabond 335 is a toughened, high performance, thixotropic adhesive, with a simple 2:1 by volume mix ratio. It is a very versatile system suitable for bonding a wide range of materials. The product has a grease-like consistency, and can be applied in thicknesses of up to 5mm at 20°C on vertical surfaces, without the risk of drainage.

With its inherent thixotropic characteristics, Spabond 335 usually needs no further filler addition for most applications.


TYPICAL APPLICATIONS

Thin bond-lines and gap-filling

PACK SIZES & AVAILABILITY

Spabond 335 is available in pails.

Spabond 340LV HT
Epoxy Adhesive System

Over 3.5hrs working time 

GL certified 

Simple mix ratio (volume) **2:1**

- Lower density than glass filled adhesives
- High strength and toughness industrial adhesive
- Low exotherm and shrinkage
- Range of working times / clamp times
- Higher thermal performance & faster cure
- Excellent gap filling properties
- Cartridge and mixing machine dispense
- Temperature performance up to 90°C

INTRODUCTION

The latest Spabond 340 formulation is a high performance adhesive designed for bonding large structures. It is a cost-effective system with good thermal and mechanical properties.

The new improved formulation gives higher thermal performance and allows faster curing, making this product ideal for bonding large composite structures where minimising cure times and increasing productivity is of value. The components are pigmented to give a visual indication of mix quality, which is a useful feature when mixing by hand or with a machine. The system has a simple 2:1 mix ratio by volume.

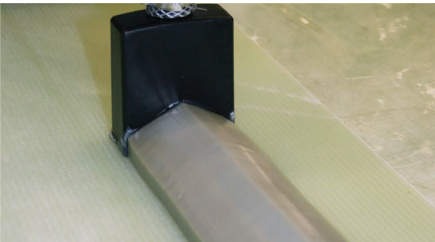
TYPICAL APPLICATIONS

Large structures such as yacht hulls and wind turbine blades.

PACK SIZES & AVAILABILITY

Spabond 340LV HT is available in 400ml cartridges and 200/200kg resin/hardener quantities for machine mixing/dispense.

Cartridge guns and mix heads are also available on request.



Spabond 345
Epoxy Adhesive System

GL certified 

High strength 

Simple mix ratio (volume) **2:1**

- High strength and toughness
- Germanischer Lloyd certified
- Designed for cartridge and mixing machine dispense
- Three hardener speeds give a range of working times / clamp times
- Low exotherm and shrinkage
- Excellent gap filling properties
- Lloyds Register certified

INTRODUCTION

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.

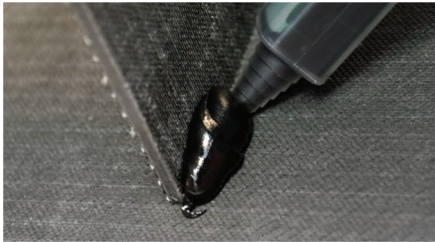
The product has a 2:1 mix ratio by volume. To aid mixing, the components are pigmented to give visual indication of mix quantity. The Fast hardener is coloured purple, but there is also a black version. This is useful for improving the cosmetic appearance of bondlines involving exposed carbon composites.

TYPICAL APPLICATIONS

For highest performance marine projects.

PACK SIZES & AVAILABILITY

Spabond 345 is available in 400ml cartridges, pails and drums.



Spabond 5-Minute
Tacking and Secondary Bonding Adhesive

5 minute adhesive 

Simple mix ratio **1:1**

- 5 minute adhesive
- Can be used alongside other Spabond products
- Ideal when used as an “extra hand” in assembly
- Available in cartridges

INTRODUCTION

Spabond 5-Minute uses Gurit’s fast-setting technology. It combines outstanding bonding speed with a simple 1:1 by weight and by volume mix ratio. This thixotropic system is ideal for general bonding and repair work on a wide range of materials.

Components bonded with Spabond 5 Minute demonstrate high bond strengths and can be handled after a very short period of time. Spabond 5-Minute can be used in conjunction with other Spabond products as a “spot weld” system in situations where the use of conventional clamps is not possible.

TYPICAL APPLICATIONS

Used to tack panels in place whilst the structural adhesive is curing.

PACK SIZES & AVAILABILITY

Spabond 5-Minute is available in individual 310ml resin and hardener cartridges or 400ml combined cartridge.

Spabond 540

Modified Epoxy Adhesive System

Up to 5hrs
working time



High
elongation



- Suitable for bonding polyester and epoxy parts
- Excellent bond to polyester & epoxy substrates
- Sag resistance of up to 30mm on a vertical face
- Resin and Hardener pigmented to give a visual indication of mix quality
- Exceptional impact toughness & peel strength
- Low exotherm & shrinkage in thick bond-lines
- Wide range of hardeners, from Fast Extra Slow

INTRODUCTION

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 for bond-line <20mm. Spabond 540LV is available in drums, pails and cartridges.

TYPICAL APPLICATIONS

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.

PACK SIZES & AVAILABILITY

Spabond 540 is available in 600ml cartridges and 20/18.4kg resin/hardener quantities for bulk mixing/dispense. Cartridge guns and mix heads are also available on request.



Spabond 568

Epoxy Core Bonding Paste

DNV certified



Long
working time



Simple mix
ratio (volume)

2:1

- Low cured density (0.68 g/cm3) core bonding paste
- Long working time for large structures
- Suitable for all applications where lightweight core is used
- DNV Certified

INTRODUCTION

Spabond 568 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 is uniquely filled and can be applied in thicknesses of up to 6mm at 20°C on vertical surfaces without the risk of drainage.

Resin and hardener are both colour coded to ensure consistency of the mix. The resin is light green and the hardener pale brown leading to a neutral grey colour when fully mixed.

TYPICAL APPLICATIONS

With the fillers used in its formulation, Spabond 568 is easy to sand and can be used for strip planking with wood or foam strips.

PACK SIZES & AVAILABILITY

Spabond 568 is available in up to 17.5/7.7 resin/hardener quantities.

Spabond 570

Epoxy Adhesive System

Excellent
Health & Safety



Simple mix
ratio (volume)

1:1

- Simple 1:1 mix ratio by weight and volume
- High tolerance to off ratio mixing
- Highly sag resistant - to 15mm on a vertical surface
- Tolerant of very high humidity
- Excellent Health and Safety
- Excellent application characteristics

INTRODUCTION

Spabond 570 has been formulated to give the optimum mechanical and working properties for bonding teak decking to a composite hull. Designed specifically for this purpose, it is the ideal adhesive for bonding down teak decks.

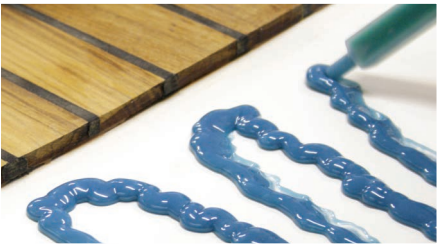
In use, Spabond 570 has a tolerant 1:1 mix ratio and a thixotropic, gel type consistency. This makes Spabond 570 very easy to measure, mix and apply. Spabond 570 is non-corrosive, solvent free and cures at room temperature. When cured, Spabond 570 is tough, highly adhesive and very strong and generates green strength rapidly (does not require post curing).

TYPICAL APPLICATIONS

Teak deck bonding.

PACK SIZES & AVAILABILITY

Spabond 570 is available in up to 20/5kg resin/hardener quantities.



SPABOND 700 SERIES

Spabond 730

Rapid Structural
Adhesive System

Rapid cure



RINA
approved



High
strength



- Reduced clamp time structural adhesive
- Available in 400ml 2 component dual cartridges
- Gels in 10 minutes, solid in 2 hours, full properties after an overnight cure at ambient
- High strength and toughness

INTRODUCTION

Spabond 730 is a fast curing structural adhesive designed for applications where reduced clamp times are important. It has a simple 1:1 by weight and volume mix ratio.

It can be used to bond together a wide variety of dissimilar materials and has been designed to give a durable high strength bond. Spabond 730 Rapid Structural Adhesive is available in a simple, easy to use 400ml cartridge.

TYPICAL APPLICATIONS

Fit-out, finishing and repair.

PACK SIZES & AVAILABILITY

Spabond 730 is available in 400ml cartridges. Cartridge guns and mix heads are also available on request.

SA 70Toughened Epoxy
Adhesive Film70°C cure
temperatureIdeal for
core bondingHigh
toughness

- Low temperature cure
- Compatible with SE 70 preregs
- Controlled flow for maximum bond integrity
- Designed for bonding prepreg skins to honeycomb and certain foam cores

INTRODUCTION

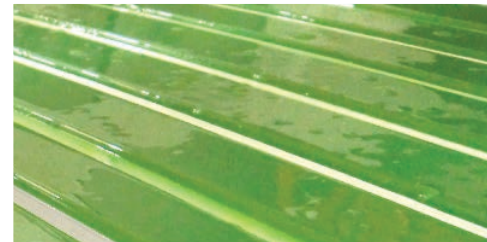
SA 70 is an adhesive film that is designed for secondary bonding, core-bonding and for co-curing with the range of Gurit preregs. It can be cured at temperatures as low as 70°C, or can be more quickly cured at temperatures above 120°C. The product has an out-life of 28 days.

TYPICAL APPLICATIONS

Suitable for bonding aluminium or foam cores in conjunction with SE 70 prepreg or Ampreg laminating systems.

PACK SIZES & AVAILABILITY

SA 70 is available in fibre weights up to 400g resin films with a glass carrier and 300g without a glass carrier.

**SA 80**Toughened Epoxy
Adhesive Film80°C cure
temperatureIdeal for
core bondingHigh
toughness

- Low temperature cure
- Designed for bonding prepreg skins to honeycomb and certain foam cores
- Controlled flow for maximum bond integrity
- Toughened for impact resistance and peel strength

INTRODUCTION

SA 80 is an adhesive film that is designed for secondary bonding, core-bonding and for co-curing with the range of Gurit preregs. 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 out-life of 56 days at room temperature.

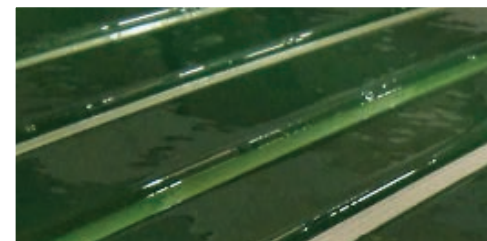
TYPICAL APPLICATIONS

Suitable for bonding aluminium or foam cores in conjunction with SE 84, SE 85 & SE 90 prepreg or Ampreg laminating systems.

PACK SIZES & AVAILABILITY

SA 80 is available in weights up to 300g resin films with or without* a glass carrier.

*150 and 250g only

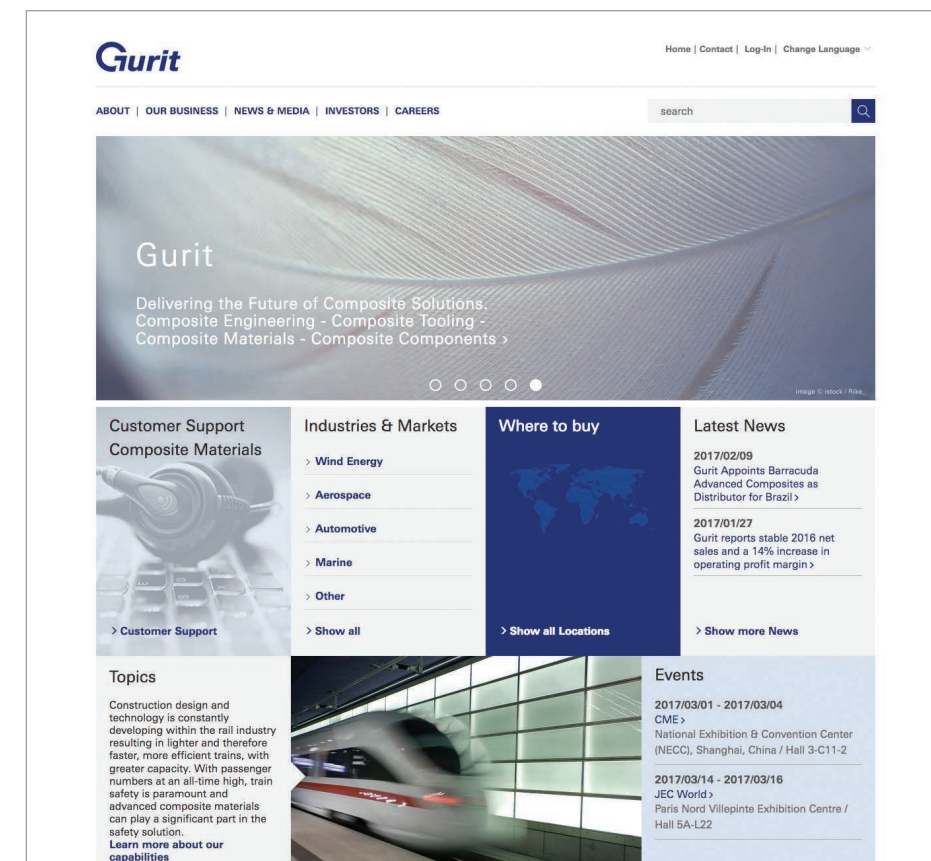
**TECHNICAL INFORMATION AND PRICING**

For more detailed information on adhesives, as well as the complete Gurit product portfolio, please visit:

www.gurit.com to view the following:

- Product Data Sheets
- Corporate Videos
- News / Case Studies
- Composite Guides
- Events Schedules
- Representatives Contact Details
- Product Brochures

For pricing or other enquiries, please contact gurit@gurit.com



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Product Datasheets



Case Studies

