

CRYSTIC<sup>®</sup>

# CRESTABOND<sup>®</sup>

— STRUCTURAL ADHESIVES —



Introducing Primer-Less Universal Bonding



COMPOSITES METALS PLASTICS



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Manufactured in the E.U.

# CRESTABOND<sup>®</sup>

— STRUCTURAL ADHESIVES —

Scott Bader are a global company with over 25 years experience in designing high quality adhesives and over 60 years experience of composites manufacturing.

Scott Bader benefits from an industry-leading technical support team available to assist customers with technical advice.

Scott Bader also boasts in-house laboratory testing facilities allowing for rapid response to customer requests.

The Crestabond<sup>®</sup> range of adhesives is a range of 1:1 and 10:1 MMA structural adhesives unique to the market due to the primer-less technology.

The Crestabond<sup>®</sup> range of adhesives benefits from a range of working times to suit different applications.

# Market Applications

✓	MARINE	from kayaks to super yachts
✓	LAND TRANSPORTATION	buses, coaches, trains and trucks
✓	BUILDING & CONSTRUCTION	doors, windows and cladding
✓	WIND ENERGY	blades, housing and nacelles
✓	RECREATIONAL VEHICLES	motorhomes and caravans
✓	AGRICULTURAL VEHICLES	tractors, diggers and combine harvesters

## Guide To Bonding

### CHECK FIRST

- ✓ Product is within shelf life
- ✓ Cartridge has been stored correctly
- ✓ No obvious defect or damage to cartridge
- ✓ No blockages within the cartridge
- ✓ Correct static mixing nozzle is being used
- ✓ Adhesive and activator are mixing correctly -
  - 10:1 Grey should be light grey in colour
  - 10:1 Black should be black in colour
  - 1:1 range should be off white in colour

### KEY POINTS

- Higher or lower working temperatures will cause the open time to decrease or increase
- Static mixers must always be discarded after use
- After specified fixture time, Crestabond will achieve approximately 85% strength, after 24 hours full cure will be achieved
- Operating temperature of Crestabond is from -50°C up to 100°C

### 3 Main groups of substrates to bond to

#### METALS

- Some surface cleaning is required – remove any obvious dirt, grease, oxidation and other contaminants with either acetone, MEK or IPA
- Galvanised or zinc coated metals should be bonded using the Crestabond 1:1 range
- When bonding cold rolled steel (CRS), ensure that the substrate has been cleaned, abraded and then cleaned once more in order to achieve the best results

#### COMPOSITES

- Some surface cleaning is required – remove any obvious dirt, grease, oxidation and other contaminants with either acetone, MEK or IPA
- Gelcoat substrates need to be cleaned and may require a light abrasion with a 100-140 grit sandpaper
- All composites can be bonded with Crestabond

#### PLASTICS

- Some surface cleaning is required – remove any obvious dirt, grease, oxidation and other contaminants with either acetone, MEK or IPA
- Plastics that cannot be bonded with the Crestabond range are:

Polyethylene	Polypropylene
Nylon	Polytetrafluoroethylene
Polyacetals	

# CRESTABOND<sup>®</sup>

— STRUCTURAL ADHESIVES —

## Crestabond<sup>®</sup> features ..... Customer benefits

✓	<b>PRIMER-LESS ADHESIVES</b>	▶	<i>Dramatically enhances production efficiency and reduces consumable costs</i>
✓	Minimal surface preparation	▶	<i>Reduces dust emissions and preparation time</i>
✓	Excellent fatigue and impact resistance	▶	<i>Confidence in the longevity of the finished product</i>
✓	Range of working and fixture times	▶	<i>Optimise production cycles to reduce manufacturing costs</i>
✓	Good gap filling capability	▶	<i>Adhesive can be used in multiple applications</i>

## Crestabond Dispensing Equipment

The Crestabond cartridges can be applied using a manual or pneumatic gun. Suitable manual and pneumatic guns plus static mixers, are available to purchase from Scott Bader.



Pails and drums can be dispensed using an automated 1:1 or 10:1 dispensing machine.



Scott Bader technical support can provide advice on appropriate dispensing equipment.







# Adhesive Selection Guide

Selection of the appropriate product is essential for long-term adhesion and durability.

Product	Description	Colour	Mix ratio by volume	Viscosity (cP)	Working Time (mins)	Fixture Time (mins)	Tensile Elongation (%)	Tensile Strength (MPa)	Tensile Modulus (MPa)	Gap Fill (mm)
M1-05	Universal Bonder	Grey or Black	10:1	100,000 - 140,000	4 - 7	12 - 18	70	14 - 17	400 - 600	1 - 15
M1-20	Universal Bonder	Grey or Black	10:1	100,000 - 140,000	14 - 22	25 - 35	70	16 - 19	600 - 850	1 - 25
M1-30	Universal Bonder	Grey or Black	10:1	200,000 - 240,000	25 - 35	60 - 80	>100	17 - 20	750 - 1000	1 - 50
M1-60	Universal Bonder	Grey	10:1	200,000 - 240,000	50 - 70	150 - 180	>100	16 - 18	650 - 850	1 - 50
M1-90	Universal Bonder	Grey	10:1	200,000 - 240,000	80 - 100	210 - 240	>100	16 - 18	650 - 850	1 - 50
M7-05	Universal Bonder	Off White	1:1	30,000 - 70,000	4 - 7	18 - 22	44	23 - 26	1300 - 1700	1 - 5
M7-15	Universal Bonder	Off White	1:1	30,000 - 70,000	10 - 20	30 - 45	43	20 - 23	1400 - 1700	1 - 5

Based on laboratory results

## Using the Adhesive Selection Guide

Step 1

Choose the adhesive with optimal working and fixture times.



## Pack Sizes

10:1 Range
400ml coaxial cartridges
20 litre (nominal) pails
200 Litre (nominal) drums

1:1 Range
400ml side by side cartridges
20 litre (nominal) pails
200 Litre (nominal) drums

## How to order Bulk Packed materials

Product	Adhesive (Pails or Drums)	Activator (Pails only)
M1-05	M1-05 Adhesive	Activator 1
M1-20	M1-20 Adhesive	Activator 1
M1-30	M1-30 Adhesive	Activator 1
M1-60	M1-60/90 Adhesive	Activator 2
M1-90	M1-60/90 Adhesive	Activator 3
M7-05	M7-05 Adhesive	M7-05/15
M7-15	M7-15 Adhesive	M7-05/15

GRP	STAINLESS STEEL	ALUMINIUM	POWDER COATED STEEL	COLD ROLLED STEEL	ABS	ACRYLIC	POLYCARBONATE	GALVANISED
✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	
✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	
✓✓	✓	✓✓	✓	✓	✓	✓	✓	
✓✓	✓	✓	✓	✓	✓	✓	✓	
✓✓	✓	✓	✓	✓	✓	✓	✓	
✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	✓✓
✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	✓✓

Multiple ticks denote exceptional suitability

Step 2

Check the adhesive bonds the required substrates.

Substrates

COMPOSITES

METALS

PLASTICS

GALVANISED

Step 3

Arrange a demonstration or trial by contacting your local Scott Bader representative or email [crestabond@scottbader.com](mailto:crestabond@scottbader.com)



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