

Structural **Adhesives**



Under the umbrella of IPS Adhesives, SCIGRIP brand comes together with other adhesive brands Integra, Unika and Arjay to offer a wide range of adhesive chemistries and bonding solutions with production and distribution facilities in the USA and Europe.

For over 65 years, we've invested in innovation to provide cutting edge formulations of Methacrylate adhesives that are unrivalled for their combination of strength, toughness and ease of use.

SCIGRIP brand manufactures a wide range of high performing methacrylate adhesives, for use in serving the transportation, marine and construction industries.

SCIGRIP products are used in a multitude of structural applications all around the world, from composite bridges to product assembly to maritime applications, SCIGRIP is an industry favourite for bonding advance composites with little or no surface preparation.

Our SubstrateMatch database system makes it easy to find a product that fits your specific bonding needs.

Scigrip delivers unsurpassed value and unmatched flexibility to ensure you receive the right solution for your project. Our technical support team will partner with you to ensure our products are adapted to fit your needs. We are ISO9001 compliant, accredited by SGS and ANAB, and hold the Greenguard certification to help lower VOC's, reduce air pollution and risk of chemical exposure. We also hold multiple third party certifications including Lloyd's Register, UL and DNV GL to ensure product performance in key applications. We are known worldwide for our quality performance and service including 24 hour technical support.



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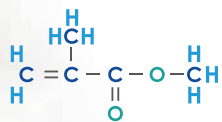
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MMA Technology

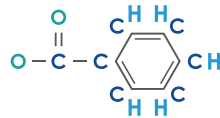
Strong focus to ensure specialised and custom formulations

The SCIGRIP® MMA structural adhesive range offers a unique combination of chemistries that tackle the main challenges for adhesives:

- ✓ Toughness
- ✓ Surface adhesion
- ✓ Cure speed control



Methyl Methacrylate
MMA



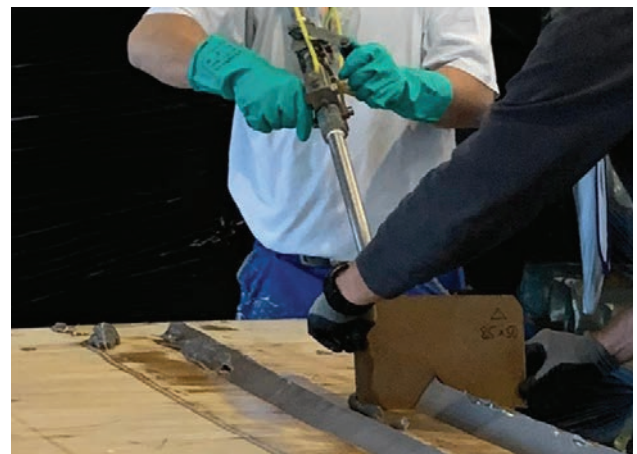
Peroxide
(Free Radical)



Elastomeric
Tougheners



Impact
Modifiers

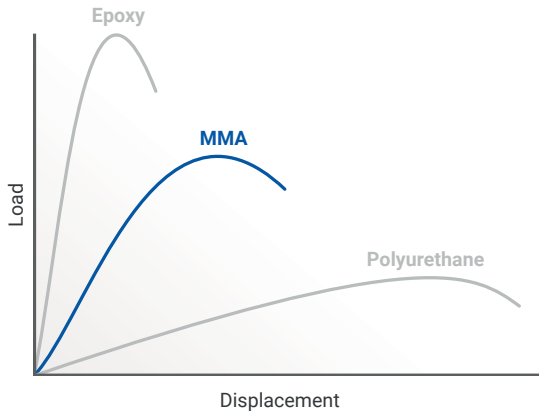


SCIGRIP offers two MMA formulations – the established 1:1 range and the newer 10:1 range. Both offer different performances. For example, 1:1 would mean 200ml of Part A (adhesive) to 200ml of Part B (activator). The 1:1 adhesives have higher strength than the 10:1 products, but lower elongation.

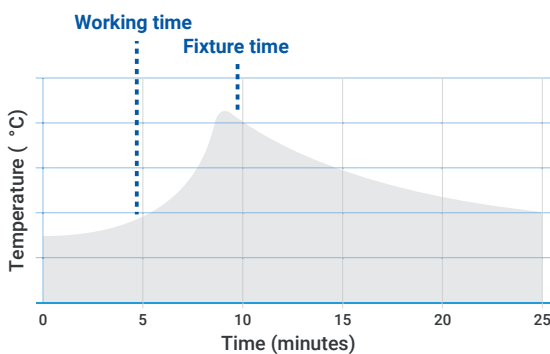


SCIGRIP advanced MMA technology bridges the gap between epoxies and polyurethane providing all the benefits of toughness, fatigue resistance and high peel strength while maintaining the highest lap shear performance.

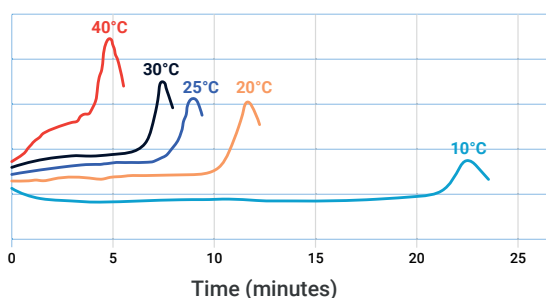
The graph below shows MMA with high strength and good flexibility.



The unique advantage of SCIGRIP MMA's is their ability to cure and reach their full strength at room temperature, as a result of the exothermic reaction by which they are formed.



SCIGRIP MMA's offer working times of 2 to 90 minutes and fixture times of between 6 minutes to 4 hours – simply by changing the activator. The application time can then be micro-adjusted by changing the ratio of components to optimise productivity on warm or cool days.



Research and Development - Focused on you our partner

SCIGRIP's unique patented MMA technology unlocks adhesive properties that were previously impossible with traditional formulations. Our dedicated research and development team works in true partnership with you to address complex challenges: new application processes, emerging substrates, enhanced assembly performance, and improved productivity.

Comprehensive Team and Lab Support:

✓ **Technical Service Support** – We help you create specifications, confirm requirements, and ensure quality bonding. Our team is available to be hands-on at your facility for application and training support.

✓ **Development Chemists** – Our specialists assist with product testing, certifications, modifications, and new product development tailored to your specific needs.

✓ **Full-Scale R&D Application Lab** – We work hand in hand with you to solve complex application problems, develop custom-made solutions, and rigorously test our products within your processes. Turn-around time is typically 1-2 weeks for average projects, with faster delivery available when needed.

At SCIGRIP, innovation is driven by collaboration—your challenges inspire our solutions..

Key Substrates

Specialised focus



Metals

SCIGRIP has a range of MMA's that are perfect for bonding metals. Metal jointing by welding or fastening is commonplace throughout a wide range of industries. In many applications these traditional methods can be replaced by using MMA adhesive which will:

- ✓ Increase productivity by reducing manufacturing steps – eliminates drilling and sealing
- ✓ Increase stress distribution by the adhesive benefit of elongation, strength and fatigue resistance
- ✓ Decrease surface marks and leaks by the adhesive benefit of reduced readthrough and enhance design capabilities.

SCIGRIP range of metal bonding MMA's are formulated so that there is no need for a primer. No priming is perfect for bonding of stiffeners or ribs to a wide range of materials, it enables production to be leaner and quality is also improved by avoiding potential priming errors.

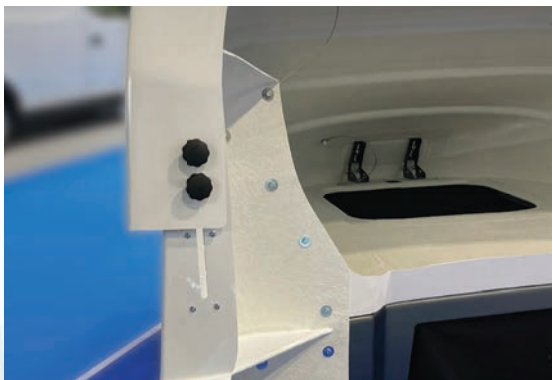


Dissimilar Material Bonding

SCIGRIP range of MMA's are perfect when joining two different substrates. Traditional jointing is always difficult with different substrates and SCIGRIP MMA's offer the perfect solution. Using MMA adhesive will:

- ✓ Reduce joint failure rate – traditional fixings can cause leaks and lead to increases in repair time
- ✓ Increase freedom of design and aerodynamics – face fixings are unsightly and hinder correct airflow movement
- ✓ Eliminate surface preparation – adhesives are primerless to most substrates

SCIGRIP range will bond together a wide variety of metals (aluminium, stainless steel, coated metals etc.), composites (polyester resins, carbon fibre epoxy systems, vinyl ester resins etc.) and plastics (ABS, PVC, Acrylics etc).



Composites

SCIGRIP range of MMA's are perfect when joining composite materials for example FRP which is widely used in the automotive, building and marine industries. A very important topic at the moment is light weighting, the concept used to create lighter, more corrosion resistant, fuel efficient vehicles. Bonding composites to make strong, complex but lightweight designs and avoid the use of metal reinforcements and fixings is a rapidly growing market. Using MMA on composites will:

- ✓ Bond a wide range of composites with our adhesive complimenting or supporting the composite strength
- ✓ Reduce bond line read through on post finishing requirements
- ✓ Offer excellent fatigue, impact and environmental resistance properties including harsh environments.

Composite components often require thick glue lines to cope with dimensional inaccuracies. SCIGRIP has unique technology to permit selected MMA products to support up to 39mm bondline thicknesses without boiling.



Plastics

SCIGRIP range of MMA's include products to join thermoplastics (ABS, Acrylics, PVA/CPVC/Styrenics) and Composites (Polyester, cellulose acetate butyrate, polycarbonate & DCPD modified) for extruded cell cast and continuous cast as well as moulded parts and some cross linked sheet. Using MMA on plastics:

- ✓ Offers good clarity retention which is important for the sign industry and in manufacturing and repair of aquariums, museum quality cases and other plastic fabrication industries
- ✓ Reduce post finishing requirements
- ✓ Excellent fatigue, impact and shock load resistance

Low Surface Energy Substrates

SCIGRIPs new MMA SG400LSE, now bonds polyolefins with no surface preparation required. It bonds polypropylene, polyethylene and will cross bond to metals including aluminium and stainless steel.

- ✓ Offers no surface preparation, saving time and cost during the assembly process
- ✓ Cross bonding polyolefins with metals.

Markets

Strong focus to ensure specialised and custom formulations

SCIGRIP's MMA technology spans a wide range of markets and applications. In order to ensure we provide the very best solutions while addressing new and rapidly changing advancements in design and technology.

We keep our market focus on Transportation, Rail and Marine and work with partners in these areas.



Automotive & transportation

- ✓ Hybrid and electric vehicles
- ✓ Interior and exterior
- ✓ Components, repair and aftermarket

Train & Tram

- ✓ Interior & exterior
- ✓ Applications for interior panels, composite parts and dashboard assembly
- ✓ Applications for exterior window frame bonding, roof structure and body panels

Marine

- ✓ Applications for hull interior reinforcement, bonding deck to hull, bonding transoms
- ✓ Hardtop bonding and consoles
- ✓ Mounting hardware, catches and composite parts, filling strakes etc.



Applications

Train applications

Interior Panels

Durable, fire-tested composite panels

Bond using SG300/SG5000

- Fast handling
- Minimal preparation
- EN45545-2 compliant
- Reduce weight and minimize fasteners

Roof Structure

Weather-resistant composites/metals

Bond using SG300/SG5000

- Non-sag
- Watertight
- Ensures adequate working time for assembly of large parts & fast curing for next steps

Interior Parts

Lightweight FRP for durability & aesthetics

Bond using SG300/SG5000

- Fast dissimilar material bonding
- Minimal surface preparation

Flooring

Durable, fire-tested composite panels

Bond using SG230HV/SG300

- Noise-dampening
- Structural stiffening
- Impact-resistant

Dashboard Assembly

Durable, aesthetic composite dashboard

Bond using SG300/SG400LSE

- Dissimilar bonds
- Minimal preparation

Rail Doors

Durable, environmental resistant metals and composites

Bond using SG230HV/SG300

- Weather-resistant dissimilar bonding

Bracket Assembly

Metal support for underframe

Bond using SG300/SG5000

- Rivet/screw and weld replacement
- Corrosion-resistant

Body Panels

Strong aluminum/FRP, impactresistant

Bond using SG230HV/SG300

- Dissimilar bonds
- Vibration-resistant

Window Frames

Lightweight aluminum/FRP frames to absorb vibration

Bond using SG230HV/SG300

- Weatherproof sealing
- Impact-resistant



Agriculture applications

Roof Bonding

Fibre-reinforced plastic or aluminium. Must transfer roof load evenly, eliminate stress concentrations and seal watertight

Bond using SG230HV/SG300

- Long open time
- Large beads required due to scale of assembly

Door Bonding

Aluminium or FRP/GRP used to deliver aesthetics, strength and impact resistance

Bond using SG230HV/SG300

- Strong
- Weather-resistant bonds for panels subject to impact and vibration

Trim Bonding

Composite materials for lower weight, durability and aesthetics

Bond using SG300/SG400LSE

- Strong bonding of dissimilar materials for small parts

Grain Tank

Steel or aluminium used to provide strength and durability for load-bearing applications

Bond using SG230HV/SG300

- Requires exceptionally strong bonds for added stability and durability for large structures

Cabin & Dashboard Assembly

Composite materials for lower weight, durability and aesthetics

Bond using SG300/SG400LSE

- Requires bonding of dissimilar materials

Chassis

Steel or aluminium providing strength for load-bearing applications

Bond using SG230HV/SG300

- Exceptionally strong bonds
- Stability and durability of large structures



Window Frames

Lightweight aluminium or composite, providing impact/vibration resistance

Bond using SG230HV/SG300/SG800

- Dissimilar material bonds
- Weatherproof sealing

Reel

Steel or aluminium used for strength, vibration and impact resistance

Bond using SG230HV/SG300

- Bond must be able to withstand harsh conditions and constant vibration

Floor Panel Bonding

Steel or aluminium used for strength and impact resistance to secure floor to frame

Bond using SG300

- Strong metal bonding
- Durability to sustain consistent impact and vibration

Engine Compartment

Aluminium or FRP/GRP to withstand high temperatures without adhesive failure

Bond using SG230HV/SG300/SG800

- Dissimilar material bonding
- High temperature resistance

Bus applications

Roof Bonding

Transfers roof load evenly, eliminates stress concentrations and seals watertight

Bond using SG230HV/SG300

- Long open time
- Large beads required due to scale of assembly

Interior Parts

Lightweight thermoset components such as luggage racks, seats, ceilings

Bond using SG300/SG400LSE/SG5000

- Fast dissimilar material bonding
- Low surface energy plastics for efficient assembly

Engine Cover

High-temp aluminium/FRP

Bond using SG800

- Dissimilar bonds
- High-temperature durability

Luggage Doors

Durable and lightweight aluminium/FRP

Bond using SG230HV/SG300

- Impact resistance
- Corrosion resistance

Window Frames

Lightweight aluminium/FRP for fuel efficiency

Bond using SG230HV/SG300/SG800

- Dissimilar material bonds
- Weatherproof sealing

AC Cover

Protects AC unit, lightweight aluminium/FRP

Bond using SG230HV/SG300/SG800

- Dissimilar materials
- Temperature resistance

Roof Hatch

Variety of materials for weather resistance

Bond using SG230HV/SG300/SG800

- Dissimilar material bonds
- Weatherproof

Front Dash & Panel

Lightweight thermoset composite parts

Bond using SG300/SG400LSE/SG5000

- Fast dissimilar material bonding including low surface energy plastics

Front & Rear Shell

Stainless steel frame ensures structural integrity, built to sustain vibration and flex

Bond using SG230HV/SG300

- Impact resistant
- Fatigue resistant

Front Bumper & Grille

Variety of composites for Door Panels: strength, low weight and impact

Bond using SG230HV/SG300

- Strong
- Weather-resistant
- Impact and corrosion resistant bonds

Door Panels

Lightweight, impact-resistant aluminium/FRP panels

Bond using SG230HV/SG300

- Strong
- Weather-resistant bonds
- Quick strength build up reduce assembly cycle time

Side Panels

Large aluminium/FRP surfaces for aesthetics and strength

Bond using SG300/SG5000

- Non-sag
- Large bead
- Minimal surface preparation
- Various curing speeds up to 90 mins



Construction vehicle applications

Roof Bonding

Fibre-reinforced plastic or aluminium. Must transfer roof load evenly, eliminate stress concentrations and seal watertight

Bond using SG230HV/SG300

- Long open time
- Large beads required due to size of assembly

Boom Arm

Steel structure connecting the cab to the bucket

Bond using SG230HV/SG300

- Exceptionally strong bonds for added stability and durability

Brackets

Structurally bonded metal brackets/supports throughout the vehicle

Bond using SG300

- Exceptionally strong bonds for stability, durability and longevity

Trim Bonding

Composite materials for lower weight, flexibility and aesthetics

Bond using SG300/SG400LSE

- Requires strong bonding of dissimilar materials for small parts

Door Bonding

Aluminium or FRP/GRP used to deliver aesthetics, strength and impact resistance

Bond using SG230HV/SG300

- Strong
- Weather-resistant bonds
- Ideal for panels subject to impact and vibration

Window Frames

Lightweight aluminium or composite, providing impact/vibration resistance

Bond using SG230HV/SG300/SG800

- Dissimilar material bonds
- Weatherproof sealing

Chassis

Steel or aluminium providing strength for load-bearing applications

Bond using SG230HV/SG300

- Exceptionally strong bonds
- Stability and durability of large structures

Engine Compartment

Aluminium or FRP/GRP to withstand high temperatures without adhesive failure

Bond using SG230HV/SG300/SG800

- Dissimilar material bonding
- High temperature resistance



Marine applications

Bulkhead and Stringer

Key structural elements that add strength and rigidity to the hull. Made from composites, plywood and metals

Bond using SG230HV/SG300/SG2000

- Withstand vibration, dynamic loads, and harsh marine conditions

Console Assembly

Designed with composite materials for lower weight, durability and aesthetics

Bond using SG300/SG350L/SG400LSE

- Requires bonding of dissimilar materials
- Limited preparation

Mounting Hardware

Primarily made of steel or aluminium and affixed to various boat surfaces to secure dock lines and ropes

Bond using SG100/SG300

- Bond dissimilar materials
- Ideal for demanding and consistently harsh environments

Transom

Made from aluminium or FRP/ GRP to provide strength and support to the hull and the rear of the boat

Bond using SG230HV/SG300/SG2000

- Strong bonding in harsh environmental conditions
- For parts subject to constant impact and vibration

Flooring

Aluminium and composites are the preferred materials for strength, low weight and noise/ vibration resistance

Bond using SG230HV/SG300/SG2000

- Bonding of dissimilar materials
- Provides impact resistance
- Noise dampening
- Structural stiffening

Interior Parts

Primarily comprised of FRP/ GRP and plastic parts for durability, light weight and aesthetics

Bond using SG300/SG350L/SG400LSE

- Strong
- Fast sealing
- Bonding of dissimilar materials with no sagging or surface preparation
- Lightweight and aesthetically pleasing

Hull

Most commonly made of glass-reinforced plastic (GRP) or aluminium alloys, the hull is responsible for keeping the boat afloat

Bond using SG230HV/SG300/SG2000

- Offers strength
- Impact and environmental resistance

Window Frame

Steel, aluminium or FRP/GRP window frames of various sizes built to secure glass while protecting it from external force

Bond using SG230HV/SG300/SG350/ SG2000

- Strong bonding of dissimilar materials
- Weather-proof sealing
- Corrosion resistance

Deck Hatch

This being the largest opening below deck, it must be resistant to water, UV exposure and temperature extremes. Made from metals, plastics and composites

Bond using SG100

- Sealing and bonding dissimilar materials
- Impact and fatigue resistance

Truck applications

Trailer Capping

Aluminium and composite bonded to the rear of the trailer for protection and aesthetics

Bond using SG300

- Strong bonds for environmental conditions

Trailer Roof

Composite and metals for even weight distribution

Bond using SG230HV/SG300

- Large surfaces requiring non-sag and maximum bead size
- Minimal surface preparation

Sun Visor

Acrylic sheet bonded to mounting brackets with excellent UV resistance

Bond using SG230HV/SG300/SG800

- Dissimilar material bonding
- High wind and temperature resistance plus enhanced aesthetics

Roof Spoiler

Composite material bonding for aerodynamics

Bond using SG230HV/SG300

- Dissimilar material bonding
- High wind and weather resistance

Trailer Load Lockers

Metal protection rails attached to the trailer side walls

Bond using SG300

- Strong bonds to protect cargo from damage and withstand consistent use

Panel Bonding

Strong but lightweight composites for fuel conservation

Bond using SG230HV/SG300

- Strong
- Seamless panel bonding
- Environmental and shock resistance

Cabin & Dashboard

Composite materials for lower weight, durability and aesthetics

Bond using SG300/SG400LSE

- Dissimilar material bonding
- Minimal surface preparation

Front Grille

Metal for durability and environmental resistance

Bond using SG230HV/SG300

- Strong weather resistant bond
- Vibration resistance

Window Sealing

Aluminium and composite window frames providing environmental and vibration resistance

Bond using SG300

- Dissimilar material bonding
- Weather-proof sealing and longevity

Brackets

Structurally bonded metal brackets/supports throughout the vehicle

Bond using SG300/SG5000

- Exceptionally strong bonds
- Stability
- Durability and longevity

Door Extension

Composite bonded to metal frame for durability and aesthetics

Bond using SG230HV/SG300

- Dissimilar material bonding
- Strong
- Vibration resistance

Headlight Surround

Metal lamp housing bonded to frame to secure headlights

Bond using SG300/SG800

- Strong bonds
- Environmental, vibration and temperature resistance

Bumper End Caps

Composite bonded to metal, providing durability, weather and impact resistance

Bond using SG230HV/SG300/SG800

- Strong bonds
- Environmental and vibration resistance

Wind applications

Yaw Mechanism

Designed with composite materials for strength, light weight and durability to rotate the turbine towards the wind

Bond using SG300/SG350L

- Requires fast strong bonding of dissimilar materials
- Weather-proof sealing
- Corrosion resistance

Rotor Hub

Composite shell enclosing cast-iron heavy-duty, componentry connecting the nacelle to the rotor blades. Requires strength to support heavy blades and vibration resistance from continuous motion

Bond using SG230HV/SG300/SG350L

- Requires strong, fast bonding and sealing of dissimilar materials
- Withstand variable weather conditions and constant movement

Rotor Blades

Constructed from composites for high strength and rigidity with minimal weight; built to ensure impact, vibration and harsh environmental conditions

Bond using SG230HV/SG300/SG350L

- Requires fast, no sag, strong bonding of dissimilar materials
- Subject to variable weather conditions and constant vibration

Interior Panels

Durable, fire-tested composite panels

Bond using SG300/SG5000

- Fast handling
- Minimal preparation
- EN45545-2 compliant
- Reduce weight and minimize fasteners

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Drill and Fill Repairs

Drill-and-fill to fix internal defects in composite materials

Repair using SG350L

- Repair internal debonding, delamination adhesive voids with SG350L
- Does not boil at large bonding gaps up to 150mm

Vortex Generators

Thermoplastic devices designed to improve aerodynamic performance by manipulating airflow patterns

Bond and retrofit using SG300/SG350L/SG400LSE

- Requires fast, no sag, strong bonding in harsh environmental conditions
- Subject to constant impact and vibration

Product assembly

Adhesive Benefits:

Bonding dissimilar materials

High elongation suitable for different expansion coefficients between metals, plastics and composites

Bond using SG230HV/SG300

Eliminating mechanical fasteners

Maintains bond strength without degradation at points of adhesion

Bond using SG100/SG200/SG230HV/SG300/SG400LSE/SG800/SG2000/SG5000

Sealing and strengthening joints

Offers protection from harsh environmental conditions

Bond using SG100/SG200/SG230HV/SG300/SG800/SG2000/SG5000

Vibration dampening

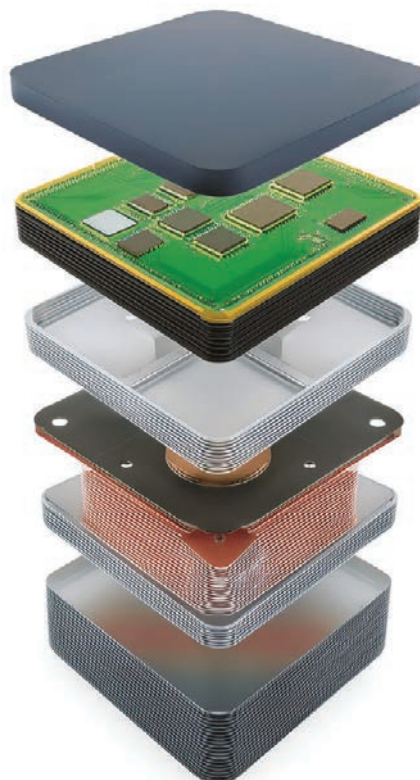
Maintains integrity of joints by minimizing the impact of vibration

Bond using SG230HV/SG300/SG2000

Load distribution

Distributes stress evenly across the bond area

Bond using SG100/SG200/SG230HV/SG300/SG400LSE/SG800/SG2000/SG5000



Assembly Efficiency:

Faster assembly times

Curing times that align with application requirements

Bond using SG100/SG200/SG230HV/SG300/SG400LSE/SG800/SG2000/SG5000

One adhesive for multiple substrates

Less changeover during assembly due to wide substrate compatibility

Bond using SG300/SG5000

Less rework – precision bonding

Ability to pinpoint application to bonding surface with limited waste

Bond using SG100/SG200/SG230HV/SG300/SG400LSE/SG800/SG2000/SG5000

Cleaner aesthetic finish – seamless appearance

Adheres to surfaces without compromising design – no need for unsightly welds, rivets or fasteners

Bond using SG100/SG200/SG300/SG400LSE/SG800/SG5000

Products

MMA's with a wide variety of working and fixture times to suit your manufacturing requirements

SCIGRIP Structural Adhesives are two component MMA's with 1:1 and 10:1 Volume ratio's which provide strong, durable bonds

with excellent environmental resistance in a variety of speeds to suit your application.

SG100 series **10:1 mix, designed for exterior applications manufacturing requirements**



Reasons to Buy:

- ◆ UV resistant, bright white colour ideal for colour critical applications
- ◆ Non-sag application characteristics
- ◆ Two working speeds: 15 & 40 minutes
- ◆ Minimal surface preparation for bonding FRP, gel coated surfaces and thermoplastics
- ◆ Excellent environmental resistance

Applications:

- ◆ Attaching exterior trim to gel coated surfaces on boat exteriors
- ◆ Non-sag characteristics to apply on non-level surfaces
- ◆ Long lasting UV resistant white colour to blend in with gel coated surfaces

SG230 series **10:1 mix, designed for strength and toughness**



Reasons to Buy:

- ◆ Excellent choice for bonding FRP composites with little to no surface prep
- ◆ Unrivalled sag resistance
- ◆ Outstanding fatigue and shock load resistance
- ◆ Excellent environmental and chemical resistance
- ◆ Bonds a broad range of substrates: PMMA, PVC, Thermosets (Vinyl ester, Polyester, Gelcoats, and Epoxies), primed metals
- ◆ Large range of working times: 30, 40, 60, 80,

- ◆ Fatigue resistance as vibrating motor is attached on the bonded area
- ◆ High strength capable of carrying static and dynamic loads
- ◆ Stacking/Non sag characteristics to fill gaps

Applications for assembly:

- ◆ Quicker fixture time allows parts to be bonded and moved earlier
- ◆ Vertical sag resistance to ensure important areas are bonded securely
- ◆ Bond strength maintained after extended exposure to marine environments

Applications for capping and gap filling on boats:

- ◆ Impact resistance

SG300 series

10:1 mix, designed for metal bonding applications



Reasons to Buy:

- ◆ A variety of working times: 5, 15 & 40 minutes.
- ◆ Used to bond metals, composites and plastics. Ideal for bonding dissimilar materials
- ◆ Primerless bonding to metals & requires minimal surface preparation.
- ◆ Excellent fatigue, impact & environmental resistance properties including harsh environments.
- ◆ Non-sag on non-level surfaces.
- ◆ Reduced bond line read through and post finishing requirements.

Applications:

Metal bonding:

- ◆ Metal bonding including but not limited to: Aluminium, mild steel (CRS), stainless steel, coated metals.

surfaces against corrosives.

Composite bonding:

- ◆ Composite bonding including but not limited to: Epoxy, vinyl ester, gelcoats, polyester & DCPD modified.

Plastic bonding:

- ◆ Plastic bonding including but not limited to: ABS, acrylics, PVC/CPVC, styrenics.

SG350L series

10:1 mix, designed for high-performance bonding of mixed materials



Reasons to Buy:

- ◆ High-strength bonding on metals, plastics and composites
- ◆ No sagging when vertical
- ◆ Variable working times (5 to 15 minutes).
- ◆ No surface treatment required on most metals
- ◆ Does not boil at larger gaps up to 150mm
- ◆ Excellent environmental and chemical resistance

Applications:

- ◆ Well suited for repair or backfill of large composite structures.
- ◆ Streamlined, lightweight product designs

SG400LSE

10:1 mix, designed for bonding low surface energy substrates



Reasons to Buy:

- ◆ Bonds polyolefins (low surface energy plastics) in assembly and fabrication applications.
- ◆ Translucent methyl methacrylate for cross bonding polypropylene and polyethylene to metals like aluminium and stainless steel.
- ◆ No surface preparation required, saving time and cost during the assembly process.

- ◆ Product is non sagging, making it an excellent choice for assembly and other fabrication or manufacturing uses.
- ◆ Good flow and ease of dispensing

Applications:

- ◆ Bonding low surface energy plastics like polypropylene and polyethylene to metals, FRP and other plastics.

SG600 series

10:1 mix, designed for composite/plastic bonding



Reasons to Buy:

- ◆ A variety of working times: 5 & 10 minutes.
- ◆ Good Flow and ease of dispensing.
- ◆ Used to bond metals (Primed), composites and plastics. Ideal for bonding dissimilar materials.
- ◆ Bonds a range of substrates: Acrylic, PVC, ABS, Coated Metals, Thermoset Composites (Vinylester, Polyester, Gelcoats, and Epoxy) and other Thermoplastics.

- ◆ Excellent fatigue, impact & environmental resistance properties including harsh environments.
- ◆ Non-sag on non-level surfaces.

Applications:

- ◆ Plastic bonding including but not limited to: ABS, acrylics, PVC/CPVC, styrenics.
- ◆ Example: Agricultural Vehicles
- ◆ Particular benefits: Availability of fast curing times for small components, ease of application, rheology benefits.

SG800 series

10:1 mix, designed for high temperature applications



Reasons to Buy:

- ◆ A variety of working times: 5 & 15 minutes.
- ◆ High temperature resistance up to 150°C.
- ◆ Used to bond metals, composites and plastics.
- ◆ Primerless bonding to metals & requires minimal surface preparation.
- ◆ Good fatigue, impact & environmental properties including harsh environments.
- ◆ Non-sag on non-level surfaces.

Applications:

- ◆ Metal bonding including but not limited to: Aluminium, mild steel (CRS), stainless steel, coated metals.
- ◆ Example: Bonding metal components prior to undergoing a paint bake cycle.
- ◆ Example: Bonding metal and plastic components in the automotive industry for use in the engine bay.
- ◆ Particular benefits: High temperature resistance over prolonged periods, minimal surface preparation prior to application.

SG5000 series

1:1 mix, multipurpose adhesive



Reasons to Buy:

- ◆ Medium/Low viscosity.
- ◆ A variety of working times: 3, 6, 13 & 40 minutes.
- ◆ Used to bond metals, composites and plastics.
- ◆ High tensile and shear strengths.
- ◆ Primerless bonding to most metals & eliminates surface treatment steps.
- ◆ Excellent chemical resistance properties providing permanent bonds in harsh environments.

Applications:

Composite bonding:

- ◆ Composite bonding including but not limited to: Epoxy, vinyl ester, gelcoats, carbon fibre, polyester & DCPD modified.
- ◆ Example: Bonding carbon fibre brackets in motorsports seat.
- ◆ Particular benefits: High strength, excellent adhesion to carbon fibre.

Plastic bonding:

- ◆ Plastic bonding including but not limited to: ABS, acrylics, PVC/CPVC, styrenics.
- ◆ Example: Bonding plastic panels and metal fixtures in vehicles.
- ◆ Particular benefits: Availability of varying curing times for different sized components, ease of application, can bond a wide range of plastics & metals.

Mould repair:

- ◆ Example: Repairing a mould using SG5000-06.
- ◆ When part of the mould is cracked the area is sanded and SG5000 is then spread across the damaged area. Once the adhesive is cured it is sanded to leave a level surface.
- ◆ The area is then quenched with styrene to prevent bond line read through and a gelcoat is applied.

SG42 series

10:1 mix, crystal clear plastic bonder



Reasons to Buy:

- ◆ SCIGRIP 42 is specially formulated to bond acrylic, including extruded cell cast and continuous cast, as well as, moulded parts and some cross-linked sheet.
- ◆ It will bond acrylic to polyester, cellulose acetate butyrate, and other materials.
- ◆ Excellent choice for bonding of acrylic plastics especially where good clarity retention is required.

- ◆ Two component, clear, medium bodied reactive acrylic adhesive.

Applications:

- ◆ Working time of 15 minutes
- ◆ Applications in the sign industry and in the manufacturing and repair of aquariums, museum quality cases and other plastics fabrication industries

SG46C

10:1 mix, optically clear, high strength structural adhesive



Reasons to Buy:

- ◆ Formulated for assembly and fabrication applications that require clear bond lines with no read through.
- ◆ A clear, thixotropic, reactive acrylic adhesive for bonding primer-less aluminium or other metals and acrylics.
- ◆ No sag application, which means reduced slide or sag even on inverted surfaces.
- ◆ High bond strength which can reach up to 2,200 lbs/in² after 24 hours (aluminium).

Applications:

- ◆ Excellent choice for sign assembly and other fabrication or manufacturing where sagging, short fixture time and good clarity retention are required.
- ◆ SG46C is a strong, clear adhesive which is a game changer when it comes to bonding Acrylic to aluminium or Acrylic to Acrylic and polycarbonate to polycarbonate.
- ◆ It cures optically clear, with no bond lines and it reduces finishing time to ensure a flawless finish.

MP100

Metal Primer



Reasons to Buy:

- ◆ MP100 Metal Primer is a surface treatment designed to clean, chemically convert and prepare stainless steel and aluminium surfaces prior to permanently bonding with methacrylate
- ◆ Simple brush or wipe application
- ◆ Rapid dry
- ◆ Aggressive etching and chemical conversion reduces surface corrosion and chemically links adhesive to metal surface

- ◆ Red colour simplifies application, facilitates visual inspection.

Applications:

- ◆ Use to prepare stainless steel and aluminium surfaces prior to bonding.

Product Packaging

Meeting the demands of a Global Market

SCIGRIP offers a wide range of packaging options to meet the demands of a global market with specific and diverse manufacturing requirements. All our products are filled in our own manufacturing

locations and go through rigorous quality control inspection before supply. All packaging used is made using the latest tried and tested materials to ISO quality standards.

Cartridge Offer



25ml Twin Syringe
1:1



50ml Cartridge
1:1



50ml Cartridge
10:1



400ml Cartridge
for **1:1**



490ml Cartridge
for **10:1**

Cartridges are supplied in boxes of 12 units with one nozzle per syringe/cartridge. Latest cartridge technology is used allowing resealing of part cartridges without cross-contamination with significant waste reduction.

Nozzles



490ml **10:1**
CNOZ-F-490



400ml **1:1**
CNOZ-F-400



50ml **10:1**
COAX-50-10:1



25ml & 50ml **1:1**
CNOZ-B-25/50

The nozzle selection is an important part of the products functional success. We have preselected most of the nozzles for the relevant adhesive but it may

be necessary to make changes to suit your specific requirements. Each cartridge is supplied with one nozzle and additional nozzles are available.

Applicator Guns

50ml



1:1 - CM2GUN
10:1 - CM5GUN

400ml



Manual Economy - CM4GUN
Manual Professional - CM6GUN
Pneumatic Professional - CM8GUN

490ml



Manual Professional - CM7GUN
Pneumatic Professional - CM9GUN

Bulk Offer



For full dimensions of
pails/drums
**please contact our
sales office.**

19 Litre pails
straight sided plastic
pails.

189 Litre drums
straight sided metal
drums

Bulk Equipment

Bulk application equipment can be a complicated and expensive process, but the SCIGRIP team have many years experience in this field. We have chosen strategic partners around the globe to assist our customers in the design, supply and servicing or equipment in a professional package. Please contact one of our sales team for further information on how we can support your requirements.

20 Litre Bulk



200 Litre Bulk



Selection Guide

Sub- strate	Aluminium	Cold Rolled Steel	Stainless Steel	Galvanised Steel	Coated Metal	ABS	PVC	PC	PC/ABS	PMMA	Vinyl Ester FRP	UPR FRP	Epoxy FRP	Carbon Fibre	
Aluminium	SG300	SG300 SG350L SG800 SG5000	SG300 SG350L SG800	SG800*	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG230**	SG230**	SG230**	SG230**	
	SG350L				SG300						SG300	SG300	SG300	SG300	SG300
	SG600**				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
Cold Rolled Steel	SG300	SG300 SG350L SG800 SG5000	SG300 SG350L SG800	SG800*	SG300	SG300 SG350L SG800 SG5000	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG230**	SG230**	SG230**	SG230**	
	SG350L				SG300						SG300	SG300	SG300	SG300	SG300
	SG600**				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
Stainless Steel	SG300	SG300 SG350L SG350L SG800	SG300 SG350L SG800 SG5000	SG800*	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG300 SG350L SG600**	SG230**	SG230**	SG230**	SG230**	
	SG350L				SG300						SG300	SG300	SG300	SG300	SG300
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
Galvanised Steel	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	SG800*	
	Coated Metal	SG300	SG300 SG350L SG600** SG800 SG5000	SG300 SG350L SG600** SG800 SG5000	SG800*	SG300	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG230	SG230	SG230	SG230
SG350L		SG300				SG300						SG300	SG300	SG300	SG300
SG600**		SG350L				SG350L						SG350L	SG350L	SG350L	SG350L
SG800		SG800				SG800						SG800	SG800	SG800	SG800
ABS	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG800*	SG300	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600 SG42	SG300	SG300	SG300	SG300	
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
PVC	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG800*	SG300	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600 SG42	SG300	SG300	SG300	SG300	
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
PC	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG800*	SG300	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600 SG42	SG300	SG300	SG300	SG300	
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
PC/ABS	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG800*	SG300	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG600	SG300 SG350L SG 600	SG300 SG350L SG600 SG42	SG300	SG300	SG300	SG300	
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
PMMA	SG300	SG300 SG350L SG600**	SG300 SG350L SG600**	SG800*	SG300	SG300 SG350L SG600 SG42	SG300 SG350L SG600 SG42	SG300 SG350L SG600 SG42	SG300 SG350L SG600 SG42	SG300 SG350L SG600 SG42	SG300	SG300	SG300	SG300	
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
Vinyl Ester FRP	SG230**	SG230** SG300 SG350L SG800 SG5000	SG230** SG300 SG350L SG800 SG5000	SG800*	SG230	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG230	SG230	SG230	SG300	
	SG300				SG300						SG300	SG300	SG300	SG300	SG300
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
UPR FRP	SG230**	SG230** SG300 SG350L SG800 SG5000	SG230** SG300 SG350L SG800 SG5000	SG800*	SG230	SG300 SG350L SG600 SG350L SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG230	SG230	SG230	SG300	
	SG300				SG300						SG300	SG300	SG300	SG300	SG300
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
Epoxy FRP	SG230**	SG230** SG300 SG350L SG800 SG5000	SG230** SG300 SG350L SG800 SG5000	SG800*	SG230	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG230	SG230	SG230	SG300	
	SG300				SG300						SG300	SG300	SG300	SG300	SG300
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800
Carbon Fibre	SG230**	SG230** SG300 SG350L SG800 SG5000	SG230** SG300 SG350L SG800 SG5000	SG800*	SG230	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300 SG350L SG600 SG800	SG300	SG300	SG300	SG300	
	SG300				SG300						SG300	SG300	SG300	SG300	SG300
	SG350L				SG350L						SG350L	SG350L	SG350L	SG350L	SG350L
	SG800				SG800						SG800	SG800	SG800	SG800	SG800

* Dependant on type. Testing required ** Primer required on metal

Series	Product	Chemistry	Mix Ratio By Volume	Colour	Viscosity cP	Working Time Minutes	Fixture Time Minutes	Shear Strength MPa	Elongation %	Service Temperature °C	Bond Line Gap mm
SG100	SG100-15 SG100-40	Methyl Methacrylate	10:1	White	Adhesive 150,000 - 220,000 Activator 70,000 - 180,000	12 - 18 35 - 45	30 - 45 80 - 100	> 14	> 15	-40 to +82	< 10
SG230HV	SG230-40 SG230-60 SG230-80	Methyl Methacrylate	10:1	Grey	Adhesive 900,000 - 1,400,000 Activator 120,000 - 180,000	35 - 45 50 - 70 70 - 90	60 - 75 140 - 170 180 - 210	> 15	> 100	-40 to +82	< 39
SG300	SG300-05 SG300-15 SG300-40	Methyl Methacrylate	10:1	Black Off White	Adhesive 175,000 - 275,000 Activator 120,000 - 180,000	4 - 6 13 - 17 35 - 45	15 - 20 30 - 40 80 - 90	> 16	> 40	-40 to +82	< 10
SG600	SG600-05 SG600-10	Methyl Methacrylate	10:1	Black Off White	Adhesive 150,000 - 250,000 Activator 120,000 - 180,000	4 - 6 8 - 12	15 - 18 25 - 30	> 21	> 65	-40 to +82	< 10
SG800	SG800-05	Hybrid	10:1	Black	Adhesive 150,000 - 250,000 Activator 120,000 - 180,000	4 - 6	12 - 15	> 18	> 25	-40 to +150	< 10
SG5000	SG5000-03 SG5000-06 SG5000-13 SG5000-40	Methyl Methacrylate	1:1	Amber	Adhesive 90,000 - 150,000 Activator 150,000 - 250,000	2 - 5 5 - 8 14 - 19 35 - 45	6 - 8 10 - 12 20-25 80 - 90	> 18	> 5	-40 to +100	< 3
SG42	SG42	Methyl Methacrylate	10:1	Crystal Clear	Adhesive 2,800 - 3,800 Activator 1,400 - 1,700	15	120	> 15	> 8	-40 to +82	< 3
SG46C	SG46C	Methyl Methacrylate	10:1	Crystal Clear	Adhesive 75,000 - 125,000 Activator 2,500 - 4,500	6 - 9	15 - 25	> 15	> 3.5	-40 to +50	< 5
SG400	SG400LSE	Methyl Methacrylate	10:1	Off White	Adhesive 50,000 - 100,000 Activator 4,500 - 10,000	1-3	360	~5	-	-	-
SG350L	SG350L-05 SG350L-15	Methyl Methacrylate	10:1	Black Amber	Adhesive 150 - 220 Activator 70 - 180	4 - 6 12 - 16	14 - 18 32 - 38	18-20	17-19	-	<05.9 <150
SG2000	SG2000	Methyl Methacrylate	1:1 1.01:1	Amber	Adhesive 250-350 Activator 350-450	80 - 100	180 - 210	>1,500 (10)	>2,500 (17) >130	-	(0.02 - 1.54) (0.50 - 39.0)





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