

STRUCTURAL ADHESIVES METALS COMPOSITES PLASTICS

Offering the latest advancements
in bonding systems and adhesive
chemistries for the most demanding
customer applications in the Marine,
Transportation, Building Construction
and Product Assembly markets.



Science + Innovation
= **SMARTER ADHESIVE SOLUTIONS**

IPS
CORPORATION



CHANGING THE WAY YOU PUT THINGS TOGETHER



SCIGRIP Smarter Adhesive Solutions™, a subsidiary of IPS corporation, has been a successful international adhesives manufacturer for over 65 years. This depth of experience has resulted in an organisation that is consistently creating new adhesive chemistries and bonding solutions.



SCIGRIP offers cutting edge formulations of Methacrylate adhesives that are unrivalled for their combination of strength, toughness and ease of use.



SCIGRIP research, technical support, production and distribution are located in USA and Europe with group facilities in Asia. This guarantees excellent service and supply to our customers throughout the world.

SCIGRIP Smarter Adhesive Solutions delivers unsurpassed value and unmatched flexibility, **changing the way you put things together.**

www.scigrip.com

MMA TECHNOLOGY

The ultimate structural adhesive

This brochure focuses on our MMA Structural Adhesives range which offers a unique combination of chemistries that tackle the main challenges for adhesives;

- Toughness
- Surface adhesion
- Cure speed control

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

Better than other chemistries MMA's are well known for excellent surface wetting and adhesion to a wide range of substrates avoiding the risk of potentially erroneous surface preparation or priming operations.



SCIGRIP MMA's cure at room temperature. Offering working times of 2 to 130 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. Compared to many chemistries, the fast green strength gain for a given application time is considered one of the most valuable advantages by many customers.



RESEARCH AND DEVELOPMENT

Focused on the customer



SCIGRIP's unique patented MMA technology makes new adhesive properties possible that were previously outside the scope of traditional formulators. SCIGRIP believes in a technical team working hand in hand with customers to test our product with your process.

SCIGRIP is committed to manufacturing quality products and maintains ISO 9001 certification for all of its manufacturing facilities. SCIGRIP has also achieved multiple third party product certifications including Lloyds and BRE that ensure product performance in key applications.

SCIGRIP has a strong research and development team focused on addressing customers' demands for new application processes, new substrates and assembly performance as well as improving customer productivity.



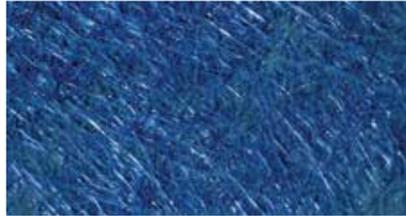
APPLICATION

Key substrates



METALS

Selected products in the SCIGRIP range are excellent for bonding metals without the need for a primer. Cutting out this step makes production leaner and improves quality by avoiding potential priming errors.



COMPOSITES

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

The SCIGRIP range has products to meet increasing challenges from low surface energy plastics such as PP & PE to the need for high strength, fast cure and crystal clear bond lines.

STRUCTURAL ADHESIVES ARE OFTEN USED TO BOND DISSIMILAR MATERIALS AND INCREASINGLY NEW SUBSTRATES ARE A CHALLENGE WE LIKE TO MEET:

MARKETS

Adapt our technology with success

MARINE

Working times to suit all boat builders



TRANSPORTATION

Fatigue resistant composite to metal bonding

RAIL

FST approval, high temperature resistance.



BUILDING AND CONSTRUCTION

Peel resistant PVC bonding with snap cure

RECREATIONAL/AGRICULTURAL VEHICLES

High strength and toughness in bulk and cartridges



AUTOMOTIVE

Lightweight materials and plastic bonding with minimal surface preparation.

PACKAGING

Meeting the demands of the global market

SCIGRIP Smarter Adhesive Solutions offer a wide range of packing options to meet the demands of the global market and the specific and diverse manufacturing requirements. All of 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 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 wastage reduction.

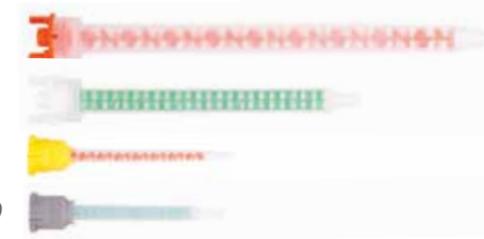
NOZZLES

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 the nozzle 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 Economy - CM11GUN
Manual Professional - CM7GUN
Pneumatic Professional - CM9GUN



BULK OFFER

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



1.9lt pails
straight sided
Plastic pails
19lt pails
straight sided
Plastic pails
189lt drums
straight sided
Metal drum

BULK EQUIPMENT

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





STRUCTURAL ADHESIVES SELECTION GUIDE

SCIGRIP Changing the way you put things together.

METALS
COMPOSITES
PLASTICS



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	Description	Adhesive Reference	Colour	Working Time ¹ / Min	Fixture Time ¹ / Min	Ratio A:B Volume (Weight)	Viscosity (10 ³ cps) A Comp B Comp	Tensile Strength ² MPa (psi) % Elongation	Shear Strength MPa (psi)	Bond Line Gap Min - Max (mm)	Packaging
SG100	Bright White and UV resistant Ideal Marine adhesive	SG100-15	Bright White	12 - 18	30 - 45	10:1 (6.4:1)	A: 150 - 220 B: 70 - 180	21 - 23 (3,000 - 3,400) > 15 - 35%	14 - 16 (2,000 - 2,400) ³	0.5 - 12.7	490ml
		SG100-40		35 - 45	80 - 100						
SG230 HV	High Gap Fill & Non Sag For Marine & Large Structures	SG230-30*	Grey	25 - 35	45 - 55	10:1 (8.4:1)	A: 900 - 1400 B: 120 - 180	21 - 24 (3,000 - 3,500) 100 - 150%	15 - 17 (2,200 - 2,500) ³ 13 - 15 (1,850 - 2,200) ⁴	0.5 - 39	490ml* & Bulk
		SG230-40*		35 - 45	60 - 75					0.5 - 39	
		SG230-60*		50 - 70	140 - 170					0.5 - 39	
		SG230-80		70 - 90	180 - 210					0.5 - 39	
SG300	Primerless Metal Bonder High Fatigue High Shear Strength	SG300-05	Off White & Black	4 - 6	15 - 20	10:1 (8.8:1)	A: 190 - 250 B: 120 - 180	12 - 15 (1,700 - 2,200) 40 - 60%	16 - 19 (2,300 - 2,800) ³	0.5 - 9.5	50ml, 490ml & Bulk
		SG300-15		13 - 17	30 - 40						
		SG300-40		35 - 45	80 - 90						
SG600	All-purpose Plastic & Composite Bonder. High Toughness. Excellent flow and wet out	SG600-05	Off White & Black	4 - 6	15 - 18	10:1 (8.5:1)	A: 150 - 250 B: 120 - 180	21 - 23 (3,000 - 3,300) 65 - 105%	21 - 25 (3,000 - 3,600) ³	0.5 - 9.5	490ml & Bulk
		SG600-10		8 - 12	25 - 30						
		SG600-20		15 - 20	35 - 45						
SG800	High Temperature Primerless metal bonder. Low bondline read through capability	SG800-05	Off White & Black	4 - 6	12 - 15	10:1 (6:1)	A: 150 - 250 B: 60 - 120	19 - 21 (2,800 - 3,100) > 25 - 50%	18 - 20 (2,600 - 2,900) ³	0.5 - 9.5	490ml & Bulk
SG5000	General Purpose Maximum Shear Strength	SG5000-03	Amber & Black	2 - 5	6 - 8	1:1	A: 90 - 150 B: 150 - 250	35 - 40 (5,076 - 5,802) > 5 - 10%	18 - 25 (2,611 - 3,626)	0.5 - 2	25ml, 50ml, 400ml & Bulk
		SG5000-06		5 - 8	10 - 12						
		SG5000-13		14 - 19	20 - 25						
		SG5000-40		35 - 45	55 - 60						
SG42	Crystal clear, Mil Spec Plastic Bonder	SG42	Clear	15	120	10:1	A: 2.9 B: 1.5	< 5%	15 - 17 (2100 - 3000)	0.1 - 2	50ml

NOTES: 1. Working time / fixture time at 24°C (75°F). Fixture Time (time to achieve 1.4 MPa or 200 psi strength in lap shear). 2. All tensile properties are based on post cure cycle, 1 hour @82°C (180°F). 3. Test method used ASTM D1002 Aluminium treated with MP100 Metal Primer (no primer needed with SG300, SG800 & SG5000 series). 4. Test method used ASTM D5868 - typical single lap shear strength of FRP to FRP bond. 5. Based on 72 hours cure ASTM D3163 on plastics.

Due to many potential variations in substrate and surface chemistries, SCIGRIP Adhesives and its distributors recommend that all substrates be tested under the intended applications to determine suitability.

FURTHER **SMARTER ADHESIVE SOLUTIONS** AVAILABLE FROM SCIGRIP:



ENGINEERING ADHESIVES

SCIGRIP's well-established range of REACH compliant engineering, maintenance adhesive and sealant products have grown and developed with the OEM and MRO industrial sectors over the last two decades. This division is a highly accredited sector of the SCIGRIP® European Group.

THE RANGE INCLUDES;

- ANAEROBIC ADHESIVES
- CYANOACRYLATES
- UV-CURABLE
- ACTIVATORS & PRIMERS
- EPOXY PUTTY STICKS
- LUBRICATION and SEALING technologies, incorporating precision chemistry needed for advanced engineering applications.

POWERCAN DISPENSING SYSTEM

The SCIGRIP® POWERCAN is the most advanced and patented system for the dispensing of thick, sticky and difficult to handle materials without waste or mess. The SCIGRIP® POWERCAN will handle a wide range of high viscosity materials such as sealants, adhesives, fillers and lubricants.

THE RANGE INCLUDES;

- SILICONES
- MS POLYMERS
- ANTI SEIZE
- EXHAUST PASTES

Your distributor:

The information contained herein is produced in good faith, and is believed to be reliable but is for guidance only. SCIGRIP and its agents cannot assume liability or responsibility for results obtained in the use of its products by persons whose methods are outside or beyond our control. All advice is given subject to terms & conditions of sale, which are available on request from SCIGRIP. It is the users responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore it is the user's responsibility to observe and adopt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products. SCIGRIP reserves the right to change specifications & prices without notice and customers should satisfy themselves that information relied on by the customer is that which is currently published by the company on its website.

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