



# TECHNICAL DATA SHEET

## A NEW FORCE IN CHEMICAL MANUFACTURING

AEROSOLS | WELDING CHEMICALS | ADHESIVES & THREADLOCKERS | ANTI-SEIZE & GREASES | CLEANING CHEMICALS & SOLVENTS | ELECTRICAL & ELECTRONICS

Issued: August 2020

### Rapidstick™ 8-150 5 Minute Epoxy

PART NUMBER	AVAILABLE SIZE
8-150-25	25ml Dual Syringe

#### PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 5 Minute Epoxy is a high strength, versatile, non-shrinking, two-part dual syringe adhesive, which delivers equal parts of both the epoxy resin and the hardener with every use. When mixed in equal volumes, the reaction produces a tough, rigid, high strength bond in 5 minutes for quick project completion.

5 Minute Epoxy can be used on a wide range of materials as a gap filler, or for surface repairs and laminating. It can also be combined with fibreglass cloth for a durable patch, as well as tinted with earth pigments, cement, or sand for colour matching. Once dry, it can be rubbed back and drilled.

5 Minute Epoxy is resistant to water and most common solvents, drying clear and making it perfect for transparent repairs, or jobs that require invisible seams.

Recommended bonding surfaces include, but are not limited to:

Metal	Glass	Ceramics	Wood	Rigid Plastics	China
Tile	Fibreglass	Concrete	Stone		

#### PRODUCT LIMITATIONS

- Not recommended for polyethylene, polypropylene, non-stick coatings, nylon products, or flexible materials
- Not suitable for applications requiring short-term heat exposure greater than 150°C
- Not recommended for applications with prolonged water immersion
- Not suitable for use on potable water systems



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### DIRECTIONS (READ LABEL BEFORE USE)

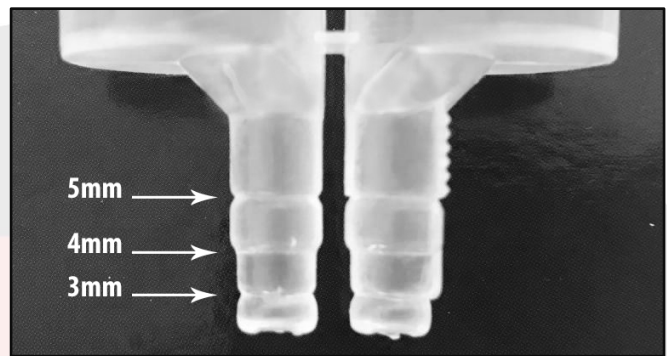
#### Tools Typically Required:

- Utility knife
- Mixing tool/applicator (small flat plastic or wooden stick)
- Disposable surface (foil, paper, or the plastic packaging of the product)

#### Preparation:

Surfaces must be clean, dry and free from oil, wax, paint, rust, etc. Roughen smooth surfaces for better adhesion by sandblasting or sanding with an emery cloth. Wash glass and ceramic surfaces with soap and water, then rinse and let dry. Pre-fit parts to be joined.

Remove the plug from between the syringe piston. Cut off the end tips of the syringe at one of the three cut-off points as illustrated to the right. For easier extrusion, cut at the 4mm or 5mm opening. For more precise application, cut at the 3mm opening.



Turn the syringe end up and pull the plunger back slightly, allowing air bubbles to rise to the top.

Press the plunger to expel air. Depress the double piston to dispense equal parts of the two materials on a disposable surface, or the cavity provided in the supplied plastic packaging.

Mix the resin and hardener thoroughly (about 1 minute). Wipe the syringe tips clean, retract the piston slightly, and close with the plug. *Note: Ensure the plug is always placed in the same orientation on the tips.*

#### Application:

For best results, apply a small amount of mixed adhesive to both surfaces within one to two minutes of mixing, and press together. The longer the mixed adhesive remains unused, the less effective the bond. Remove any excess glue immediately. Support the bond for up to 30 minutes at room temperature.

#### Clean-up:

Clean excess glue immediately by wiping with a clean cloth. Acetone may be used to assist in removal. Cured adhesive may be cut away with caution using a sharp blade. Prolonged immersion in paint stripper will soften the cured adhesive to aid removal. *Note: Acetone is highly flammable and not compatible with all surfaces. Follow manufacturer's instruction and test of a small area prior to application.*



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### TECHNICAL DATA

#### ADHESIVE PROPERTIES (LIQUID):

Colour (Resin & Hardener)	Colourless to Clear Amber
Base	Epoxy Resin / Polymercaptan Hardener
Odour	Mild Amine
Specific Gravity	Resin: 1.17, Hardener: 1.04
Flash Point	Resin: >249°C, Hardener: >93°C
VOC Content (Resin & Hardener)	0.1% by weight (CARB)
Shelf Life (unopened)	24 months from date of manufacture

#### APPLICATION PROPERTIES:

Temperature	4°C to 35°C
Gel Time (5g:5g)	4 to 10 minutes*
Handling Time	20 minutes*
Usable Strength (500 psi)	30 minutes*
Full Cure	24 hours*

\*Dependent upon temperature, humidity, and thickness of epoxy applied

#### ADHESIVE PROPERTIES (CURED):

Colour	Colourless
Cured form	Non-flammable solid
Service Temperature	-23°C to +49°C Long-term (Continuous) Exposure -23°C to +150°C Short-term (Intermittent) Exposure
Water Resistant	Yes
Sandable	Yes
Paintable	No
Hardness (Shore D)	80 ± 1

#### TENSILE SHEAR STRENGTH

Substrate	Cure Time	Tensile Shear Strength
Cold Rolled Steel, Sandblasted	1 hour	1322 ± 128 psi (9.11 ± 0.88 N/mm <sup>2</sup> )
	4 hours	2494 ± 78 psi (17.20 ± 0.54 N/mm <sup>2</sup> )
	24 hours	3437 ± 58 psi (23.70 ± 0.40 N/mm <sup>2</sup> )
	7 days	3426 ± 155 psi (23.62 ± 1.07 N/mm <sup>2</sup> )
Aluminium, Sandblasted	24 hours	2055 ± 290 psi (14.17 ± 2.0 N/mm <sup>2</sup> )
Aluminium, Sandblasted, H2O Immersion	7 days	2048 ± 160 psi (14.12 ± 1.10 N/mm <sup>2</sup> )

#### SOLVENT RESISTANCE

Substrate	Solvent Immersion	Tensile Shear Strength
Aluminium, 7 day cure	Gasoline, 24hrs	3216 ± 275 psi (22.17 ± 1.90 N/mm <sup>2</sup> )



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### **COMPRESSIVE SHEAR STRENGTH**

Substrate	Cure Time	Compressive Shear Strength
Sanded Hard PVC (White)	24 hours	1081 ± 199 psi (7.45 ± 1.37 N/mm <sup>2</sup> )
Sanded Acrylite FF	24 hours	958 ± 268 psi (6.61 ± 1.85 N/mm <sup>2</sup> )
Maple	24 hours	2088 ± 243 psi (14.40 ± 1.68 N/mm <sup>2</sup> )

### **SIDE IMPACT RESISTANCE**

Substrate	Cure Time	Side Impact Resistance
Sand Blasted Cold Rolled Steel, 1" x 1"	7 Days	6.8 Joules

### **STORAGE & DISPOSAL**

Not damaged by freezing. If frozen, warm to room temperature until the resin and hardener become liquid enough to mix. Use an approved hazardous waste facility for disposal.

### **FIRST AID & SAFETY PRECAUTIONS**

Please refer to Safety Data Sheet (SDS) before use. Use with adequate ventilation and avoid breathing fumes. Avoid contact with eyes and skin. This product may produce adverse health conditions, ranging from minor skin irritation to serious systemic effects. It should not be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet (SDS) for this product have been fully understood by all persons who will work with the material.

### **DISCLAIMER**

Chemtools® has made every effort to ensure the information provided in this Technical Data Sheet is accurate at the time of publication. Chemtools® expressly recommends that the user make his/her own assessment to determine the suitability of the product for its intended purpose prior to application. Chemtools shall not be responsible for loss, damage, or injury, resulting from the reliance upon, or failure to adhere to, any recommendations or information contained herein; nor from abnormal use of the material; nor from any hazard inherent in the nature of the material.

### **FURTHER INFORMATION**

Please visit Chemtools® online at [www.chemtools.com.au](http://www.chemtools.com.au) for product photos, marketing materials, Technical Data Sheets, Safety Data Sheets, contact details, and other company/business related information.