



# TECHNICAL DATA SHEET

A NEW FORCE IN CHEMICAL MANUFACTURING

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

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## Rapidstick™ 8542 Thread Sealant

PART NUMBER	AVAILABLE SIZE
8542-50	50ml Tube
8542-250	250ml Tube

### PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 8542 is recommended for hydraulic and pneumatic fittings in high temperature environments, providing low pressure resistance to all thread types immediately after application.

8542 prevents loosening and leakage from shock and vibration, protects from corrosion on all metal threads, pipes, and fittings, and will not creep, shrink, gall, migrate, or block systems. It is ideal for sealing against gases, water, LPG, hydrocarbons, oils, and other chemicals, and its excellent thixotropic property prevents migration of the sealant before or during curing.

### DIRECTIONS (READ LABEL BEFORE USE)

All surfaces must be clean, dry, and free of dust and grease. It is recommended to prime inactive metals first with *Chemtools® Rapidstick™ 8-3471 Anaerobic Adhesives Primer*.

Apply a single bead of sealant to the leading threads of the male fitting, leaving the first thread free.

Ensure all threads and voids are filled. Add further sealant if necessary.

Apply another bead of sealant to the female threads.

Assemble and tighten as required.



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### TECHNICAL DATA

#### LIQUID PROPERTIES:

Composition	Methacrylate Ester
Appearance	Brown
Thread Filling	Up to 25mm (1")
Viscosity @ 25°C, Brookfield RVT, Spindle 3, 20 rpm	525 - 1,850 Thixotropic (low)
Flash Point	> 100°C
Solvent Content	None

#### CURED ADHESIVE PROPERTIES:

Service Temperature Range	-54°C to +148°C
Handling Cure Time	10 – 30 minutes
Functional Cure Time	2 – 4 hours
Full Cure Time	24 hours

#### MECHANICAL PROPERTIES:

Coefficient of Thermal Expansion, ASTM D696, K <sup>-1</sup>	80 x 10 <sup>-6</sup>
Coefficient of Thermal Conductivity, ASTM C177, W.m <sup>-1</sup> .K <sup>-1</sup>	0.1
Specific Heat, kJ/Kg.K	0.3
Compressive Shear Strength, ISO 10123, Steel Pins and Collars	> 6.5 N/mm <sup>2</sup> / 940 psi
Seals Operating Pressures to 10,000 psi	Pass

#### Torque, ISO 10964 (M10 Steel Nuts and Bolts)

Breakaway Torque	15 N.m. / 130 lb.in.
Prevail Torque	9 N.m. / 80 lb.in.
Break Loose Torque (pre-torqued to 5 N.m.)	25 N.m. / 220 lb.in.
Max Prevail Torque (pre-torqued to 5 N.m.)	25 N.m. / 220 lb.in.

#### CHEMICAL RESISTANCE PROPERTIES:

Chemical	Temperature	% Initial Strength Retained	
		500 hours	1,000 hours
Acetone	22°C	80	80
Ethanol	22°C	100	95
Motor Oil	125°C	100	100
Petrol	22°C	100	95
Brake Fluid	22°C	100	95
Water/Glycol	87°C	90	90



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### 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.

### STORAGE

Keep out of reach of children. Store in a sealed container in a cool, dry place. Do not return any unused material to its original container.

Containers must be secured and stored upright during transit.

### 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.