

## **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<sup>™</sup> 8222 Threadlocker

PART NUMBER	AVAILABLE SIZE
8222-10	10ml Bottle
8222-50	50ml Bottle
8222-250	250ml Bottle

#### **PRODUCT DESCRIPTION**

Chemtools® Rapidstick™ 8222 Threadlocker is low strength, fast curing, and specifically formulated to give controlled friction and torque/tension ratio during assembly. It is used for the permanent bonding and sealing of threads and the retaining of cylindrical parts, and is ideal for small screws and fasteners 6mm and under particularly those loosening under vibration.

8222 is highly resistant to heat, water, gases, oils, hydrocarbons, and many chemicals, and is specifically suitable for applications requiring the adjustment of set screws and fasteners where easy disassembly is required. Best performance is achieved in thin bond gaps.

8222 meets Military Specification MIL-S-46163 Type 11, Grade M.

#### **DIRECTIONS (READ LABEL BEFORE USE)**

All surfaces must be clean, dry, and free of dust and grease.

Apply to the bolt in sufficient quantity to fill threads.

**Technical Data Sheet:** Rapidstick<sup>™</sup> 8222 Threadlocker Page 1 of 3

TECHNICAL DATA SHEET BY CHEMTOOLS PTY LTD (ABN 12 114 400 083) • HEAD OFFICE/MANUFACTURING FACILITY: UNIT 2, 14 - 16 LEE HOLM ROAD ST MARYS NSW 2760 VISIT US ONLINE: WWW.CHEMTOOLS.COM.AU • PHONE: 1300 738 250 | INTERNATIONAL PHONE: +61 2 9833 9766 • AUSTRALIAN OWNED & OPERATED • GLOBALLY UNSURPASSED QUALITY



# **TECHNICAL DATA SHEET**

## A **NEW FORCE** IN CHEMICAL MANUFACTURING aerosols | welding chemicals | adhesives & threadlockers | anti-seize & greases | cleaning chemicals & solvents | electrical & electronics

TECHNICAL DATA	
Composition	Methacrylate Ester
Appearance	Purple
Viscosity @ 25°C, Brookfield RVT, Spindle 3, 20 rpm	1,000 cps
Maximum Diameter of Thread/Gap Filling	6mm (1/4")
Flash Point	> 100°C
Shelf Life	2 years from the date of manufacture
CURED ADHESIVE PROPERTIES:	
Service Temperature Range	-55°C to +150°C
Handling Cure Time	20 minutes
Functional Cure Time	1 – 3 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	3 to 10 N/mm <sup>2</sup> / 430 to 1,450 psi
Torque, ISO 10964 (M10 Steel Nuts and Bolts)	
Breakaway Torque	6 N.m. / 53 lb.in.
Prevail Torque	4 N.m. / 30 lb.in.
Break Loose Torque, Pre-torqued to 5 N.m.	9 to 21 N.m / 80 to 190 lb.in.
Max Prevail Torque, Pre-torqued to 5 N.m.	9 to 21 N.m / 190 lb.in.

#### **CHEMICAL RESISTANCE PROPERTIES:**

		% Ini	% Initial Strength Retained	
Chemical	Temperature	500 hours	1,000 hours	
Acetone	22°C	100	80	
Ethanol	22°C	100	100	
Motor Oil	125°C	100	100	
Petrol	22°C	100	100	
Brake Fluid	22°C	100	100	
Water/Glycol	87°C	90	85	

Rapidstick<sup>™</sup> 8222 Threadlocker

Page 2 of 3

TECHNICAL DATA SHEET BY CHEMTOOLS PTY LTD (ABN 12 114 400 083) • HEAD OFFICE/MANUFACTURING FACILITY: UNIT 2, 14 - 16 LEE HOLM ROAD ST MARYS NSW 2760 VISIT US ONLINE: WWW.CHEMTOOLS.COM.AU • PHONE: 1300 738 250 | INTERNATIONAL PHONE: +61 2 9833 9766 • AUSTRALIAN OWNED & OPERATED • GLOBALLY UNSURPASSED QUALITY



## **TECHNICAL DATA SHEET**

### A NEW FORCE IN CHEMICAL MANUFACTURING Aerosols | welding chemicals | adhesives & threadlockers | anti-seize & greases | cleaning chemicals & solvents | electrical & electronics

#### **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 for product photos, marketing materials, Technical Data Sheets, Safety Data Sheets, contact details, and other company/business related information.

Technical Data Sheet: Rapid	lstick™ 8222 Threadlocker
-----------------------------	---------------------------

Page 3 of 3

TECHNICAL DATA SHEET BY CHEMTOOLS PTY LTD (ABN 12 114 400 083) • HEAD OFFICE/MANUFACTURING FACILITY: UNIT 2, 14 - 16 LEE HOLM ROAD ST MARYS NSW 2760 VISIT US ONLINE: WWW.CHEMTOOLS.COM.AU • PHONE: 1300 738 250 | INTERNATIONAL PHONE: +61 2 9833 9766 • AUSTRALIAN OWNED & OPERATED • GLOBALLY UNSURPASSED QUALITY