



# 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™ 8263 Threadlocker

| PART NUMBER | AVAILABLE SIZE |
|-------------|----------------|
| 8263-10     | 10ml Bottle    |
| 8263-50     | 50ml Bottle    |
| 8263-250    | 250ml Bottle   |

#### PRODUCT DESCRIPTION

Chemtools® Rapidstick™ 8263 Threadlocker is a fast curing, high strength, permanent compound that eliminates the need for double nutting and welding. It prevents corrosion and leakage, and has high resistance to heat, vibrations, water, gases, oils, hydrocarbons, and many chemicals.

8263 has improved oil resistance and offers excellent curing performance on a wide variety of active and passive metals, as well as even, oily surfaces. It is ideal for fasteners with diameters of up to 25mm (1"), and fasteners used on vibrating machines or moving components, such as transmissions, engine block studs, and valve sets. It can also be used for the retaining of cylindrical parts.

8263 performs the best in thin bond gaps, and is specifically formulated to give controlled friction and torque/tension ratio during assembly.

#### 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.



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### TECHNICAL DATA

#### LIQUID PROPERTIES:

|                                        |                                     |
|----------------------------------------|-------------------------------------|
| Composition                            | Methacrylate Ester                  |
| Appearance                             | Red                                 |
| Viscosity @ 25°C, Brookfield RVT       | 40 – 600 Thixotropic                |
| Specific Gravity                       | 1.10                                |
| Maximum Diameter of Thread/Gap Filling | 25mm (1")                           |
| Flash Point                            | > 100°C                             |
| Solvent Content                        | None                                |
| Shelf Life                             | 1 year from the date of manufacture |

#### CURED ADHESIVE PROPERTIES:

|                           |                 |
|---------------------------|-----------------|
| Service Temperature Range | -55°C to +180°C |
| Handling Cure Time        | 10 – 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                       |
| Shear Strength                                                                     | 15 – 20 N/mm <sup>2</sup> |
| Breakaway Torque                                                                   | 28 – 35 N.m.              |
| Prevail Torque                                                                     | 50 – 65 N.m.              |

#### CHEMICAL RESISTANCE PROPERTIES:

| Chemical     | Temperature | % Initial Strength Retained |             |
|--------------|-------------|-----------------------------|-------------|
|              |             | 500 hours                   | 1,000 hours |
| Acetone      | 22°C        | 100                         | 95          |
| 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        | 85                          | 85          |



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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.