



## A NEW FORCE IN CHEMICAL MANUFACTURING

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# TECHNICAL DATA SHEET

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## PRODUCT NAME

8270 Permanent High Strength Threadlocker

## PRODUCT RANGE

Part Number	Available Size
8270-10	10 ml
8270-50	50 ml
8270-250	250 ml



Refer to MSDS for product safety guidelines

## 8270 High Strength Permanent Anaerobic Thread Locking Compound

Chemtools® 8270 is a fast curing high strength anaerobic thread locking compound for bonding and sealing threads, and retaining of cylindrical parts. It is highly resistant to heat, vibrations, water, gases, oils, hydrocarbons, and many chemicals.

### APPLICATIONS:

- Ideal for fastener up to 25 mm in diameter.
- Transmission and engine block studs, valve sets, etc.
- High strength, permanent and eliminates need for double nutting and welding. Prevents corrosion and leakage.
- Excellent performance of even oily surfaces.
- Fasteners on vibrating machines or moving components.
- Meets Military specifications: MIL-S-46163A Type I Grade K, MIL-S-22473E Letter Grade CVV

### LIQUID PROPERTIES:

Composition	Methacrylate Ester
Appearance	Green
Viscosity @ 25°C (Brookfield Viscometer, Spindle 3 @ 20 rpm)	500 cps
Specific Gravity	1.11
Flash Point	> 100°C
Solvent Content	None
Shelf Life	1 year

### CURING PROPERTIES:

Handling Cure Time	10 - 20 minutes
Functional Cure Time	1 - 3 hours
Full Cure Time	24 hours
Locking Torque - Break	28 - 35 Nm
Locking Torque - Prevailing	50 - 65 Nm
Temperature Range	-55 to 150°C

**PHYSICAL PROPERTIES:**

Coefficient of Thermal Conductivity, ASTM C177, W/m.K	0.10
Coefficient of Thermal Expansion, ASTM D696, K <sup>-1</sup>	80 x 10 <sup>-6</sup>
Specific Heat, kJ/kg.K	0.30

**CHEMICAL RESISTANCE PROPERTIES:**

Chemical	Temperature	% Initial Strength Retained	
		500 hours	1000 hours
Acetone	22°C	100	95
Ethanol	22°C	100	100
Motor Oil	125°C	100	100
Gasoline	22°C	100	100
Brake Fluid	22°C	100	100
Water/Glycol	87°C	85	85

**APPLICATION INSTRUCTIONS:**

Surfaces should be dry, clean, and free of any contamination. Threadlocker should be applied to the bolt in sufficient quantity to fill threads. Chemtools® 8270 performs the best in thin bond gaps. This threadlocker is specifically formulated to give controlled friction and torque/tension ratio during assembly.

**STORAGE:**

Anaerobic adhesives shall be ideally stored in a cool, dry place in unopened containers at a room temperature between 7°C to 28°C. Please do not return any unused material to its original container.

**PRECAUTIONS:**

This product is capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the material.

**WARRANTY:**

All products purchased from or supplied by Chemtools® are subject to terms and conditions set out in the contract. Chemtools® warrants only that its products meet the specifications designated as such herein, or in other publications. All other information supplied by Chemtools® is considered accurate, but is furnished upon the express condition. The customer shall make its own assessment to determine the products suitability for a particular purpose. Chemtools® makes no other warranty, either expressed or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or products will not infringe any patent.