



ChemTools 8270 **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.

ChemTools 8270 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

Adhesive Properties:

Liquid Adhesive

Composition:	Methacrylate Ester
Colour:	Green
Viscosity @ 25°C, (Brookfield Viscometer, Spindle 3 @ 20 rpm)	500 cps
Specific Gravity:	1.11
Maximum Diameter of Thread/Gap Filling:	M 20 / 1" / 0.15mm
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
Breakaway Torque, ISO 10964: M10 steel nuts and bolts Nm	28 - 35 Nm,
Prevail Torque, ISO 10964: M10 steel nuts and bolts	50 - 65 Nm

ChemTools Pty Ltd –PO Box 4319 – Penrith NSW 2750
ABN 12 114 400 083
Ph 02 4735 3126 – Fax 02 4735 3746
info@chemtools.com.au – www.chemtools.com.au



Temperature Range: -55 to 150°C

Physical Properties:

Coefficient of Thermal Expansion, ASTM D 696, K ⁻¹	80×10 ⁻⁶
Coefficient of Thermal Conductivity, ASTM C 177, W/(mK)	0.10
Specific Heat, kJ/(kgK)	0.30

Chemical Resistance:

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:

Surfaces should be dry, clean, and free of any contamination. Thread locker should be applied to the bolt in sufficient quantity to fill threads. ChemTools 8270 performs the best in thin bond gaps. This thread locker 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 and the auxiliary materials normally combined with it are 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 product will meet those specifications designated as such herein or in other publications. All other information supplied by ChemTools is considered accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. ChemTools makes no other warranty, either express 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 product will not infringe any patent.