

8243 Oil Resistant, Medium Strength Threadlocker

Technical Data Sheet

Anaerobic Thread Locking Compound

ChemTools 8243 is a fast curing, medium strength anaerobic thread locking compound for bonding and sealing threads, and retaining of cylindrical parts.

ChemTools 8243 is highly resistance to heat, vibrations, water, gases, oils, hydrocarbons and many chemicals.

Applications:

- Ideal for thread locking plated parts, vibration or moving components.
- Ideal for fasteners between 6 and 20mm ($\frac{1}{4}$ " and $\frac{3}{4}$ ") diameters.
- Locks and seals threaded joints-nuts, screws, and studs with improved oil resistance.
- Meets 90% of all nut and bolt thread locking applications.
- Meets Military specifications: MIL-S-46163 Type II Grade N
MIL-S-22473E Letter Grade CVV

Physical Properties:

Composition:	Dimethacrylate Ester
Color:	Blue
Viscosity@ 25°C: Brookfield RVT Spindle3 @ 20 rpm	2,250 Thixotropic cps
Specific Gravity:	1.07
Maximum Diameter Of Thread/Gap Filling:	M20 (3/4") / 0.20mm
Flash Point:	>100°C
Solvent Content:	None
Shelf Life:	1 year

Curing Properties:

Handling Cure Time:	10 - 12 minutes
Functional Cure Time:	1 - 3 hours
Full Cure Time:	24 hours
Shear Strength:	8 - 12 N/mm ²
Locking Torque	
-Break	15 – 25 Nm
-Prevailing	5 – 10 Nm
Break loose Torque	15 – 35 Nm
Max. Prevail Torque	15 – 35 Nm
Temperature Range	-55 to 150°C
Coefficient of thermal expansion, ASTM D696, K ⁻¹	80 x 10 ⁻⁶
Specific Heat, kJ.kg ⁻¹ K ⁻¹	0.3



Chemtools P/L

Unit 4, 3 Pullman Place
Emu Plains, NSW 2750

Phone: 02 4735 3126

Fax: 02 4735 3746

info@chemtools.com.au

www.chemtools.com.au

8243 Oil Resistant, Medium Strength Threadlocker

Technical Data Sheet



Chemtools P/L

Unit 4, 3 Pullman Place
Emu Plains, NSW 2750

Phone: 02 4735 3126

Fax: 02 4735 3746

info@chemtools.com.au

www.chemtools.com.au

Chemical Resistance:

Chemical	Temp.	% Initial Strength Retained	
		500 hours	1000 hours
Acetone	22°C	100	90
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	80

Application Method:

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 8243 performs the best in thin bond gaps. This thread locker is specifically formulated to give controlled friction and torque/tension ratio during assembly.

Packaging:

Available Size	Part Number
10 mL	8243-10
50 mL	8243-50
250 mL	8243-250

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 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 consider 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.

Date of issue: July 2009