



A NEW FORCE IN CHEMICAL MANUFACTURING

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TECHNICAL DATA SHEET

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PRODUCT NAME

8263 Oil Resistant, High Strength Threadlocker

PRODUCT RANGE

Part Number	Available Size
8263-10	10 ml
8263-50	50 ml
8263-250	250 ml



Refer to MSDS for product safety guidelines

8263 Oil Resistant, High Strength Anaerobic Thread Locking Compound

Chemtools® 8263 is an oil resistant medium to 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 thread locking heavy duty applications such as bolts used in transmission, construction equipment or railroad assemblies, etc.
- Lubricated for easy assembly. Locks and seals threaded joints - nuts, screws, and large studs up to M25, or larger.
- The thixotropic nature of Chemtools® 8263 reduces the migration of liquid products after application to the substrate.

LIQUID PROPERTIES:

Composition	Methacrylate Ester
Appearance	Red
Viscosity @ 25°C (Brookfield Viscometer, Spindle 3 @ 20 rpm)	2,400 cps
Specific Gravity	1.05
Flash Point	> 95°C
Solvent Content	None
Shelf Life	2 years

CURING PROPERTIES:

Handling Cure Time	20 minutes
Functional Cure Time	1 - 3 hours
Full Cure Time	24 hours
Compressive Shear Strength, ISO 10123 (Steel Pins and Collars)	> 10 N/mm ² (> 1,400 psi)
Temperature Range	-55 to 180°C

Torque - ISO 10964

Breakaway	M10 steel nuts and bolts	22 Nm, 190 lb.in
Prevail	M10 steel nuts and bolts	32 Nm, 275 lb.in
Break Loose (Pre-torqued to 5 Nm)	M10 steel nuts and bolts	38 Nm, 340 lb.in
Max. Prevail (Pre-torqued to 5 Nm)	M10 steel nuts and bolts	40 Nm, 350 lb.in

PHYSICAL PROPERTIES:

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

CHEMICAL RESISTANCE PROPERTIES:

Chemical	Temperature	<u>% Initial Strength Retained</u>	
		500 hours	1000 hours
Acetone	22°C	95	95
Ethanol	22°C	95	95
Motor Oil	125°C	95	95
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® 8263 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:

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