

FORMULA-8[®] PTFE Thread Sealant

DESCRIPTION

FORMULA-8 uses PTFE in a shear-sensitive white thixotropic paste to seal threaded joints with PTFE strings when torqued. The seals are formed over the entire thread length. Even fine threads in instrumentation systems are sealed effectively over the entire thread length. It won't deteriorate from -400°F to +500°F. It is stable in pressures up to 10,000 psi and in vacuums 10⁻³ torr. FORMULA-8 has been tested and certified for use in gaseous and liquid oxygen by NASA (ASTM G72-82 and ASTM G86) and also by BAM (German Federal Institute for Materials Testing). Formula-8 is approved for use in food processing facilities. NSN 8030-01-527-7193.

TYPICAL APPLICATIONS

Formula-8 seals threads in gas, liquid and vacuum service.

Use Formula-8 in:

- natural gas applications
- oxygen cylinders to eliminate leaks
- hydraulic systems
- fuel systems
- moderate vacuum service
- fine pipe threads
- oxygen systems
- valves in bottled gases

TYPICAL PROPERTIES

Appearance: white, light paste

Texture: smooth, light paste mixture, free of foreign matter

Available Sizes

- 3.5 oz. tube
- 15 gram jar

APPLICATION DETAILS

Apply liberally to a clean, dry surface. Fit and torque the matching piece. Formula-8 works by being shear sensitive.

Formula-8 is used in applications involving gases (shop gases) such as...

Acetylene	Hydrogen
Carbon dioxide	Hydrogen peroxide (all concentrations)
Diesel fuel	Kerosene
Gasoline	Oxygen (liquid & gaseous)
Helium	Propane

STORAGE/SHIPPING/HANDLING

Do not allow Formula-8 to freeze.

HEALTH & SAFETY

Formula-8 is a very safe solvent-free product. Wash hands after use. Keep product out of eyes.



Nonfood Compounds
(Category Code)





LOX-8[®]

Thread Sealant & Grease

DESCRIPTION

LOX-8 Paste and **LOX-8 Grease**, PCTFE/PTFE pastes and greases, are used where oxygen or harsh chemicals such as chlorine or powerful oxidizers are present. Providing superior performance as a lubricant and sealant, LOX-8 is stable from -400° F to +550° F. LOX-8 is certified for use in gaseous and liquid oxygen.

Use LOX-8 Grease and LOX-8 Paste in environments where extended service life is important: medical, nuclear and other high-tech fields including chemical processing, industrial gases and other aggressive applications. Approved for use in food processing facilities. Fire resistant. MIL-PRF-27617G. NSN 8030-00-829-3982.

TYPICAL APPLICATIONS

Paste applications include:

- off-shore rigging
- oxygen and chlorine systems
- cryogenics
- waste-water processing
- welding gases
- stainless steel anti-galling



Grease applications include:

- greasing oxygen service bearings, valves, O-rings, pumps and regulators
- fire-resistant grease

TYPICAL PROPERTIES

LOX-8 is specifically formulated for wet and dry conditions. It is non-migrating, remaining where it is applied. LOX-8 is ideal where repetitive assembly and disassembly are required. It is non-flammable, non-toxic, non-hardening, and is anti-galling with stainless steel.

Available sizes for both LOX-8 Grease and LOX-8 Paste:

- 25 gram jar
- 100 gram jar
- 1 lb. jar
- 100 gram plunger*

* Applicator gun to fit plunger is also available.



APPLICATION DETAILS

LOX-8 is the only thread sealant that does it all.

Apply liberally to a clean, dry surface. Fit and torque the matching piece.

STORAGE/SHIPPING/HANDLING

No special handling required.

HEALTH & SAFETY

LOX-8 is a very safe solvent-free product. Wash hands after use. Keep product out of eyes.

LOX-8 PASTE and GREASE ARE . . .

- Certified by NASA (ASTM G72-82) (ASTM G86)
- Certified by BAM
- Oxygen-compatible
- Anti-galling
- Anti-seizing
- Non-migrating
- Chemically Inert
- Waterproof
- Non-flammable
- Easy to apply
- Silicone free
- Hydrocarbon free
- Non-toxic
- Odorless

LOX-8[®]

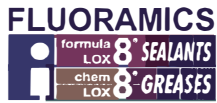
Thread Sealant & Grease

LOX-8 is compatible with many aggressive chemicals, including...

Acetylene	Hydrogen sulfide
Aluminum chloride	Hydroiodic acid
Ammonia	Hypochlorite solutions
Ammonium hydroxide	Iodine
Ammonium nitrate	Kerosene
Ammonium perchlorate	Muriatic acid
Anhydrous ammonia	Natural Gas
Antimony trichloride	Nitric acid
Argon	Nitrogen
Bicarbonate Acid	Nitrogen oxides (all)
Boron trichloride	Nitrogen trifluoride
Boron trifluoride	Oleum
Bromine	Oxygen (liquid & gaseous)
Bromine trifluoride (gaseous)	Phosphoric acid
Calcium hypochlorite	Potassium perchlorate
Carbon dioxide	Potassium persulfate
Chlorine	Propane
Chlorine trifluoride (gaseous)	Propylene oxide
Chlorosilanes	Silane
Chlorosulfonic acid	Silicone tetrachloride
Chromic acid	Sodium
Chromyl nitrate	Sodium hydroxide (all concentrations)
Ethylene oxide	Sodium peroxide
Fuming nitric oxide	Sulfur trioxide
Helium	Sulfuric acid
Hydrogen	Sulfur dioxide
Hydrogen bromide	Thionyl chloride
Helium	Titanium tetrachloride
Hydrochloric acid	Uranium hexafluoride
Hydrogen fluoride	Water
Hydrogen peroxide (all concentrations)	

The chemistries found in LOX-8 are compatible with the following elastomers and plastics:

Cured epoxies	Polyvinyl alcohol
EPDM	Rigid PVC
Ethylene propylene rubber	Rigid CPVC
Fluoro-silicones	Teflon type plastics
Neoprene	Urethanes
Polycarbonates	Viton type plastics
Polyamides	



Chem-8[®]

Silicone PTFE Lubricant

DESCRIPTION

Chem-8[®] is a great lubricant where sophisticated chemicals are packaged, or where corrosion or rusting is a problem. It is especially suitable for mechanical instruments such as hinges where repeated autoclaving is required.

As a superior Silicone-PTFE lubricant, Chem-8 works particularly well for high pressure gases except fluorine and oxygen. It is waterproof, effective to 300°F, and chemically inert. Chem-8 stays put, lasts indefinitely, and is resistant to autoclave washout.

TYPICAL APPLICATIONS

CHEM-8 is recommended for aluminum against aluminum surfaces. It is not recommended for alkali, fluorine or HF environments.

Chem-8 applications include:

- vacuum systems
- instrument threads
- mechanical instruments
- high vapor pressure applications



TYPICAL PROPERTIES

Chem-8 is a white, low-odor gel lubricant.

Available sizes for Chem-8:

- 12 oz. tube
- 1/2 lb.
- 1/4 lb.
- 1 lb.

APPLICATION DETAILS

Apply liberally to a clean, dry surface.

STORAGE/SHIPPING/HANDLING

No special handling required.

HEALTH & SAFETY

Chem-8 is a very safe product. Wash hands after use. Keep product out of eyes.



Tufoil® Engine Treatment

DESCRIPTION

Tufoil Engine Treatment will keep your car, truck, motorcycle or boat running so efficiently you can literally double the life of your engine. Efficiently running engines use less gas, need fewer repairs, run smoother and quieter and last a very long time. Compatible with mineral and PAO synthetic oils.

Tufoil has a blended synthetic base of the highest quality possible. The magic in Tufoil is the incredibly tiny size of the PTFE particles suspended in your oil.

The results are impressive:

- Faster cranking speed under all weather conditions.
- Better gas mileage
- Increased horsepower and acceleration
- Extended engine life.

The *Guinness World Book of Records* deemed Tufoil to be the world's most efficient lubricant in 1996 and 1997.

TYPICAL APPLICATIONS

Tufoil for Engines may be used in cars, truck, boats, 4-cycle motorcycles, and other 4-cycle engines.

TYPICAL PROPERTIES

Tufoil for Engines is a tan, low-odor, thick liquid.

Tufoil for Engines is available in:

- 4 oz.
- Quart
- Gallon
- 55-Gallon
- 8 oz
- 48-oz.
- 5-Gallon



Truck Engine Treatment is available in a 50 oz. container.

Motorcycle Treatment is available in a 2 oz. container.

APPLICATION DETAILS

For a standard crankcase of 4 - 5 quarts, add 8 ounces of Tufoil as an initial treatment when you change your oil. After this initial treatment, just 4 ounces of Tufoil added to the crankcase at each oil change is sufficient. Smaller crankcases require less Tufoil. The basic guideline is 2 ounces for each quart as an initial treatment and 1 ounce per quart at each oil change after that.

Synthetic Oils & Synthetic Gear Oils & Greases: Over the years, Tufoil has always mixed with all mineral oils and synthetic oils. Recently, however, we have seen an emergence of glycol-based synthetic oils and greases. We are mostly seeing it in high-end gear box synthetic oils for high temperature applications. Tufoil is not always compatible with glycol synthetics. If in doubt, you can check compatibility by mixing 1 ounce of Tufoil and 10 ounces of your oil at room temperature and stirring. No wait time is needed. Tufoil should dissolve right into your oil with no settling or clumping. If there is no separation, Tufoil is compatible with your synthetic oil.



Tufoil

Engine Treatment

**STORAGE/SHIPPING/
HANDLING**

No special handling required.

HEALTH & SAFETY

Tufoil is a very safe product. Wash hands after use. Keep product out of eyes.

Hinder**RUST**[®]

Engineered with



Hinder**RUST**

Rust Inhibitor and Lubricant

DESCRIPTION

Hinder**RUST** is a solvent-free and non-hazardous rust stopper and lubricant engineered for surface film management.

R2.0 The Rust Protector: Provides temporary surface protection for metal parts that need protection after fabrication, or during storage and transportation. Removable by washing to allow for final finishing.

S4.0 The Rust Stopper: Extreme surface adhesion and wetting across the surface and mounted parts allows for self-repairing, rust protection, and lubrication.

HV100 The Rust Shield: Substance slowly self-polymerizes over time and provides added protection in extreme weather exposure. Great for use as a protective undercoating on vehicles, plus earth moving and excavation equipment.

TYPICAL APPLICATIONS

R2.0 The Rust Protector

- Machined parts
- Castings
- Stampings

S4.0 The Rust Stopper

- Equipment maintenance
- Battery terminals and electronics
- Frees up frozen joints and fasteners
- Apply pre-assembly to stop corrosion
- Tools and weapons protection
- Protect and lubricate wire rope cables

HV100 The Rust Shield

- Undercoating on vehicles, excavation, earth moving and industrial equipment
- Protection in extreme weather conditions

TYPICAL PROPERTIES

Hinder**RUST** is a translucent tan liquid with a mild petroleum odor. It is solvent-free which means it is safe for users, non-flammable, and can be used in confined spaces.

% VOC – ASTM D2369

R2.0: 8.6%

S4.0: 3.0%

HV100: 2.0%

Viscosity – ASTM D445

@40°C @100°C

R2.0: 90 cSt; 18 SUS

S4.0: 119 cSt; 25 SUS

HV100: 111 cSt 19 SUS



Available sizes for Hinder**RUST**:

- 4 oz. with dauber (S4.0 only)
- 8 oz. BoV Pinpoint Stream Can (S4.0 only)
- 11.5 Aerosol Spray Can (S4.0-ASC)
- 5 gallon
- 8 oz. squirt bottle
- quart
- gallon
- 55 gallon

Hinder*RUST*[®]

Engineered with

Tufoil[®]
TECHNOLOGY

Hinder*RUST*

Rust Inhibitor and Lubricant

APPLICATION DETAILS

See directions for use below.

STORAGE/SHIPPING/ HANDLING

No special handling required.

Hinder*RUST* is a very safe product. Wash hands after use. Keep out of eyes.

Use Hinder*RUST* on . .

- Shop Tools
- Nuts and Bolts
- Near-water Environments
- Storage of Molds & Dies
- Battery Terminals
- Wire Rope Cables
- Forklifts
- Swing Chains
- Conveyors
- Steering Cables
- Spare Parts Storage
- Gardening Tools
- Wiring & Harnesses
- Wheels
- Chain Drives
- Gardening Tools
- Trailers & Hitches
- Locks & Hinges
- Firearms
- Yard Art
- Vehicle Underbodies

DIRECTIONS FOR USE:

1. Shake occasionally.
2. Simply apply by brushing or spraying on to new or rusty metal. No prep is needed for rusty metal.
3. Coat the surface with a thin even layer. Hinder*RUST* will wet and spread to a thin, glossy layer. Will penetrate between layers of metal and stop corrosion. Hinder*RUST* may be applied to wet or dry metals.
4. On wire ropes, brush or spray on the surface, Hinder*RUST* will soak and spread to the center of the cable.
5. Hinder*RUST* is not conductive so it is safe to brush directly on to electrical connections, cable ends, and battery terminals.
6. Parts/components can be put back in use immediately.
7. Hinder*RUST* starts protecting and lubricating the surface upon application.
8. An annual maintenance program for reapplication is recommended if constant, repeated exposures to water sprays greater than a rainfall are to occur.