

A low-angle, upward-looking photograph of an industrial oilfield structure. On the left, a complex network of blue-painted metal beams and pipes forms a lattice-like framework. To the right, several large, dark, weathered metal tubulars are stacked vertically, their ends capped with flanges. The background is a bright blue sky with scattered white clouds. The overall composition conveys a sense of height and industrial scale.

***JET-LUBE®***

**Oilfield, Tubulars  
& Valves**



**jetlube.com**

The place to go to get Safety, Tech and Product Data Sheets (SDS/TDS/PDS), product information, company news and more.





With more than 70 years of research with development, testing and manufacturing, Jet-Lube® has developed a broad line of oilfield, tubulars and valve products, to include Drilling and OCTG Compounds, Greases, Valve Sealants & Lubricants, Anti-Seizes, Thread Sealants, Cleaners & Degreasers and More.

Every Jet-Lube product is meticulously developed, manufactured and inspected to the industry's most comprehensive and rigorous quality control standards. Jet-Lube products are made in the USA in an ISO 9001:2015 and ISO 14001:2015 Facility. Headquartered in the United States, and facilities in Canada and United Kingdom. Jet-Lube has earned its place as an established leader worldwide in the lubrication industry.

Whatever your application, Jet-Lube has the right product to solve your lubrication needs. Through our experienced R&D lab, Jet-Lube has the ability to create customized products for unique conditions, environmental regulations and to meet the toughest application requirements.

## Table of Contents

---

Environmental Compound Formulas	2
Premium Copper-Based	
Drill Collar & Tool Joint Compounds	3
Premium Metal-Free	
Drill Collar & Tool Joint Compounds	3
OCTG Running Compounds	4
API Compounds	5
Oilfield Specialty Greases	5
Thread Compound Usage	6
Oilfield Specialty Products	6
Oilfield Specialty Anti-Seizes & Epoxy	7
Valve Sealants & Lubricants	8,9
Application Chart	10
Anti-Seizes	13
EP Greases	14
Thread Sealants	15
Lubricants for Open Gear	
& Wire Rope Applications	16
Coatings, Specialties & Cleaners	17, 18
Cleaners & Degreasers	18
Reference	19

**Please note that container images may vary.**

## ECF - Environmental Compound Formulas

---

Since 1949, Jet-Lube® has been formulating and testing environmentally acceptable compounds. Today, we offer alternatives that exceed the most stringent mandated performance and environmental requirements for offshore and onshore drilling operations worldwide. Now, Jet-Lube's environmentally sensitive greases and lubricants join our thread compounds in meeting Norway's Yellow (SFT) and the United Kingdom and the Netherlands' "E" classification

by CEFAS. These classifications are the most rigid environmental requirements to date and are part of the effort to apply "green" standards and practices throughout all industries worldwide. To meet the OSPAR Commission's Harmonized Offshore Chemical Notification Format (HOCNF) directives, compounds are required to be biodegradable, bioaccumulation-potential free and nontoxic to all the life forms tested.



### Metal-Free & Extreme Temperature Thread Compounds

---

#### **RUN-N-SEAL® ECF™**

A high-pressure sealant alternative for larger clearance connection designs such as API buttress, TENARIS TS-ER & DINO-VAM.

#### **SEAL-GUARD™ ECF™**

Specifically formulated for mechanical seal connection designs and high alloy, prone to galling steel connections.

#### **NCS-30® ECF™**

A premium, non-metallic drill string compound with superior galling resistance, adhesion and water resistance.

#### **HPHT THREAD COMPOUND™**

Contains a wider service range and better shoulder torques on heavy wall and high chrome and nickel alloys.

### Workover, Subsea & Open-Gear Greases & Lubricants

---

#### **JACKING SYSTEM GREASE ECF™**

For jacking systems, slides, cantilever-type rigs and any heavily loaded gear equipment.

#### **WIRE LINE LUBRICANT ECF™**

Formulated to extend and protect your slick braided and electric wireline.

#### **ALCO-EP™ ECF™**

A long-lasting, highly water-resistant, multi-purpose grease. Excellent for subsea, as well as topside moving components. Approved for use on RC-4S and ALT-2 connection types.

*> Our focus is to produce the industry's highest-quality drill pipe compounds, thread sealants, EP greases, aerosol products, and valve lubricants for demanding applications.*

## Premium Copper-Based Drill Collar & Tool Joint Compounds

### KOPR-KOTE®

#### Drill Collar & Tool Joint Compound

KOPR-KOTE is a premium, established, widely recognized copper-based drilling compound. It is also one of the few copper compounds to be granted a marine-pollutant exception by the DOT. KOPR-KOTE is uniquely formulated to prevent excessive circumferential make up and has a very high static friction factor that helps prevent downhole joint make up when excessive drilling torques are encountered. It prevents galling and seizure and allows easy breakout. KOPR-KOTE is recommended for all oilfield threads: drill pipe, collars, tools and jacking systems.



Rating: Standard: 0°F (-18°C) to 450°F (232°C), Thermal: 0°F (-18°C) to 700°F (370°C), Arctic: -65°F (-55°C) to 300°F (149°C) • NSF H2 Registered

### 2I®

#### Double-Duty Tool Joint & Drill Collar Compound

JET-LUBE's 2I is a high-quality product designed for less severe applications than KOPR-KOTE. It is formulated to prevent excessive circumferential make up of tool joints and protects against galling and high stress to prolong thread and shoulder life. 2I is designed for use as a tool joint compound for consistent control of make up and break out. It may also be used on collars in less severe drilling conditions. The high-dynamic friction factor helps prevent excessive downhole make up and bellowing of box members. 2I has an exception from the DOT's marine-pollutant labeling requirements and some extended storage properties.



Rating: Standard: 0°F (-18°C) to 450°F (232°C), Thermal: 0°F (-18°C) to 700°F (370°C), Arctic: -65°F (-55°C) to 300°F (149°C)

### JLS®

#### Tool Joint Compound

JLS TOOL JOINT COMPOUND is economical and contains premium-grade copper flakes, amorphous graphite, extreme-pressure additives, rust and corrosion inhibitors and other special purpose ingredients at lower doses to be used in less severe drilling applications. JLS is recommended for use on tool joints in drilling medium-depth formations. It provides consistent control of make up, break out, galling and seizure.



Rating: Standard: 0°F (-18°C) to 450°F (232°C), Arctic: -65°F (-55°C) to 300°F (149°C)

### KOPR-KOTE® ARCTIC

#### Drill Collar & Tool Joint Compound

KOPR-KOTE ARCTIC is the more pumpable or sprayable version of the standard grade of KOPR-KOTE. It is an unleaded compound containing copper flake, graphite, and other natural extreme pressure and anti-wear additives. KOPR-KOTE ARCTIC's solids package is formulated to prevent excessive circumferential makeup by increasing the coefficient of friction under compressive forces. As stress levels rise above 50% of yield, the friction factor increases, limiting downhole makeup. Full hydraulic joint efficiency is maintained allowing joint shoulder faces to mate completely without standoff or deformation.



Rating: -65°F (-54°C) to 300°F (149°C)  
(Note: Base oil pour points can vary effecting the range)

### EXTREME®

#### Mud Resistant Drill Collar & Tool Joint Compound

EXTREME is a premium-quality, unleaded compound blended into JET-LUBE's high-temp, mud-resistant, complex-base grease which also offers extended storage capability. It prevents excessive circumferential make up by increasing the coefficient of friction under compressive forces. As stress levels rise above 50% of yield, the friction factor increases, limiting downhole make up. Full hydraulic joint efficiency is maintained allowing joint shoulder faces to mate completely without standoff or deformation. EXTREME has an exception from the DOT's marine-pollutant labeling requirements.



Rating: Standard: 0°F (-18°C) to 450°F (232°C)

## Premium Metal-Free Drill Collar & Tool Joint Compounds

### NCS-30®

#### Tool Joint & Drill Collar Compound

NCS-30 is a premium-quality, nonmetallic compound containing carbon-based fibers and additives and other natural extreme-pressure and anti-wear additives. These additives are blended into JET-LUBE's high-temp, calcium-complex base grease, which also offers extended storage capability to NCS-30. This base grease offers the additional advantage of superior adhesion to wet steel and resistance to water wash-off. NCS-30 is especially effective for invert or high-pH muds.



Rating: -20°F (-29°C) to 500°F (260°C), Arctic: -40°F (-40°C)

### NCS-30® ECF™

#### Tool Joint & Drill Collar Compound

This biodegradable, nonmetallic formula meets Norway "Yellow", British and Dutch "E" HOCNF classifications. NCS-30 ECF's extreme-pressure and anti-wear additives control friction and galling. It resists wash-off and sticks to wet pipe. NCS-30 ECF withstands invert and high-pH muds and is non conductive for MWD. This tool joint & drill collar compound is excellent for high-chrome or nickel alloy connections in extreme temperature service. The complex grease carrier in Jet-Lube NCS-30 ECF allows it to provide extended storage capability.



Rating: -20°F (-29°C) to 450°F (232°C)



## Premium Metal-Free Drill Collar & Tool Joint Compounds

### KOV'R-KOTE®

#### Double-Duty & Tool Joint Compound/Sealant

The unique blend of polymers, graphite and friction-reducing additives makes KOV'R-KOTE ideal for drill collars, drill pipe and tubing and it can be used for bottom hole assemblies. This metal-free formula was developed to replace compounds containing zinc, copper and heavy metals with similar frictional properties.

While maintaining multifunctional capabilities, KOV'R-KOTE is recommended for use on shouldered and interference threads and is ideal for small and large diameter drill pipe.

Rating: Standard: 0°F (-18°C) to 450°F (232°C), Thermal: 0°F (-18°C) to 700°F (370°C) • NSF H2 Registered



### CURÄL™

#### Work Over/Non-Critical Tool Joint Compound

CURÄL is a thread compound developed for non critical drilling, work over and production applications.

Nonmetallic, environmentally acceptable, special additives enable CURÄL to also be used for lubricating, sealing and storage of drilling and production equipment. It can also be used as an alternative to API-MODIFIED on carbon steel alloys.

Rating: Standard: 0°F (-18°C) to 450°F (232°C)

**Note: Not for use on mechanical seal designs.**



## OCTG Running Compounds

### RUN-N-SEAL® ECF™

#### Non-Premium Thread Connection Sealant

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format)

- Classification: "Yellow" rating for Norway
  - "E" for the United Kingdom and Netherlands
- RUN-N-SEAL ECF is a high-pressure sealant alternative for API Buttress and other larger clearance thread seal connection designs. It is brushable over a wide range of temperatures and has excellent inherent water resistance.

RUN-N-SEAL ECF sticks to wet and oily steel, ensuring the compound will not wash-off threads.

Rating: 0°F (-18°C) to 450°F (232°C) Friction factor 1.0 relative to API-MODIFIED



### RUN-N-SEAL® EXTREME®

#### Running & Storage Compound

RUN-N-SEAL EXTREME is a nonmetallic, high-pressure sealant for API connections (buttress and 8-round) and storage compound. This compound is not intended for use on mechanical seal connections. RUN-N-SEAL EXTREME contains graphite and other nonmetallic, inorganic, anti-wear additives blended into a state-of-the-art, high temperature, rust-inhibiting complex soap-based grease. RUN-N-SEAL EXTREME has been tested for California Code and is not classified as a hazardous waste. It is nontoxic, even in a marine environment, as evidenced by test results on the California Hazardous Waste Assessment Bioassay and a "D" rating in the North Sea (OSPAR) Guidelines.

Rating: Standard: 0°F (-18°C) to 450°F (232°C), Thermal: 0°F (-18°C) to 700°F (370°C), Arctic: -65°F (-55°C) to 350°F (177°C)  
Friction factor 0.9 relative to API-MODIFIED



### SEAL-GUARD™ ECF™

#### Yellow/"E"-Rated Premium Connection Thread Compound

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format)

- Classification: "Yellow" rating for Norway
- "E" for the United Kingdom and Netherlands

SEAL-GUARD ECF is specifically formulated for mechanical seal thread designs and high-alloy steel materials. The smaller particle size distribution may not provide optimum sealability on 8-round and buttress thread forms.

Biodegradable • Metal-free • Frictional properties similar to API MODIFIED. Rating: -20°F (-29°C) to 450°F (232°C)



### RUN-N-SEAL® EXTREME®

#### AWG

#### All Weather Grade, Metal-Free Thread Sealant

RUN-N-SEAL EXTREME AWG is a metal-free, high-pressure sealant alternative versus API-MODIFIED for OCTG 8-round and buttress connections. This compound contains graphite and other nonmetallic, inorganic, anti-wear additives blended into a state-of-the-art, all weather, rust inhibiting complex soap based grease.

Nontoxic. H2S inhibited • Rating: 40°F (-40°C) to 450°F (232°C)  
Friction factor 0.9 relative to API-MODIFIED



### HPHT THREAD COMPOUND™

#### High Pressure/High-Temp Thread Compound

HPHT Thread Compound is specifically formulated to meet high performance requirements of proprietary, metal-to-metal seal and high interference connection designs. This compound utilizes today's high-performance materials, which include "super chrome" and high-alloy steels.

Biodegradable • Ideal for high-chrome connections • Eco-safe • Metal-free  
• Low volatility at temperatures up to 232°C



### SEAL-GUARD™

#### Proprietary Connection Thread Compound

This nonmetallic thread compound design provides optimum galling resistance and frictional properties in the make up of high-chrome, proprietary designs (metal to metal seals, as well as API 8 round designs).

Rating: -20°F (-29°C) to 450°F (232°C) Friction factor 0.9 relative to API-MODIFIED



## API Compounds

### Z-50™

#### Zinc Tool Joint Compounds

Z-50 contain varying percentages of prime-grade metallic zinc dust along with other special additives. They ensure consistent floor make up and are brushable over a wide temperature range. Z-50 adhere to all surfaces, resist water wash-off and prevent rust and corrosion.

Rating: 0°F (-18°C) to 300°F (149°C)



### MODIFIED-LZF™

#### Lead/Zinc-Free High-Pressure Thread Compound

MODIFIED-LZF is a patented, high-pressure sealant and anti-seize compound designed as a lead-free alternate for API-MODIFIED. MODIFIED-LZF, formerly known as ENVIRO-SAFE was first introduced into the market in 1989. The compound contains copper flake and graphite as well as other nonmetallic, inorganic, extreme pressure, and anti-wear additives. It has a balanced package of rust, corrosion, and oxidation inhibitors blended into a high-quality aluminum complex base grease. The aluminum complex grease provides a high melting point and excellent inherent water resistance; allowing it to stick to wet steel and ensuring that the compound will not wash off threads.

Rating: 0°F (-18°C) to 450°F (232°C)



### API-MODIFIED

#### Thread Compound Sealant

API-MODIFIED is a high-pressure thread compound that conforms to and exceeds the requirements of API Bulletin 5A2 and R.P. 5A3. It is formulated with JET-LUBE's unique grease base, which tenaciously adheres to wet or oily surfaces and provides brushability throughout the service range. API-MODIFIED seals and withstands pressures to 10,000 psi, on API connections and greater on mechanical seal designs. It resists wash-off and will not harden or dry.

Rating: 0°F (-18°C) to 300°F (149°C)



## Oilfield Specialty Greases

### ALCO-EP™ ECF™

#### Extreme-Service Grease

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format)

- Classification: "Yellow" rating for Norway
- "E" for the United Kingdom and Netherlands

ALCO-EP ECF is a premium, state-of-the-art, multipurpose, biodegradable grease containing a highly synergistic blend of rust and oxidation inhibitors plus extreme pressure and anti-wear additives for maximum performance. This extreme service grease is an excellent choice for subsea or other conditions where extreme water resistance is necessary, its non-plating, organic extreme pressure, anti-wear additives allow ALCO-EP ECF to be used where tolerances are tight and/or speeds are high.

Rating: -10°F (-23°C) to 450°F (232°C)



### TF-15®

#### High-Pressure PTFE Thread Sealant

The TF-15 PTFE formula aids in the make up of large-diameter casing by providing a lower coefficient of friction than API-MODIFIED. TF-15 provides excellent protection against galling and wear, seals badly worn threads and greatly increases connection life. This sealant is recommended for use as a sealant on fiberglass tubing and casing threads as well as VAM BIG OMEGA. TF-15 is particularly useful in areas subject to H<sub>2</sub>S and salt water and in applications subject to vibration, pressure surge and temperature fluctuations.

Rating: Temperatures up to 600°F (315°C), Pressures up to 10,000 psi



### WIRE LINE

#### LUBRICANT ECF™

##### Slick/Electric Braided Wireline Lubricant

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format)

- Classification: "Yellow" rating for Norway
- "E" for the United Kingdom and Netherlands

WIRE LINE LUBRICANT ECF is a unique product for wire line applications where a grease-type lubricant is required. This easy flow formula will stick to the wire line and penetrate it for added protection and extended life. WIRE LINE LUBRICANT ECF is H<sub>2</sub>S inhibited and has unique capabilities as a preservative against rust and corrosion. It offers excellent protection against extended exposure to elements and UV rays. WIRE LINE LUBRICANT ECF can be applied by hand or through a pneumatic lubrication system.

Rating: -20°F (-29°C) to 500°F (260°C)



**Note: Not for use with oxygen or strong oxidizers such as hydrogen peroxide or sulfuric acid.**

*> For over 70 years, Jet-Lube® has played an integral role in the research and development of specialty compounds.*

## Thread Compound Usage

### Drill Collar & Tool Joint Size

	4.5"	5"	5.5"	6.625"	7"	7.625"	8.625"	9.625"
mm	114.3	127	139.7	168.28	177.8	193.68	219.08	244.48
Compound OZ/PIN	2.75	3.00	3.75	4.25	5.50	7.25	9.00	9.50
grams	77.96	85.05	106.31	120.49	155.92	205.53	255.15	269.32
Joints* PINS/GAL	51	46	42	34	30	23	17	14

### Tubing Size

	2.375"	2.875"	3.5"	4"
mm	60.33	73.03	88.90	101.60
Compound OZ/PIN	.66	.80	.88	1.12
grams	18.71	22.68	24.95	31.75
Joints* PINS/GAL	194	160	128	114

### Casing Size

	4.5"	5"	5.5"	6.625"	7"	7.625"	8.625"	9.625"	10.75"	11.75"	13.375"	16"	18.625"	20"
mm	114.3	127	139.7	168.28	177.8	193.68	219.08	244.48	273.05	298.45	339.73	406.40	473.08	508.00
Compound OZ/PIN	1.88	2.09	2.30	2.76	2.93	3.19	3.61	4.03	4.50	4.92	5.60	6.70	7.79	8.37
grams	53.30	59.25	65.20	78.24	83.06	90.43	102.34	114.25	127.57	139.48	158.76	189.94	220.84	237.29
Joints* PINS/GAL	68	61	55	46	44	40	35	32	28	26	23	19	16	15

*\*When applying compound to one pin or box*

## Oilfield Specialty Products

### KORR-GUARD™ Storage Compound

KORR-GUARD is a water-displacing, semi-fluid grease. It flows into the thread roots, displacing moisture, cutting oils and residual threading materials. KORR-GUARD will allow the thread protectors to completely engage the pipe threads and aid in eliminating moisture penetration to the newly threaded or recut threaded areas. KORR-GUARD does not run or drip off the threads.



This unique blend of rust and corrosion inhibitors, made into a grease-type product is ideal for short or long-term storage of casing, tubing, drill pipe, or any metal surface requiring protection from the elements. KORR-GUARD is ideally suited for extremely humid or salt water environments. KORR-GUARD can be applied by a brush and will not harden over time, therefore, this product can be removed by using a rag or cleaner.

Rating: - 20°F (-29°C) to 425°F (218°C)



## Oilfield Specialty Anti-Seizes

---

### MP-50™

#### Multipurpose Non-Melting MoS<sub>2</sub> Paste

50% Molybdenum Disulphide Paste • Brushable  
• Color - Black • -300°F to 750°F (-185°C to 400°C) • Organic Clay Mixture with Molybdenum Disulphide • Non-Melting Formula • 300,000 psi Contact Stress Load • NAVSEA TMS S 9958-AA-MMA-100



MP-50 was developed for applications where extreme high loads are present, like center bowl lubrication points for rail cars and walking cams for dragline cranes. This product is highly saturated with MoS<sub>2</sub> (Molybdenum Disulphide) in a thick non-melt, grease base for stay put properties. MP-50 is designed to handle high pressure and high heat applications like mandrel forming presses, and is used as a valve stem lubricant for many OEM valve manufacturers.

## Epoxy

---

### JET-LOK® III

#### Zinc-Free Threadlocker, Two-Part Epoxy

JET-LOK III can be used to permanently lock threaded connections under normal operating conditions. JET-LOK III uses a new catalyst for added pot life and durability with lower toxicity and less heat generation, making it the optimum choice for its recommended applications. It is specially designed for use on all threaded joints or fasteners where an exceptionally strong and durable bond is required. Ideal on drilling tools, casing, and other tubulars where the effective prevention of joint loosening is required.



## Valve Sealants & Lubricants

### EZY-TURN® #2

#### Gate/Plug Valve Body Fill Lubricant

EZY-TURN #2 is a hydrocarbon-resistant, general-purpose gate valve sealant. This lubricant is blended from chemically stable and naturally corrosion-resistant vegetable oils. EZY-TURN #2 contains no solid fillers and is easily pumped with a high-pressure lubricator at temperatures as low as 0°F (-18°C).

Applications: Condensate, crude, kerosene, jet fuels, dilute acids, dilute alkalis, hydrocarbon gases and hydrocarbon liquids.

Rating: 0°F (-18°C) to 450°F (232°C)  
Color: Amber



### EZY-TURN® #4 Plus

#### Multipurpose Valve Sealant w/MoS2

EZY-TURN #4 PLUS is ideal for applications requiring moisture & hydrocarbon resistance. It is pumpable to temperatures as low as -40°F (-40°C) when used with a high-pressure lubricator and with the softer consistency is more easily pumped for hydraulic fracturing applications. It has very good hydrochloric acid resistance but also has additives to neutralize the harmful effects of hydrochloric acid in valves pulled from Frac service.

Applications: Recommended for use in gate, ball and globe valve applications requiring aliphatic hydrocarbon and acid resistance or where high and low temperature extremes are encountered. Suitable for valves used in hydraulic fracturing.

Rating: >-40° °F (-40°C) to >450°F (232°C). It can retain its consistency at 500°F (260°C) within a valve where oxygen contact is excluded.  
Color: Grey to Black



### EZY-TURN® #3

#### Valve Sealant Body Fill Lubricant w/MoS2

Specifically designed for light hydrocarbon liquids and gases, making it the sealant of choice for pipeline and compressor stations. EZY-TURN #3 pumps easily in temperatures as low as 0°F (-18°C) with a high-pressure lubricator. With a blend of vegetable oils and molybdenum disulfide (MoS<sub>2</sub>) as a solid lubricant, EZY-TURN #3 resists all aliphatic hydrocarbons, protects internal plug surfaces and reduces valve operating torque.

Applications: Aliphatic hydrocarbons, butane, fuel oils hot gases, LPG, natural gas and propane.

Rating: 0°F (-18°C) to 500°F (260°C)  
Color: Black



### EZY-TURN® #7

#### Ball Valve Sealant

EZY-TURN #7 is formulated from premium food grade synthetic fluids for maximum hydrocarbon resistance over a broad temperature range. Pumpable and usable at temperatures as low as -30°F (-35°C). It also retains its firm consistency at temperatures as high as 400°F (204°C) when injected into the valve and oxygen contact is avoided. Fortified with inhibitors against H<sub>2</sub>S, rust and oxidation.

Applications: Any application involving aliphatic hydrocarbon product streams. EZY-TURN #7 is resistant to water and aqueous services, but is not recommended for steam service. Ideal for use in ball valves where the temperature range of conventional vegetable oil sealants precludes their use. Particularly well suited for low-temperature applications -30°F (-35°C) to 20°F (-7°C). Will not dissolve in aliphatic hydrocarbon services. Prevents scoring and galling on precision valve surfaces.

Rating: -30°F (-35°C) to 400°F (204°C)  
Color: Blue



### EZY-TURN® #3 ARCTIC

#### Gate/Plug Valve & Body Fill Lubricant

EZY-TURN #3 ARCTIC is a multipurpose valve lubricant and sealant that provides excellent overall resistance to CO<sub>2</sub>, H<sub>2</sub>S, moisture and gases. It's urethane-silicone carrier performs well to temperatures as low as -70°F (-57°C).

Rating: -58°F (-50°C) to 500°F (260°C)  
Color: Black



### EZY-TURN® #4

#### Gate Valve & Body Fill Lubricant w/ MoS2

EZY-TURN #4 is formulated from food grade polyester base fluids that provide increased resistance to aliphatic hydrocarbons. When compared with the standard vegetable products, EZY-TURN #4 has superior performance characteristics in both low and high-temperature applications. Lubrication and sealing is enhanced by the addition of molybdenum disulfide, which effectively burnishes into scratches, renewing the surface.

Rating: -40°F (-40°C) to 500°F (260°C)  
Color: Black



### EZY-TURN® #12

#### Gate/Plug Valve Body Fill Lubricant

EZY-TURN #12 is a "peanut butter" type product designed for expanding and other gate valves with body cavities. It can also be used in specific plug valve designs as a sealant. It's recommended for applications where gas or liquid hydrocarbon resistance is required. It is also an ideal general-purpose sealant. EZY-TURN #12 is formulated from vegetable oils and polymers to reduce torque during valve operation while providing a leak-proof seal. It injects into the valve body using a high-pressure lubricator.

Applications: Aliphatic hydrocarbon liquids, crude, dilute acids and alkalis, fuel oils, gasoline, natural gas and water.

Rating: 0°F (-18°C) to 250°F (121°C)  
Color: Beige-Brown



## **EZY-TURN® PVS**

### **Plug Valve Supreme Sealant**

A biodegradable product specifically designed for large bore plug valves used on zipper manifolds and Frac stacks. It is the sealant of choice for fracking operations. EZY-TURN PVS is formulated from a blend of vegetable oils and contains molybdenum disulfide (MoS<sub>2</sub>) as a solid film lubricant. EZY-TURN PVS is resistant to all aliphatic hydrocarbons and lowers the torque necessary for smooth valve operation while protecting internal surfaces from scoring and galling.



Applications: Recommended for use in any valve application requiring aliphatic liquid and gas resistance. Ideal for fracking operations.

Rating: -20°F (-28°C) to 600°F (315°C)  
Color: Grey to Dark Grey

## **EZY-TURN® H2S**

### **High-Temp/Pressure Valve & Body Fill Lubricant**

A premium vegetable and synthetic oil sealant, thickened with silicone to provide maximum resistance to H<sub>2</sub>S and hydrocarbon fluids with temperatures as high as 400°F (204°C). This black, tacky compound is waterproof, corrosion resistant and extremely adhesive to all metal surfaces.



Applications: Acid solutions, diesel fuel, hydrocarbon gases and liquids, sour gas, crude and water.

Rating: 0°F (-18°C) to 400°F (204°C)  
Color: Black

## **EZY-TURN® #196**

### **High-Temp/High-Pressure Valve Sealant & Body Fill Lubricant**

EZY-TURN #196 is a premium sealant formulated from a unique blend of high-viscosity, gas-resistant synthetic and vegetable-based oils for use in all valve types. This high-pressure sealant is ideal for service applications involving gases, distillates, dilute acids and steam. EZY-TURN #196 contains special polymeric fibers and other sliding lubricants to enhance sealability in extreme applications. Although designed for expanding gate-type valves, EZY-TURN #196 is used effectively on many other valve types.



Applications: EZY-TURN #196 has been formulated for use in production oilfield situations (pipeline valves) where a variety of service conditions may be required. This is a premium product and should be used where typical solid fillers mandated in the "peanut butter" type sealants do not work. The new polymeric fibers add greater performance for extreme services.

Rating: 0°F (-18°C) to 420°F (215°C)  
Color: Peanut Butter Brown

## **EZY-OPEN™**

### **Valve Penetrant (Liquid or Gel)**

EZY-OPEN is a valve penetrant designed to penetrate scale, rust, corrosion and old, hardened valve lubricants which can hamper or disable valve operation. EZY-OPEN is specifically formulated from a select group of nonflammable, nontoxic and biodegradable fluids. It is available in a liquid or gel formula.



## **EZY-OPEN™ (Cont.)**

### **Valve Penetrant (Liquid or Gel)**

EZY-OPEN contains a powerful dispersant and detergent to aid in the removal of gum and lacquer; metal wetting agents to aid in the penetration of scale and rust, and PTFE to reduce the torque required to break the valve-free.

Applications: Disabled or hard to operate lubricated valves. Excellent for use in any injectable assembly to aid in disassembly.

Rating: -10°F (-23°C) to 400°F (204°C)  
Color: Amber

## **EZY-TURN® POLAR**

### **Gate Valve Body Fill Lubricant - (Arctic Conditions)**

EZY-TURN POLAR is designed for oilfield gate valve lubrication not only for arctic conditions but also as a general purpose product with its broad temperature range. It is resistant to hydrocarbons, hydrogen sulfide, carbon dioxide and water. It remains an effective sealant and lubricant to -75°F (-59°C). This sealant has the most OEM valve approvals.



Applications: Carbon dioxide, sour crude, hydrogen sulfide/sour gas.

Rating: -75°F (-59°C) to 350°F (177°C)  
Color: Black

## **EZY-TURN® BODY FILL**

### **Gate Valve Body Fill Lubricant**

An economical, petroleum oil-based sealant that readily flows into hard to fill orifices and channels in gate valve body cavities when pumped with a high-pressure lubricator. EZY-TURN BODY FILL is economical where hydrocarbon resistance is not a major concern. It is petroleum based, has good metal adhesion and field studies show it has excellent ability to remain in the body cavity and displace water and foreign material.



Applications: Should be used in situations where economy is a factor and maximum hydrocarbon resistance is not required. Good for close tolerance valves due to metal adhesion and superior flow properties under pressure.

Rating: -20°F (-29°C) to 350°F (177°C)  
Color: Black

## **EZY-TURN® BODY FILL ARCTIC**

### **Gate Valve Body Fill Lubricant**

A petroleum oil based sealant suitable for displacing water and foreign material in gate valve cavities. EZY-TURN BODY FILL ARCTIC has proven it has excellent ability to remain in the body cavity during field service even though it is petroleum based. This sealant has outstanding metal-adhesion and readily flows into hard to fill orifices and channels when pumped with a high-pressure lubricator.



Applications: Low-temperature applications where economy is a factor and maximum hydrocarbon resistance is not required. Good for close tolerance valves due to metal adhesion and superior flow properties under pressure.

Rating: -40°F (-40°C) to 300°F (149°C)  
Color: Grey to Black



## Application Chart

	DRILLING								
PRODUCTS	Drill Collars - Severe Duty	Drill Collars - Light to Medium Duty	Tool Joints - Severe Duty	Tool Joints - Light to Medium Duty	Drill Collars & Tool Joints - Light Duty	Non-Magnetic/CRA (Corrosion, Resistant Alloy)	Large Diameter (9.5 "O.D.") Rotary Shoulder Connections	Proprietary/Non-API	API/8-Round, Line Pipe
METALLIC PRODUCTS									
EXTREME	X	X	X	X	X		X	X	
KOPR-KOTE	X	X	X	X	X		X	X	
2I		X		X				X	
JLS			X	X	X			X	
Z-50		X		X	X				
API-MODIFIED*									
MODIFIED-LZF									X
NON-METALLIC PRODUCTS									
NCS-30	X	X	X	X	X	X	X	X	
KOV'R-KOTE		X		X				X	
RUN-N-SEAL EXTREME							X		X
SEAL-GUARD									X
TF-I5							X		
KORR-GUARD									
CURAL				X					X
OG-H									
AP-5									
ALCO-EP 73 PLUS									
ENVIRONMENTALLY SAFE PRODUCTS									
NCS-30 ECF	X	X	X	X	X	X	X	X	
RUN-N-SEAL ECF									X
SEAL-GUARD ECF							X		
ALCO-EP ECF									
JACKING SYSTEM GREASE ECF									
HPHT THREAD COMPOUND							X	X	X

\*Contains Lead



## Valve Sealants & Lubricants

---

### TEMP-GUARD™

#### High Temperature Grease

TEMP-GUARD (formerly EZY-TURN HI-TEMP) is a high quality synthetic grease developed for high temperature applications. It contains both graphite and molybdenum disulfide, giving the product both low friction and extreme pressure capabilities. The synthetic fluid in this product provides exceptional low temperature flow characteristics as well as high temperature stability. TEMP-GUARD's inherent oxidation resistance is further enhanced with high temperature carbon controlling antioxidants.

Applications: Plain and anti-friction ball and roller bearings, kiln bearings, crushers, crane ladles, press and hammer guides, high temperature blowers, fans and oven conveyors.

Rating: -25°F (-32°C) to 600°F (316°C)



### SILICONE COMPOUND DM™

#### Moisture-Proofing Non-Conductive Lubricant - NSF H1

SILICONE COMPOUND DM provides excellent lubrication and sealing properties for plug and gate valves, stuffing boxes, o-rings and vacuum and pressure systems. SILICONE COMPOUND DM will not harm most elastomers and plastics. Ideally suited for subzero processing and freezer applications.

Dielectric strength: >500volts/mil. NLGI Grade 3. Conforms to MIL S-8660-C. NATO Code# S-736.

Rating: -50°F (-46°C) to 400°F (204°C)  
NSF H1 Registered

**Note: Not recommended for use on surfaces to be painted.**





## Anti-Seizes

### KOPR-KOTE® ANTI-SEIZE Copper Anti-Seize & Thread Lubricant

-65°F to 1800°F (-54°C to 982°C) • NSF H2 Registered  
• MIL PRF-907F • Raytheon -Spec M8656839 Type I  
• Load Rating -80,000 psi • Friction Coefficient  
(K-factor) -.15 • 10% pure metallic copper flake • No  
VOC • NSN #8030-01-239-8703 • Not Classified as a  
Marine Pollutant • DOT approval CA2004080025



KOPR-KOTE ANTI-SEIZE is a combination of copper flake, graphite and other extreme pressure additives, blended into a food grade grease base that helps properly distribute all the components on the surface of the fastener or the metal surface needing lubrication. This particle distribution is necessary to achieve the .15 K-Factor and aids in the break out process by reducing metal-to-metal contact that can cause friction, heat and damage to the threaded surface.

### 550® EXTREME® Low "E" Nonmetallic Anti-Seize and Thread Lubricant

-65°F to 2400°F (-54°C to 1316°C) • MIL-PRF 907F •  
Raytheon Spec M8656839 Type II • Friction Coefficient  
(K-Factor) -.17 • Blend of Molybdenum Disulfide &  
Special Oxidation Resistant Graphite • No  
VOC



550 EXTREME anti-seize compound is an enhanced formulation of our 550® product. 550 EXTREME is the ideal product for petrochemical plant maintenance needs. Its homogeneous composition offers maximum protection against seizure and heat freeze, eases assembling and dismantling, and saves maintenance hours. This anti-seize lubricant assures protection against rust, oxidation, and corrosion. It will not harden, evaporate, or settle out; and it requires no thinning. In addition to molybdenum disulfide ( $\text{MoS}_2$ ), graphite, and low friction fillers, 550 EXTREME utilizes a complex base grease that is fortified with effective rust and corrosion inhibitors and inherent anti-wear properties. As an added benefit, of 550 EXTREME, when compared to other anti-seize compounds containing greater than 40% molybdenum disulfide is the coefficient friction of 550 EXTREME is less sensitive to temperature.

### SILVER PLUS REGULAR Regular Grade Anti-Seize and Thread Lubricant

-65°F to 1800°F (-54°C to 982°C) • Friction Coefficient  
(K-Factor) -.15 • 15% Pure Metallic Content (Copper &  
Aluminum) • No VOC



SILVER PLUS REGULAR is a heavy-duty blend of aluminum, copper and graphite lubricants in a petroleum grease base. It is a non-drying, soft-set anti-seize, specially formulated to work with aluminum, carbon steel, black iron and rough cut threads. SILVER PLUS REGULAR protects metal parts from rust corrosion, seizing and galling up to 1800°F (982°C). The micro-sized particles produce a smooth consistency and allow it to quickly coat fine threads and small and large diameter fasteners. The metallic components make it very conductive and, because the primary anti-seize particle is aluminum, it eliminates the potential for galvanic corrosion.

### ALCO-EP-73 PLUS™

#### Premium Multipurpose Grease

-25°F to 450°F (-32°C to 232°C) • Superior rust and corrosion protection • Dropping point - 500°F (260°C) • Polymer additives for extreme water resistance • Color - Red • Exceeds Military spec MIL-G-18458B-SH

ALCO-EP-73 PLUS is a premium, state-of-the-art, multipurpose aluminum complex grease containing a highly synergistic blend of rust and oxidation inhibitors plus extreme pressure and anti-wear additives for maximum performance characteristics.

ALCO-EP-73 PLUS also contains polymer additives, further enhancing the inherent water resistance of an aluminum complex based grease. This multipurpose grease is extremely resistant to rust and corrosion and suited for use in high moisture areas. It's specially formulated and developed for subsea or other conditions where extreme water resistance is necessary. The highly developed additive package makes ALCO-EP-73 PLUS the premier, multipurpose grease for hostile environments.



### ALCO-EP™

#### Premium Multipurpose Grease with Moly

-25°F to 450°F (-32°C to 232°C) • Protects against rust and corrosion • Dropping Point - 500°F (260°C) • Protects against extreme pressure, shock load, welding and scoring • Forms a protective barrier to reduce wear and extend service life

ALCO-EP premium multipurpose grease is a versatile, aluminum complex grease with a high level of rust and oxidation inhibitors, as well as CZ-EX®, Jet-Lube's extreme pressure additive. ALCO-EP also contains molybdenum disulfide (MoS<sub>2</sub>) and graphite, which plate out to resist metal-to-metal contact. This grease provides superior wear protection against extreme pressure and is highly water resistant. Its 60 pound rating in the Timken Load Test proves ALCO-EP has excellent load-carrying ability.

ALCO-EP is designed for friction and anti-friction bearings, bushings, chassis points, U-joints, pivot pins, and a wide range of other industrial, fleet and equipment applications.



### JET-PLEX-EP™

#### Premium Multipurpose Grease

14°F to 527°F (-10°C to 300°C) • Will not run or pound out • Pumpable hot or cold • Extremely resistant to rust and oxidation • Color - Red • Available in NLGI 2 grades

JET-PLEX-EP is the ideal multipurpose grease for use in extreme pressure and high temperature operating conditions. JET-PLEX-EP is manufactured from carefully selected petroleum oils and lithium complex soap to create a multipurpose grease with a dropping point of 550°F (288°C). JET-PLEX-EP has excellent resistance to water and water washout. JET-PLEX-EP is formulated with special lubricity, anti-wear, and extreme pressure additives and fortified with rust, corrosion and oxidation inhibitors.

JET-PLEX-EP is recommended for all types of bearing and sliding applications, for shock-loading, pounding, rough chassis usage and high loads.



### #202 MOLY-LITH™

#### Multipurpose Grease with Moly

0°F to 300°F (-18°C to 150°C) • NLGI Grade 2 • Contains Molybdenum Disulfide (MoS<sub>2</sub>) for friction reduction and high load capacity • Superior metal adhesion • Pumpable • Resistant to water, heat, weathering and oxidation • Color - Black

#202 MOLY-LITH is a high temperature, lithium 12-hydroxystearate soap grease containing micro-fine molybdenum disulfide (MoS<sub>2</sub>). #202 MOLY-LITH has a dropping point of 390°F (199°C), is water resistant and displays excellent work stability under high loads, high speeds, shock and vibration.

#202 MOLY-LITH has exceptional resistance to the effects of heat, water, weathering, oxidation and heavy loads. It contains rust, corrosion and oxidation inhibitors. #202 MOLY-LITH gives unbeatable protection anywhere that dirt, dust, high humidity, rain and adverse temperatures are critical problems.

#202 MOLY-LITH is recommended for automotive and industrial applications, including all grease fittings where semi-solid or plastic consistency grease is normally used. Also for use in grease cups, pre-sealed bearings and for general chassis lubrication.



### ARCTIC™

#### Extreme Cold Temperature Grease

-65°F to 225°F (-54°C to 107°C) • Dropping point of 285°F (141°C) • Contains no solid additives • Extremely resistant to salt spray • All temperature formula-effective winter or summer • Water resistant • Rust and corrosion resistant • Color - Amber

ARCTIC is particularly suitable for use in extreme cold environments such as cold rooms, cold storage lockers, ice plants, and on refrigeration or cold storage equipment. It will resist such environmental contact as humidity, ice, and road salts without hardening, washing off or deteriorating.

ARCTIC is an excellent service grease that has passed the Shell Roll Test for 100 hours at 150°F (66°C), and passed Federal Test Method Standard No. 791B, Method No. 3454.2 "Leakage Tendencies of Automotive Wheel Bearing Greases" and ASTM 1263. It also passes the application salt-spray resistance and rust tests required by the United States Government for its severe environmental contact greases.

ARCTIC may be used on automobiles and aircraft, in industrial applications, or anywhere lubricating properties of a moderate to severe nature are required over a wide range of temperatures.



## Thread Sealants

Jet-Lube® Thread Sealants are manufactured to seal and secure metal, plastic and fiberglass piping and fittings by filling the voids and imperfections on the threaded surfaces and to eliminate back flow through the threads, thus causing a leak pattern. Jet-Lube thread sealants prevent leakage

### V2®

#### Multipurpose Pipe Thread Sealant with PTFE

-70°F to 500°F (-57°C to 260°C) • NSF PI Registered #121265 • #21265 • Uniform Plumbing Code: IAPMO #1282 • Biodegradable • MIL-TT-S-1732 • No VOC • Seals to 10,000 psi (Liquids), 2,000 (Gases) • Brushable to 0°F (-18°C) • Contains PTFE • Safe to use on PVC & Fiberglass Fittings • No Odor

V2 is a combination of vegetable oil, PTFE and inert fillers that are environmentally safe, nontoxic for use in potable water applications, on NPT and standard pipe fittings. It's a soft setting product, so you can remove the fitting without damage to the threads. This formulation also has rust and corrosion inhibitors built in so the connection/fitting will not rust or corrode. V2 also has a bacteria/fungistat which is a food grade additive that will eliminate bacterial culturing.



### TF-25™

#### Line Pipe and NPT & Anti-Seize Thread Sealant

-100°F to 600°F (-73°F to 316°C) • Contains PTFE & Graphite • Brushable to 0°F • Soft Setting Formula • Non-Melt Formula • Chemically Inert • Pressures to 10,000 psi liquid and 2,000 psi natural gas & air • Friction Factor - .07

TF-25 is a thread sealant that has anti-seize characteristics, where standard thread sealants do not have the ability to handle dual function applications. TF-25 performs both functions of sealing the threads on large diameter connections (3 1/2" and above), while also working as an assembly and disassembly lubricant. The ingredients are inert, noncorrosive, and ideal for natural gas, hot oils, desolate materials and wastewater applications. TF-25 is ideal as a thread sealant where loose fittings or worn threads are present, on imperfectly cut threads or where thread damages have occurred. TF-25 may be used on both ferrous and nonferrous metals.



caused by vibration loosening, solvent evaporation, damaged threads and temperature cycling. All sealants are specially manufactured to meet plumbing codes for use in natural gas applications, fire sprinkler system installations and general-purpose applications for threaded plastic pipe.

### PETRO-TAPE™

#### Heavy-Duty Thread Sealant Tape

-400°F to 500°F (-240°C to 260°C) • 3-Mil Thickness • Conforms to CID A-A-58092 (MIL-T-27730A) • Inert Properties • Chemical Resistant • Pure Virgin Polytetrafluoroethylene

PETRO-TAPE is inert, highly resistant and impervious to salt water, fuels, refrigerants, acids and alkalis, including kerosene, cleaning fluids and gases. Immediate pressurization of the joint is possible. This 3-Mil tape will not tear easily, as the combination of polymers actually stretch and expand to develop a tight seal. When the NPT fitting is assembled to the pipe, the Petro-Tape will not tear or ball up in the threads during assembly which can cause leak patterns to develop.



### PETRO-TAPE™ NICKEL

#### Heavy-Duty Thread Sealant Tape

-450°F to 550°F (-267°C to 287°C) • ≥4 MIL Thickness • Conforms to CID A-A-58092 • Inert Properties • Chemical Resistant • Pure Virgin Polytetrafluoroethylene • Full Vacuum to 10,000 psi

PETRO-TAPE NICKEL is a thick, premium-density tape that permits quick, clean sealing of threaded pipe connections. Its PTFE base provides natural lubrication of the joint, while its nickel filler prevents galling of the threads which is common in stainless steel assemblies. PETRO-TAPE NICKEL contains a gray pigment for easy identification, and distinguishes it from lower density, general purpose thread sealant tapes. HEAVY DUTY - IDEAL FOR MULTIPURPOSE CONNECTIONS, SPECIALLY STAINLESS STEEL.





## Lubricants for Open Gear & Wire Rope Applications

### GEAR-GUARD™

#### Premium Lubricant Paste

35°F to 350°F (2°C to 175°C)

- Brushable/Pumpable formula
- Black, Sticky Semi-Fluid
- Petroleum Oil Based Material

This product has been developed to coat and protect mating surfaces of opened and closed crown ring and pinion gears. Also used for “bull” gears, planetary ring gears and assemblies where high load contact protection is required. GEAR-GUARD contains molybdenum disulfide and graphite in a water resistance grease base so the product will not run, sling off or melt over time and cause exposure to the elements. This combination of durable and flexible components produces a thin film on the gears, eliminating metal-to-metal contact which will reduce surface heat and wear.



### WRL™

#### Wire Rope and Chain Lubricant

-40°F to 320°F (-40°C to 160°C)

- Petroleum Oil
- Color - Beige
- Solvent-Free
- Pumpable

All wire ropes contain numerous moving parts that require lubrication. Each time the rope bends or flexes, the internal strands rub together causing friction, heat and wear. WRL has a blend of additives that coat, cover and protect the strands from the weathering conditions caused by offshore environments. This lubricant is highly resistant to rain and salt water atmospheres, and ideally suited for offshore cranes and lashing lines. WRL is formulated with rust and corrosion additives so it's ideal for lubricating wire rope, forklifts and any application that needs lubrication without attracting dirt and grime. WRL can also be used for cable pull systems and lines on amusement park rides.



### WLD™

#### Wire Rope, Cable and Roller Chain Dressing & Lubricant

Non-Melt Grease Base • 35°F to 350°F (2°C to 175°C) • Black Brushable Formula • NSN # 9150-01-179-0228

WLD is a blend of petroleum and organic resins that aid in adhesion properties and make WLD highly water resistant. This formula is a coating for long-term storage to protect exposed wire rope. It's ideally suited for spooling applications where pneumatic lubricators are present for applying wire rope lubricants. WLD's special blend of rust and corrosion inhibitors will eliminate oxidation and is UV protected. It will not run or drip off during transport or storage. The barrier film of WLD protects against the formation of rust and prevents “rust binding,” which reduces cable flexibility and life, increasing friction and wear. WLD is well suited for walking dragline applications and as a lubricant for wire line guides and sheaves. WLD has the ability to penetrate in a working environment, protecting the inner core strands of the cable or rope.



### OG-H™

#### Heavy-Duty Open Gear Lubricant

0°F to 550°F (-18°C to 288°C) • Non-Melt Grease Base • Brushable Formula • Black Sticky Paste

This blend of mineral oils, MoS<sub>2</sub> (Molybdenum Disulphide) and graphite combined with rust and corrosion inhibitors are ideal for open, outdoor surfaces. OG-H is specially formulated for gears, gearboxes, trunnion rollers and thrust rollers. OG-H is for gears that drive large kiln drying units.

OG-H is a brushable and pumpable formula, so applying the grease to flat, tapered or open gears is easily done using a conventional paint brush or pneumatic pumping system. This uniformly blended combination of low friction ingredients provides a high film strength which reduces starting torque and lowers operating temperatures.



### 769 LUBRICANT®

#### Nonflammable Penetrant/Lubricant/ Moisture Displacer/Protectant

NSF H2 Registered • 35-40 KV Dielectric Strength  
• Nonflammable • Nonevaporating • Contains No  
Silicones • MIL-PRF-81309H (Aerosol) Type II & III,  
Class II, CO2 Grade • MIL-PRF-81309H (Bulk) Type  
II & III, Class I • MIL-C-16173E Grade 3 • MIL-C-  
23411A VV-P-216B • CID A-A-50493C Class B  
Type I

769 LUBRICANT is the leading lubricating, penetrating, moisture displacing, and corrosion preventative coating on the market. Unequalled where salt water, salt spray or other harsh environments are present. 769 LUBRICANT gives total performance while being environmentally safe, easy to use and nonflammable.

Lubricates: Contains ashless, extreme pressure additives and highly refined lubricating oils that provide superior lubricating protection and anti-wear properties.

Penetrates: Rusted and frozen metal parts – studs, nuts, screws, pins, linkages are easily loosened by means of superior “creepability.”

Removes Moisture: Moisture is lifted and displaced rather than trapped. Pores and crevices of surfaces are freed from moisture and are coated with a thin, non-greasy film that prevents additional moisture from clinging or entering.

Prevents Rust & Corrosion: Thin film adheres to metallic surfaces, providing positive, temporary protection against the formation of rust and corrosion, including electrolytic and galvanic corrosion common in salt environments.



### 12|34®

#### Lubricant & Penetrant

Contains No Fluorocarbons or Silicones • Economical to use  
• Non-evaporating • Non-conductor • Chemically stable  
• Never hardens or dries out • Meets the requirements of  
MIL-PRF-81309 • -100°F to 300°F (-75°C to 150°C)

An industrial penetrating, moisture displacing, lubricating and corrosion preventative. Unequalled where salt water, salt spray or other harsh environments are encountered. 12|34 gives total performance while being environmentally safe and easy to use.

Lubricates: Contains ashless extreme pressure additives and highly refined lubricating oils which provide superior protection and anti-wear properties.

Penetrates: Rusted and frozen metal parts - studs, nuts, screws, pins, linkages - are easily loosened by means of superior 'creepability'.

Removes Moisture: Moisture is lifted and displaced rather than trapped. Pores and crevices of surfaces are freed from moisture and are coated with a thin non-greasy film that prevents additional moisture from clinging or entering.

Prevents Rust and Corrosion: Thin film adheres to metallic surfaces, providing positive, temporary protection against the formation of rust and corrosion, including electrolytic and galvanic corrosion common in salt environments.

Cleans: Low viscosity dissolves grease and oil for easy removal. Cleans dirt, dust and grit for easier penetration and quicker rust-busting.



### C-PLATE™

#### Copper Dry Film Coating

Aids in the break-in process of freshly-cut threads • Low VOC's  
• Air-cures at room temperature in 4 to 6 hours • Forms a  
durable, acid-free, corrosion-resistant finish • Contains no  
ozone-depleting substances • Fast evaporating • Prevents  
galling during break-in process • Greaseless, solid-film protective  
coating • Acid-free film

C-PLATE provides a durable micro-thin coating of copper to machined surfaces, aiding in preventing galling during the break-in process. The micro-sized copper flakes adhere to the steel, utilizing a high-tech resin that air cures at room temperature in 4 to 6 hours. With the addition of heat, an even stronger, more durable bond may be achieved. Once cured, C-PLATE forms a durable, acid free, corrosion resistant finish which can be burnished into the steel surface during the initial work hardening of the threaded connection. The thin copper coating provides a dissimilar metal which acts to prohibit the metal-to-metal contact under bearing loads which may cause galling damage to threaded connections.



### Z-PLATE™

#### Zinc-Rich Galvanizing Compound

Fast Evaporating • Color - Grey • Cone Spray Water Displacing  
• Dry Film • Long-Term Coating • 95% Pure Metallic Zinc • Rust  
& Corrosion Inhibited

Z-PLATE Prevents: Rust and corrosion with galvanic action equal to hot-dip galvanizing. 95% pure zinc compound which forms a tough, durable and flexible coating.

Z-PLATE Repairs: Galvanized surfaces damaged by cutting or welding. Primer for surfaces to be painted. Protects against salt water. It requires little surface preparation. Z-PLATE is excellent for cosmetic repairs to welded joints, guard rails, bridges, fencing, storage tanks, pipe lines, TV towers, metal buildings, heavy equipment, heat ducts, marine and offshore equipment.



### RUST-GUARD™

#### Corrosion Inhibitor

Contains No Fluorocarbons • Indoor & Outdoor Formula  
• MIL-PRF-16173E, Grades 1 and 2 • Nontoxic

RUST-GUARD is a specialized water displacing formula which dries to a uniform, thin waxy film to effectively seal out moisture and corrosion. RUST-GUARD provides long-term protection on all metal and alloy surfaces, even under harsh environmental conditions such as water, high humidity or salt spray. RUST-GUARD's bulk formula typically provides six months outdoor and one year indoor protection against rust and corrosion. RUST-GUARD may be used indoors or outdoors as a protective coating on raw materials, machined parts, tools, pipe, fittings, valves, etc., while they are being stored or in transit. RUST-GUARD will not crack or flake off, it penetrates fully into even the smallest crevices to displace moisture and prevent rust and corrosion. RUST-GUARD is green in color to provide a visual check of product application and is easily and safely removed by use of a safety solvent such as CLEAN-UP™.



## Coatings, Specialties & Cleaners

### MOLY-MIST™

#### MoS<sub>2</sub> Dry Film Lubricant

Noncorrosive • Bonds to Most Porous & Nonporous Metals  
• -300°F to 750°F (-184°C to 399°C)

MOLY-MIST lowers friction, prevents galling, seizure, stick-slip, fretting, corrosion and metal-to-metal contact. It reduces torque and power consumption. MOLY-MIST can be applied while equipment is in motion, it deposits a coating of MoS<sub>2</sub> (Molybdenum Disulfide) on hard to reach surfaces of fixed, moving or irregular parts. MOLY-MIST is used wherever a dry lubricant is needed, particularly where temperatures are extreme, where environments are hostile, and where friction must be kept to a minimum.

MOLY-MIST provides the initial lubrication protection that is needed where conventional lubrication in most cases cannot. Its low coefficient of friction, bonding tenacity, and ability to sustain lubrication make MOLY-MIST a pre-assembly necessity. Lubrication – or lack of lubrication – on the first pass or revolution of a wearing surface to a large extent determines the life of a component. New parts contain rough surfaces in the form of microscopic imperfections. Use of MOLY-MIST during initial “running in” period will provide extended service life.



## Cleaners & Degreasers

### CLEAN-UP™

#### Industrial Cleaner & Safety Solvent

NSF K1 Registered • Nonflammable  
• Ozone Friendly • Acid, Alkali Free  
• Low Odor • 53KV Dielectric Strength

CLEAN-UP is a heavy-duty, low-foaming, chlorinated solvent that rapidly dissolves oil, grease, paint, tar and grime on contact, leaving a clean, residue free surface. Will not corrode or damage metal. CLEAN-UP is ideal for bearings, machinery, injectors, engine parts, tools, cables and more.



### CLEAN-UP™ II

#### Industrial Cleaner & Safety Solvent

Low VOC Formula • Residue Free • Ozone Friendly  
• Replaces 1:1:1 Trichloroethane

CLEAN-UP II is a specially formulated low VOC blend of organic solvents designed to quickly dissolve and rinse away dirt, grease, grime, oil, tar and wax while being both environmentally responsible and ozone friendly. The product contains no chlorinated or fluorinated solvents, no hazardous air pollutants and evaporates residue-free quickly. This product is California compliant and acceptable for use in CARB/OTC States.

CLEAN-UP II starts working immediately on contact, breaking down and dissolving even stubborn contaminants without the use of fluorinated, chlorinated or SARA listed ingredients. Safe on all metals and some plastics. For sensitive materials, test on an inconspicuous small area first to determine acceptability. For electrical services the system must be off and time given to evaporate before re-energizing the system to avoid flash or fire.



### CLEAN-UP™ PLUS

#### Citrus Degreaser

NSF C1 Registered • Replaces 1:1:1 Trichloroethane • Nonflammable  
• Natural Organic Formula • Ozone Friendly • Biodegradable • 29KV Dielectric Strength

CLEAN-UP PLUS is a high-performance blend of safe, organic solvents that quickly dissolves and rinses away dirt, grease, grime, oil, tar, and wax, while being both environmentally safe and ozone friendly. It works immediately on contact, breaking down and dissolving even the most stubborn contaminants without the use of fluorinated, chlorinated or SARA listed ingredients. CLEAN-UP PLUS slowly evaporates while cleaning, leaving a residue free surface. This degreaser is safe on all metals and most plastics.





## Reference

### Valve Lubricant/Sealant Comparison

JET-LUBE®	CHEMOLA DESCO	CLIMAX	COOPER/ CAMERON	FMC	HUSKEY	LUBCHEM	NORDSTROM BRT/AUDUCO	OCR	R.S CLARE & CO	SEALWELD	VALTEX	ABB VETCO GRAY	W-K-M	OTHERS
EZY-TURN® #2	600	650	0315452701 stick 0315452702 stick		#6	#1, #4	555 WG	600		EQUA-LUBE 80	80	Y002 or VGS	112	Daniel Type I Size B
EZY-TURN® #3	111 (HS) 95	900		G70200		#3			C.M. Compound		PL 1000			Wetherford Well Cat
EZY-TURN® #4	422	350A Poly Seal 3	71383711-5lb 71383712-25lb 1383713-120lb 700677-12lb 71383714- 400lb				735		VALVE LUBE 601		50 972K			
EZY-TURN® #7	433													
EZY-TURN® #12	620	102-SWS & 110				102 Special & 196 Special		616			60		102	McEVOY RS 1608
EZY-TURN® #196														
EZY-TURN® BODY FILL	TF-41 960	S-100	700667-5lb 700668-20lb 700669-120lb 700770-400lb PS-1 1603 700676-25lb	G70100	Body Fill	Longlife 1600 (closer to Jet-Lube CB-2)	X-208		G.P. VALVE GREASE				108	
EZY-TURN® H2S	SS-14	340 360HS	PS-1-1605, TS-41H			50-500	X-184			D-1014	972		375	Magnalube
EZY-TURN® POLAR	HS-LT III(LT)	901 Frosty 220	41H PS-1-1604 700671-5lb 700672-25lb 700673-120lb 700674-400lb	G70302		LONGLIFE ARCTIC BP ARCTIC	862	610	Lt. VALVE LUBE & H.L. Low Temp			Y004 VGS 53100.3		
EZY-OPEN™											Valve Flush			
SILICONE COMPOUND DM	244	204,661I		G70600			921,234			Silicone Lubricant	202			
EZY-PAK™ I15	VERSI-PAK	PAC EZ				TFE Stem Pack				Slick Sticks				Bergmann 8032 SCW
EZY-PAK™ HCR	#625		J STIK 022 176-06-000-00			TFE Self Mold Packing	Stem Packing 903	—	—	—	—	—	109, 115, 107	—
EZY-PAK™ I25	STEM-PAK			G70700		PAK-OFF	Stem Packing 909					300- 461-2		
EZY-PAK™ ARCTIC	ARTIC PAC & SILICONE PAK 25II					Low Tempera- ture Pak								

> Each compound is manufactured using only proven formulas for high and low temperatures and a full range of valve and service conditions.

## Reference

### Lubricants

Product	Temp	NLGI	Color	NSF	Marine	Features
Gear-Guard™	35°F to 350°F 2°C to 175°C	I	Black,Paste			Ideal for all heavily loaded applications
OG-H™	0°F to 550°F -18°C to 288°C	3	Black,Paste			Highly adhesive and easy to apply
WLD™	35°F to 350°F 2°C to 175°C	I	Black,Paste		Yes	Ideal for use in salt water enviroments
WRL™	-40°F to 320°F 40°C to 160°C		Amber Oil		Yes	Provides a non-drying, non-tacky film
MP-50™	10°F to 600°F -23°C to 204°C	2.5	Blue to Black			"Plates" metal surfaces

### Anti-Seize Compounds

Product	Specifications	Temp Range	K-Factor	NSF	Marine Grade	Recommended ASTM Specs	Features
Kopr-Kote® Anti-Seize	Exceeds MIL-PRF-907F	-65°F to 1800°F -54°C to 982°C	0.15			A307, A354, A193/A193M, A320/A320M, AF468, A563, F467	Ideal for high temp, stress and load applications. Not recommended for aluminum fittings and fasteners.
550® Extreme®	Exceeds MIL-PRF-907F  Raytheon Spec M856839 TYPE II	-65°F to 2400°F -54°C to 1316°C	0.17			A307, A354, A193/A193M, A320/A320M, F593, A562, F594, F467, A153, B960, B696	Enhanced formulation of 550 to better enable assembly and dismantling of threaded connections. General-purpose water resistant lubricant for use on steel, aluminum & cast iron.
Silver Plus Regular		-65°F to 1800°F -54°C to 982°C	0.01			A307, A354, A193/A193M, A320/A320M, F468, A563, F467	Micro-sized particles allow it to quickly and easily coat fine threaded, small & large diameter fasteners.

### EP Greases

Product	Type	Color	Temp	Specifications	NLGI Grade	Marine	NSF	Features
#202 Moly-Lith™	Lithium	Black	0°F to 300°F -18°C to 150°C		2			Multi-purpose grease with moly
Jet-Plex-EP™	Lithium	Red	0°F to 425°F -18°C to 232°C		1&2	Yes		Premium multi-purpose grease
Alco-EP-73 Plus™	Aluminium Complex	Red	-25°F to 450°F -32°C to 232°C	MIL-G-18458B(SH)	2	Yes		Premium multi-purpose grease
Alco-EP™	Aluminium Complex	Black	-25°F to 450°F -32°C to 232°C		2			Premium multi-purpose grease with moly
Arctic™	Calcium	Amber	-65°F to 225°F -54°C to 107°C		2			Effective in extreme cold

### Thread Sealants

Product	Specifications	Temp	Pressure	NSF	Features
V2®	MIL-TT-S-1732	-70°F to 500°F -57°C to 260°C	10,000 psi liquid 2,000 psi gases	PI NSF-61	Vegetable oil-based, soft-setting, for use with potable water.
TF-25™		-100°F to 600°F -73°F to 316°C	10,000 psi liquid		Ideal for pipe diameters larger than 3 inches.
Petro-Tape™	CID-A-A-58092 (formerly MIL-T-27730A)	-400°F to 500°F -240°C to 260°C	2,000 psi		2mm thicker than the average tape. Fewer wraps to achieve an airtight seal.
Petro-Tape™ Nickel	CID A-A-58092	-400°F to 500°F -267°C to 287°C	10,000 psi		Ideal For Multipurpose Connections, Specially Stainless Steel.

A large, bold, white letter 'J' is positioned on the left side of the image, serving as a logo or initial for the company name.

*et-Lube® has been a leader in the development*

*and manufacturing of high quality grease products since 1949.*

*Jet-Lube is recognized by the NLGI (National Lubrication Grease Institute) as a master blender of grease products, by the ASTM for our research, test and R&D lab, and the U.S. government for our Mil-Spec test capabilities. Jet-Lube's reputation as an industry leader has been earned in the world's harshest environments and the most demanding applications.*

#### **JET-LUBE - UNITED STATES**

930 Whitmore Drive  
Rockwall, Texas 75087  
800-538-5823  
713-670-5700  
[sales@jetlube.com](mailto:sales@jetlube.com)

#### **JET-LUBE - CANADA**

Units 8 & 9, 1260-34 Avenue  
Nisku, Alberta T9E 1K7  
780-463-7441  
[sales@jetlubecanada.com](mailto:sales@jetlubecanada.com)

#### **JET-LUBE - UNITED KINGDOM**

Unit 9, Foster Avenue  
Woodside Park Industrial Estate  
Dunstable, Bedfordshire LU5 5TA  
+44 1707 379870  
[info-uk@whitmores.com](mailto:info-uk@whitmores.com)

**For Product  
Numbers/Package  
Sizes & Types:**

[https://www.jetlube.com/  
resources/product-index/](https://www.jetlube.com/resources/product-index/)



[jetlube.com](http://jetlube.com)



***JET-LUBE®***

JL 10/2022