

P R O D U C T G U I D E



JET-LUBE[®]

**Oilfield, Tubular
and Valve**

Jet-Lube® ECF Environmental Compound Formulas

Since the late 1980's, 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 environmentally sensitive greases and lubricants join our thread compounds in meeting Norway's Yellow (SFT) and the United Kingdom and the Netherland's "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 industry 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 life forms tested.



Metal-Free & Extreme-Temperature Thread Compounds

RUN-N-SEAL® ECF™

A high-pressure sealant alternative for non-premium connections.

SEAL-GUARD™ ECF™

Specifically formulated for metal-to-threads and high-alloy steel materials.

NCS-30® ECF™

A premium drill string compound with superior adhesion and water resistance.

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™

A new-generation formula 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.

> *Since 1949, Jet-Lube products have been helping people solve equipment maintenance problems. Jet-Lube is recognized as the world leader in manufacturing lubricants for Oilfield, Water Well, and Industrial MRO customers worldwide. Jet-Lube products are available around the globe through a strategic distribution network; with a combination of factory representatives and warehouses in key locations. 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.*

ISO 9001 CERTIFIED

Premium Copper-Based Drill Collar & Tool Joint Compounds

KOPR-KOTE® Premium Drill Collar & Tool Joint Compound

KOPR-KOTE is widely regarded as the best copper-based drilling compound in the world. It is also one of the few copper compounds to be granted a marine-pollutant exemption 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.

Service 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



JET-LUBE® EXTREME® Mud-Resistant Drill Collar & Tool Joint Compound

A premium-quality, unleaded compound blended into JET-LUBE's high-temp, mud-resistant, complex-base grease. 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. Exempt from the DOT's marine-pollutant labeling requirements.

Service 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)



JET-LUBE® 21® Double-Duty Tool Joint & Drill Collar Compound

JET-LUBE 21 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. JET-LUBE 21 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 out of box members. Exempt from the DOT's marine-pollutant labeling requirements.

Service 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 flake, amorphous graphite, extreme-pressure additive, 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.

Service 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)



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 are blended into JET-LUBE's high-temp, calcium-complex base grease. This new base grease offers the additional advantage of superior adhesion to wet steel and resistance to water wash-off. Especially effective for invert or high-pH muds.

Service Rating: -65°F (-54°C) to 500°F (260°C)
NSF H₂ Registered



NCS-30® ECF™ Tool Joint & Drill Collar Compound

This biodegradable, nonmetallic formula meets Norway "Yellow", British and Dutch "E" HOCNF classifications. Extreme-pressure and anti-wear additives control friction and galling. Resists wash-off and sticks to wet pipe. Withstands invert and high-pH muds and is nonconductive for MWD. Excellent for high-chrome or nickel-alloy connections in extreme-temperature service.

Service Rating: -10°F (-23°C) to 500°F (260°C)



Premium Metal-Free Drill Collar & Tool Joint Compounds

KOV'R-KOTE® **Double-Duty Compound** **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 can be used for bottom hole assemblies. This metal-free formula was developed to address concerns related to products containing zinc, copper and heavy metals.

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.

KOV'R-KOTE has exceptionally high film strength (1000kgf) which makes this product ideal as a jacking gear grease. KOV'R-KOTE exceeds all performance specs in the API specification 5CT and API Recommended Practice 5A3. KOV'R-KOTE contains additives for rust, corrosion and oxidation protection, while maintaining consistent rig floor make up and excellent resistance to make up downhole.

Service 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



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. Can be used as an alternative to API-MODIFIED.

Service 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)



OCTG Running Compounds

RUN-N-SEAL® EXTREME® **Running & Storage Compound**

Nonmetallic, high-pressure sealant for API connections (buttress and 8-round) and storage compound. Not intended for use on premium connections. 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. RUN-N-SEAL EXTREME 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.

Service 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)
Friction factor 0.9 relative to API-MODIFIED.



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

A metal-free extreme temperature, high-pressure sealant alternative for non-premium, non-shouldered, large and small diameter threads connections. Its rust inhibiting formula provides an excellent seal. RUN-N-SEAL ECF is brushable over a wide range of temperatures and has excellent inherent water resistance. It sticks to wet and oily steel, ensuring the compound will not wash off threads.

Service Rating: 0°F (-18°C) to 450°F (232°C)
Friction factor 0.9 Relative to API Modified



JET-LUBE® SEAL-GUARD™ **Premium Connection Thread Compound**

A new-technology, nonmetallic thread compound design provides optimum galling resistance and frictional properties in the make up of high-chrome, premium thread designs (metal-to-metal seals).

Service Rating: 20°F (-29°C) to 500°F (260°C)
Friction factor 0.9 relative to API-MODIFIED.



JET-LUBE® **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

JET-LUBE SEAL-GUARD ECF has been specifically formulated to meet the performance requirements of proprietary, metal-to-metal seal and high-interference connection designs utilizing today's high-performance materials, which include "super" chrome and high-alloy steels. 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
Service Rating: -20°F (-29°C) to 500°F (260°C)



API Compounds

Z-40™ • Z-50™ • Z-60™ Zinc Tool Joint Compounds

JET-LUBE's "Z-Series" products 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. They adhere to all surfaces, resist water wash off and prevent rust and corrosion.

Service Rating: 0°F (-18°C) to 300°F (149°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, resists wash-off and will not harden or dry.

Service Rating: 0°F (-18°C) to 300°F (149°C)



OCTG Compounds

WIRE LINE LUBRICANT ECF™ For Slick/Electric Braided Wireline

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format) • Classification: "Yellow" rating for Norway • "E" for the United Kingdom and Netherlands

A unique product for wire line applications where a grease-type lubricant is required. The easy flow formula will stick to the wire line and penetrate the wire core for added protection and wire line life. WIRE LINE LUBRICANT ECF is H₂S inhibited and has unique capabilities as a preservative against rust and corrosion. It offers excellent protection against extended exposure to the elements and UV rays. WIRE LINE LUBRICANT ECF can be applied by hand or through a pneumatic lubrication system.

Service 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.



STEAM CHIEF™ High-Temperature Tubing & Casing Thread Sealant

A metal-free, patent-pending, high-pressure, high-temperature thread compound formulated for demanding geothermal and high-pressure steam injection well applications. The STEAM CHIEF formula withstands the detrimental effects of carbon dioxide, hydrogen sulfide, extreme temperature, gas distillates and high moisture. STEAM CHIEF works well with premium and EUE tubing and casing threads and is well suited for extreme-temperature cycling applications such as steam injection, "huff and puff," SAG-D oil recovery methods. STEAM CHIEF is also an exceptional anti-seize compound for nuts, bolts and other threaded connections.

Service Rating: 0°F (-18°C) to 1800°F (982°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. TF-15 is recommended for use as a sealant on fiberglass tubing and casing threads. It is particularly useful in areas subject to H₂S and salt water and in applications subject to vibration, pressure surge and temperature fluctuations.

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



> Since 1949, 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"
Compound OZ/PIN	2.75	3.00	3.75	4.25	5.50	7.25	9.00	9.50
Joints* PINS/GAL	51	46	42	34	30	23	17	14

Tubing Size

	2.375"	2.875"	3.5"	4"
Compound OZ/PIN	.66	.80	.88	1.12
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"
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
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 easily 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 will aid in eliminating moisture penetration to the newly threaded or recut threaded areas. KORR-GUARD will 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. Ideally suited for highly humid or salt water environments. KORR-GUARD can be applied by brush. It will not harden over time, so product can be removed by using a rag or cleaner.

Service Rating: -40°F (-40°C) to 425°F (218°C)

C-PLATE™ Copper-Rich Coating

Aids in the break-in process of freshly cut threads where platings or coatings are not available nor desired due to the occupational or environmental hazards. It can also be used in conjunction with plated surfaces for additional protection. C-PLATE provides a durable, micro-thin coating of copper to machined surfaces. Air-cures at room temperature in 4 to 6 hours. Once cured, C-PLATE forms a durable, corrosion-resistant finish which may then be burnished into the steel surface during the initial work-hardening of the threaded connection. Prohibits the metal-to-metal contact under bearing loads which may cause galling damage to threaded connections.



RUST-GUARD™ Rust and Corrosion Inhibitor

Formulated to provide long-term, heavy-duty protection from rust and corrosion on metal parts, tools, equipment, pipe, valves, fittings, etc. for up to twenty-four months. RUST-GUARD is the ideal product for use in harsh marine environments where water, humidity and/or salt spray is present. RUST-GUARD forms a durable, dry, waxy green film that cures in less than 24 hours. Safe to use on all metal, plastic, rubber and painted surfaces. Remove by spraying with safety solvent/degreaser. Meets U.S. Military Specifications: MIL-C-16173D and MIL-C-23411A.

Service Rating: -20°F (-30°C) to 280°F (138°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

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. An excellent choice for subsea or other conditions where extreme water resistance is necessary, its non-plating, organic EP/ anti-wear additives allow ALCO-EP™ ECF™ to be used where tolerances are low and/or speeds are high.

Service Rating: -25°F (-32°C) to 450°F (232°C)



JACKING SYSTEM GREASE ECF™

Heavy Loaded Gear Application

Ospar Commission-HOCNF (Harmonized Offshore Chemical Notification Format) • Classification: "Yellow" rating for Norway • "E" for the United Kingdom and Netherlands

Formulated for easy application in wide array of heavily loaded gear applications, JACKING SYSTEM GREASE ECF™ provides superior protection to slides, jacking systems, cantilever-type rigs and assemblies, nuts, bolts and a wide range of other applications making it a nearly universal product. Its water-resistant calcium thickener enhances adhesion and provides greater protection against water wash-off, wear and corrosion.

Service Rating: 0°F (-18°C) to 300°F (149°C)



Oilfield Specialty Anti-Seizes

RISER BOLT LUBE Nonmetallic, High-Moly Anti-Seize Compound

Ideal for subsea riser bolt applications and all maintenance needs. RISER BOLT LUBE requires no thinning and will not harden, evaporate, or settle out. The Molybdenum disulfide (MoS₂) component bonds itself into steel working surfaces providing a long-term, low-friction shield that protects working parts, prevents galling, seizure, stick-slip, heat freeze and corrosion while sustaining lubrication. The rust-inhibiting base carrier in RISER BOLT LUBE is barium free, so it's safer for marine life in offshore installations. With a salt fog resistance of >2000 hours at 5% NaCl, RISER BOLT LUBE is far superior to that of conventional grease carriers for long-term protection.

Service Rating: -300°F (-185°) to 750°F (400°C)



MOLY-MIST™ MoS₂ Dry Film Lubricant

When sprayed on any surface, MOLY-MIST "touches dry" quickly and cures in 30 minutes to an even, tenacious Molybdenum Disulfide (MoS₂) coating. MOLY-MIST lowers friction, reducing torque and power consumption and prevents galling, seizure, stick-slip, fretting and corrosion. It can be applied while equipment is in motion allowing the deposit of a MoS₂ coating on hard to reach surfaces of fixed, moving, or irregular parts. Excellent for threads, gears, dies, taps, chains, packings, sprockets, cables, pulleys and a wide range of other applications.

Service Rating: -300°F (-184°C) to 750°F (399°C)



Oilfield Anaerobics

JET-LOK® II High-Friction and Sealing Compound

A two-part epoxy with metallic fillers to permanently lock threaded connections under normal operating conditions. Improved catalyst adds pot life and durability with lower toxicity and rapid curing. For use on all threaded joints or fasteners where an exceptionally strong and durable bond is required. Especially useful on casing and other tubulars where the effective prevention of joint loosening is required. Also recommended for use on casing shoes, couplings and collars, eliminating the need for gas/arc welding.

Service Rating: up to 400°F (204°C)



Valve Sealants & Lubricants

EZY-TURN® #2 FRAC Valve Lubricant

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.

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



EZY-TURN® H₂S Valve Sealant

A premium vegetable and synthetic oil sealant thickened with silicone to provide maximum resistance to H₂S and hydrocarbon fluids to temperatures as high as 400°F (204°C). This black, tacky compound is waterproof, corrosion resistant and is extremely adhesive to all metal surfaces.

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

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



EZY-TURN® #3 ARCTIC Seat Sealant

EZY-TURN #3 ARCTIC is a multipurpose valve lubricant and sealant that provides excellent overall resistance to CO₂, H₂S, moisture and gases. Its urethane-silicone carrier performs well to temperatures as low as -70°F (-57°C)

Service Rating: -70°F (-57°C) to 500°F (260°C)
Color: Black



EZY-TURN® #3 Valve Sealant

Specifically designed for light-hydrocarbon liquids and gases, making it the sealant of choice for pipeline and compressor stations. 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 (MoS₂) 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.

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



EZY-TURN® HIGH-TEMP Valve Sealant

A premium, non-melting, synthetic-based lubricant and sealant for a wide range of valves in high-temperature service. Unaffected by acids, oils, CO₂, H₂S, glycols, caustics, water, steam, alcohols, similar-based solvents and high pressure. EZY-TURN HIGH-TEMP contains a synergistic blend of MoS₂ and graphite to enhance its sealing properties and provide lubrication to maintain operating torque at extreme temperatures where fluids are lost.

Applications: Geothermal wellheads, steam, petroleum refineries and other demanding high-temperature applications.

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



EZY-TURN® POLAR Low-Temp, H₂S-Resistant Sealant

A black lubricant for arctic oilfield applications. EZY-TURN POLAR is not affected by H₂S and is pumpable with a high-pressure lubricator to -75°F (-59°C).

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

Service Rating: -75°F (-59°C) to 250°F (121°C)
Color: Black



EZY-TURN® #4 Gate Valve Sealant

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.

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



EZY-TURN® #5 Plug Valve Sealant

A general-purpose, heavy-duty sealant that is resistant to aliphatic hydrocarbons and aqueous solutions. Formulated from nontoxic, high-viscosity vegetable oils and polymers, EZY-TURN #5 contains a food-grade thickener with no other solid lubricants or fillers.

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

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



SILICONE COMPOUND DM™ Moisture-Proofing Sealant & Lubricant

Provides excellent lubrication and sealing properties for plug and gate valves, stuffing boxes, O-rings and vacuum and pressure systems. Will not harm most elastomers and plastics. Ideally suited for subzero processing and freezer applications. Not recommended for use on surfaces to be painted. Dielectric strength: >500volts/mil. NLGI Grade 3. Conforms to MIL S-8660-C. NATO Code# S-736.

Service Rating: -70°F (-57°C) to 400°F (204°C)
NSF HI Registered



EZY-TURN® PVS Plug Valve Supreme Sealant

EZY-TURN PVS is formulated from nontoxic, high-viscosity vegetable oils and polymers to assure heavy-duty sealing and lubrication in a wide range of ball, gate and plug valves as well as orifice fittings where resistance to aliphatic hydrocarbons or aqueous solutions is required. Contains a food-grade thickener with micronized PTFE for improved sealing and reduction in actuation torque. EZY-TURN PVS is the recommended plug valve sealant for maximum sealing power and lowered valve torque requirements. It works well for a majority of valve maintenance applications, is pumpable using a high-pressure lubricator, and is insoluble in oil, natural gas and water.

Service Rating: -20°F (-29°C) to 400°F (232°C)
Color - Cream.



EZY-TURN® #196 High-Pressure Sealant

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. Ideal sealant 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.

Service Rating: 0°F (-18°C) to 420°F (215°C)
Color: Gold to Amber



EZY-TURN® #12 Seat Sealant, Creamy Peanut Butter

EZY-TURN #12 is a "peanut butter" type product designed for expanding and other gate valves with body cavities. 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. EZY-TURN #12 injects into the valve body using a high-pressure lubricator.

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

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



EZY-TURN® #22 Gate Valve Seat Sealant

EZY-TURN #22 Gate Valve Seat Sealant, Body Filler and Lubricant is a premium sealant formulated from a unique blend of synthetic and vegetable-based oils for use in expanding gate-type valves. EZY-TURN #22 contains no solid fillers that may inhibit valve lubrication. Although designed for expanding gate-type valves, EZY-TURN #22 can be effectively used on virtually any lubricated gate valve. EZY-TURN #22 provides optimum sealability, lubricity and torque reduction while being hydrocarbon and water resistant. Easily injectable into the valve body using a high-pressure lubricator. Ideal for use with gaseous services.

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

Service Rating: -50°F (-46°C) to 300°F (149°C)
Color: Yellow



EZY-TURN® BODY FILL Body Filler

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. EZY-TURN BODY FILL 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: EZY-TURN BODY FILL 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.

Service Rating: 0°F (-18°C) to 450°F (230°C)
Color: Black



Valve Sealants & Lubricants

EZY-TURN® #7 **Ball Valve Sealant**

EZY-TURN #7 Ball Valve Sealant 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 H₂S, rust and oxidation.

Applications: EZY-TURN #7 is an all-purpose sealant for use in 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.

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



EZY-OPEN™ **Valve Penetrant** **(grease or liquid form)**

EZY-OPEN Valve Penetrant is designed to penetrate scale, rust, corrosion and old, hardened valve lubricants which can hamper or disable valve operation. EZY-OPEN can be purchased as a soft gel or as a liquid specifically formulated from a select group of nonflammable, nontoxic and biodegradable fluids capable of softening or dissolving valve lubricants and sealants, residual gums, lacquer, scale and corrosion deposits.

Applications: EZY-OPEN valve penetrant is designed to penetrate and lubricate disabled or hard to operate lubricated valves. Excellent for use in any injectable assembly to aid in disassembly.

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



Rig Wash

EASY-CLEAN® LIQUID **Cleaner and Degreaser Concentrate**

An alkaline-based cleaner/degreaser that uniquely combines cleaning agents with a newly-developed emulsifying technology to effectively remove carbon, grease, oil and other organic deposits while being both safe and ozone friendly. Contains no 1:1:1 Trichloroethane, Fluorocarbons, or SARA Title III, Section 313, Part 372-listed ingredients and contains no acids, chlorides, phosphates, or TTO's (Total Toxic Organic Compounds).



EASY-CLEAN® RIG WASH **Concentrated Detergent Powder**

A highly concentrated and biodegradable powdered detergent for heavy industry equipment cleaning. Emulsifies oil and greasy grime so it can be quickly washed away with fresh or salt water, leaving a residue-free surface. Will not harm painted surfaces or rubber.



Stick-Type Valve Packing

EZY-PAK™ #125 **Extreme-Temp Packing Compound**

Specifically designed for use in severe arctic conditions. Formulated with synthetic binders, polymers, inert fillers and fibers, EZY-PAK #125 provides a flexible packing at temperatures as low as -75°F (-60°C). Pumpable with a high-pressure lubricator, EZY-PAK #125 conforms to any shape, preventing leaks and/or foreign materials from entering the valve cavity. Excellent water resistance allows use for steam applications.

Applications: Specifically designed for valves, wellheads and other equipment in arctic conditions.

Service Rating: -75°F (-60°) to 750°F (400°C)
Color: Blue



Valve Lubricant/Sealant Comparison

JET-LUBE®	CHEMOLA DESCO	CLIMAX	COOPER/ CAMERON	FMC	HUSKEY	LUBCHEM	NORDSTROM BTR/AUDCO	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 5.3100.1	112	Daniel Type I Size B
EZY-TURN® #3	111 (HS) 955	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® #5	600, 800	650, 800	See EZY-TURN #2	P/N 3256666 (stick)	#4	-	555,654	611 stick	-	-	85	-	-	-
EZY-TURN® #6	-	Poly Seal 6,220	-	-	-	50-400 FORMASIL CO ₂	1033	-	-	-	-	-	-	-
EZY-TURN® #7	433	-	-	-	-	-	-	-	-	-	-	-	-	-
EZY-TURN® #8	TFE SEAL 104	900 TC	-	-	#2 HD Teflon	#1, #2, #3	-	404	-	#5050	-	-	-	-
EZY-TURN® #12	620	102-SWS & 110	-	-	-	102 Special & 196 Special	-	616	-	-	60	-	102	McEVOY RS 1608
EZY-TURN® #22	622	650, 800	-	-	#6	#1, #4	733	-	-	-	-	VGS 53100.1	112/105	-
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® H ₂ S	SS-14	340 360HS	PS-1-1605, TS-41H	-	-	50-500	X-184	-	-	D-1014	972	-	375	Magnalube
EZY-TURN® POLAR	HS-LT 111(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-TURN® PVS	-	-	-	-	-	-	950	-	-	Total Lube 911	-	-	-	-
EZY-OPEN™ Gel	VALVE CUT	Valve Tum	-	-	Valve Cheater	VALVE SAVER	VPX Valve Purge	613	-	Valve Cleaner	-	-	-	-
EZY-OPEN™ Liq	-	-	-	-	-	-	-	-	-	Valve Flush	-	-	-	-
EZY-PAK™ 100	VERSI-PAK	PAC EZ	-	-	-	TFE Stem Pack	-	-	-	Slick Sticks	-	-	-	Bergmann 8032 SCW
EZY-PAK™ 115	#625	-	J STIK 022 176-06-000-00	-	-	TFE Self Mold Packing	Stem Packing 903	-	-	-	-	-	109, 115, 107	-
EZY-PAK™ 120	STEM-PAK	-	-	G70700	-	PAK-OFF	Stem Packing 909	-	-	-	-	300-461-2	-	-
EZY-PAK™ 125	ARCTIC PAK & SILCONE PAK 2511	-	-	-	-	Low Temperature Pak	-	-	-	-	-	-	-	-

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

JET-LUBE, INC.
4849 Homestead Road, Suite 232
Houston, Texas 77028
Tel: 800-538-5823
Tel: 713-670-5700
Fax: 713-678-4604
Email: sales@jetlube.com
www.jetlube.com

JET-LUBE OF CANADA LTD.
3820 97th Street
Edmonton, Alberta
Canada T6E 5S8
Tel: 780-463-7441
Fax: 780-463-7454
Email: sales@jetlubecanada.com

JET-LUBE (UK) LTD.
Jet-Lube House
Reform Road
Maidenhead, Berkshire
SL6 8BY England
Tel: 44-1628-631913
Fax: 44-1628-773138
Email: uksales@jetlube.com