

RUN-N-SEAL[®] ECF[™]

Tubing & Casing Running Compound For Thread Seal Connection Designs

Ospar Commission-HOCNF

(Harmonized Offshore Chemical Notification Format)

CLASSIFICATION: "Yellow" rating for Norway

CLASSIFICATION: "E" for The United Kingdom & The Netherlands

DESCRIPTION

RUN-N-SEAL[®] ECF[™] has been specifically formulated to meet the performance requirements of proprietary thread seal connection designs utilizing today's high-performance materials, which include "super" chrome and high-alloy steels. The combination of small and large particles provides optimum sealability on 8-round and buttress thread forms.

RUN-N-SEAL ECF's advanced base grease is a carefully selected balance of synthetic and vegetable oils with our **Extreme** base grease thickener technology coupled with innovative solid lubricants. The result is superior lubrication under high loads with galling resistance equivalent to heavy metal-based compounds in a totally metal-free formulation. This cutting-edge technology provides a high affinity to metal surfaces with a high added-solids content. In addition, there is a large percentage of submicron particles formed by chemical reaction; creating a film that gives consistent frictional performance without restricting proper engagement of the connection contact surfaces. In lab tests, **RUN-N-SEAL ECF** has a friction factor equivalent to API MODIFIED. However, there may be connection types with which a higher/lower friction factor is incurred

- Biodegradable
- Metal free
- Frictional properties similar to API MODIFIED
- High film strength to protect against galling
- High solids content to accommodate thread seal connection design requirements
- Ideal for use on high-chrome connections
- Sticks to wet or oily threads

APPLICATIONS

RUN-N-SEAL[®] ECF is recommended for use on thread seal connections such as 8-round, buttress, and DINO VAM[®].

PRODUCT CHARACTERISTICS

Color	Dark Gray to Black
Thickener	Complex Thickeners
Fluid Type (oil)	Synthetic & Vegetable
Dropping Point (ASTM D-2265)	374°F (190°C)
Specific Gravity, typical	1.32
Density (lb/gal), typical	11.0
Oil Separation (ASTM D-6184)	<3.0
Wt. % Loss @ 212°F (100°C)	
Flash Point (ASTM D-92)	>450°F (232°C)
NLGI Grade	1
Penetration @77°F (ASTM D-217)	310 - 340
Copper Strip Corrosion (ASTM D-4048)	1B
4-Ball (ASTM D-2596)	
Weld Point, kgf	800 typical
Salt Fog Resistance (ASTM B-117)	5% NaCl >2000 hrs., 20% NaCl >750 hrs.
Service Rating	-20°F (-29°C) to 500°F (260°C)

Friction Factor*

Relative to API-Modified

* The frictional properties can vary from one connection design to another. As such, one should test the torque required for proper engagement prior to running, or consult the connection manufacturer.

Thixotropic - Stir Well Before Using

PACKAGING

Code No.	Container Size	Container
29214	12.5 Kg.	Pail
29215	20 Kg.	Pail
29228	180 Kg.	Drum

LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

CORPORATE LOCATIONS

Houston, Texas—World Headquarters

Maidenhead, England

Phone: 44.1628.631913

Edmonton, Canada

Phone: 780.463.7441

JET-LUBE, INC.
4849 HOMESTEAD RD.,
P.O. BOX 21258 (77226-1258)
HOUSTON, TX 77028

WATS: 800-538-5823
PHONE: 713-674-7617
FAX: 713-678-4604
E-MAIL: sales@jetlube.com
www.jetlube.com

OILFIELD

OILFIELD

OILFIELD

OILFIELD

OILFIELD

JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: RUN-N-SEAL® ECF™
Chemical Family: Complex grease base
Use: Thread lubricant and sealant.

Manufacturer/Supplier: JET-LUBE, INC.
Address: 4849 Homestead Rd., Ste. #200
 Houston, TX, 77028 USA **Phone:** 713-674-7617
Emergency Phone: 713-674-7617 **Fax:** 713-678-4604
Chemtrec 24 hours (USA): 800-424-9300

Hazardous Components	CAS No.	Wt%	OSHA PEL	ACGIH TLV	Other Limits of Exposure
No hazardous compounds	7440-44-0; 65996-61-4	100	N/A	N/A	N/A
Lubricating grease (No carcinogens)	7789-75-5; 7782-42-5 74869-21-9				

Main Hazards—Health Effects

Eyes: May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.
Skin: For hypersensitive persons, may irritate the skin after prolonged periods of contact.

Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.
Protective Equipment for Fire fighting: Self-contained breathing apparatus.

Personal Precautions: Wear gloves & protective overalls. **Environmental Precautions:** None **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

Handling: No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

Respiratory Protection: None needed. **Hand Protection:** Protective gloves for hypersensitive persons.
Eye Protection: Glasses, if applied to parts in motion. **Body Protection:** Overalls.

Physical State: Semi-solid paste **Color:** Dark Gray to Black **Odor:** Canola **pH:** Neutral **Boiling Range/Point °F (°C):** UN
Melting Point °F (°C): >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)
Explosive Properties: LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** <1
Vapor Pressure (kPa): <0.01 **Percent Volatiles:** Nil **Density (g/cm³):** 1.28 **Flammability:** Not flammable at ambient temperature.
OAR Value: N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

Stability: Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

Acute Toxicity: Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.
Genotoxicity: None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No OSHA: No
EC Classification (67/548/EEC): No **Allergens:** None known. **LC-50:** >4000mg/kg—extrapolated from component data. **LD-50:** N/A

Possible Effects: None

Behavior: Relatively well behaved. Bioaccumulation potential nil.

Environmental Fate: Highly unlikely to cause notable contamination. Nontoxic to marine or land organisms.

Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice.


Container Disposal: Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner**—see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous
Sea Transport (IMO & IMDG): Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

Labeling Information: None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** Not registered.

S Phrases: S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection. **Ozone Depleting Chemicals:** Not applicable.
TSCA: All components are listed. **WHMIS (Canada):** Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous **311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: 
Prepared by: Donald A. Oldiges
Date Issued: September 10, 2008

As of issue date, the information contained herein is accurate and reliable to the best of JET-LUBE'S knowledge. JET-LUBE® does not warrant or guarantee its accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that the information offered for its consideration is suitable for its particular use.

LEGEND	
I.	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
II.	COMPOSITION INFORMATION ON INGREDIENTS
III.	HAZARDS IDENTIFICATION
IV.	FIRST AID MEASURES
V.	FIRE FIGHTING MEASURES
VI.	ACCIDENTAL RELEASE MEASURES
VII.	HANDLING AND STORAGE
VIII.	EXPOSURE CONTROL/PERSONAL PROTECTION
IX.	PHYSICAL AND CHEMICAL PROPERTIES
X.	STABILITY AND REACTIVITY
XI.	TOXICOLOGICAL INFORMATION
XII.	ECOLOGICAL INFORMATION
XIII.	WASTE DISPOSAL
XIV.	TRANSPORT INFORMATION
XV.	REGULATORY INFORMATION
XVI.	OTHER INFORMATION

HMIS SYMBOL

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PPI	B

NFPA SYMBOL

