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): >450°F (232°C)
- Flash Point (ASTM D-92): NLGI Grade 1
- Penetration @77°F (ASTM D-217): 310 - 340
- Copper Strip Corrosion (ASTM D-4048): 1B
- 4-Ball (ASTM D-2596): 800 typical
- Weld Point, kgf: 5% NaCl >2000 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

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Container Size</th>
<th>Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>29214</td>
<td>12.5 Kg.</td>
<td>Pail</td>
</tr>
<tr>
<td>29215</td>
<td>20 Kg.</td>
<td>Pail</td>
</tr>
<tr>
<td>29228</td>
<td>180 Kg.</td>
<td>Drum</td>
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</tbody>
</table>

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

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Houston, Texas–World Headquarters

Maidenhead, England
Phone: 44.1628.631913

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HOUSTON, TX 77028

EDMONTON, CANADA
Phone: 780.463.7441

WATS: 800-538-5823
PHONE: 713-674-7617
FAX: 713-678-4604
E-MAIL: sales@jetlube.com
www.jetlube.com
**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**  
<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Wt%</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits of Exposure</th>
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<tbody>
<tr>
<td>7440-44-0; 65996-61-4</td>
<td>100</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>7789-75-6; 7782-42-5</td>
<td>74869-21-9</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lubricating grease (No carcinogens)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

**Personal Protective Equipment**

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

**Physical State:** Semi-solid paste  
**Color:** Dark Gray to Black  
**Odor:** Canola

**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  
**Other Information:** None

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

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

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