



ALCO-EP™ ECF™

OSPAR Commission – HOCNF

Classification - “Yellow” Rating for Norway

“E” for the United Kingdom & The Netherlands

DESCRIPTION

ALCO-EP™ ECF™ is a premium, state-of-the-art, multi-purpose complex grease thickening a blend of synthetic and vegetable oils selected to provide the level of biodegradation required to meet the Norwegian “Yellow” and the combined UK and Netherlands “E” categories. These are the safest environmental ratings for lubricating grease. The non-plating, organic EP/anti-wear additives allow **ALCO-EP ECF** to be used where tolerances are low and/or speeds are high.

ALCO-EP ECF also contains polymer additives, further enhancing the inherent water resistance of complex-based grease. **ALCO-EP ECF** is extremely resistant to rust and corrosion and is ideally suited for use in high-moisture areas, including subsea applications.

- Operating Range from -10°F (-23°C) to 450°F (232°C)
- Excellent elastomer compatibility
- Superior rust and corrosion protection for maximum service life under harsh conditions
- Dropping Point 500°F (260°C)
- Polymer additives for extreme water resistance
- Biodegradable
- Color - Pale Red
- Exceeds Military specification MIL-G-18458B-SH
- Approved for use on sunch & RL-4 and other similar oilfield connections.

This product is formulated to contain no detectable, leachable, volatile organics by EPA Test Method 1311-TCLP number SW846 8260B as determined by independent, 3rd party testing.

ALCO EP ECF carries EU certification/registrations.

- Norway –Yellow
- Netherlands & UK: E
- Denmark PR#: 2324093

APPLICATIONS

Specially formulated and developed for subsea or other conditions where extreme water resistance is necessary. Highly developed additive package makes **ALCO-EP ECF** the premier, multipurpose grease for hostile environments. Ideal for certain RISER, WASH PIPE and other proprietary connection designs.

PRODUCT CHARACTERISTICS

Thickener Fluid Type	Complex Synthetic & Vegetable Oils
Color/Appearance	Pale Red Sticky Grease
Dropping Point (ASTM D-566)	500°F (260°C)
Specific Gravity	0.96
Density (lb. /gal)	8.0
Additive Type	EP/AW, R&O
Flash Point (ASTM D-92)	>430°F (221°C)
Autoignition Point (Calculated)	>500°F (260°C)
NLGI Grade	2
Approx. Safe DN Limit	400,000
Penetration @ 77°F (ASTM D-217)	265 – 295
US Steel Mobility, -10°F(-23°C)	16 grams/minute
Copper Strip Corrosion (ASTM D-4048)	1A
Wear Scar Diameter (ASTM D-2266)	0.7
Oxidation Resistance (ASTM D-942)	<5.0
PSI Drop, 100 hours	
EPA 1311-TCLP	Non-detected