



Wire Rope and EM Cable Lubricant

OLL D- 2 is formulated as a corrosion inhibitor and lubricant for wire rope and umbilical cable maintenance applications. **OLL D-2** is applied as a topical coating that will penetrate into the cable overtime leaving a thin film on the crowns of the wires and deposit corrosion inhibitors inside the cable. Frequency of application is dependent on atmospheric conditions and cable application.

OLL D-2: Outperforms greases by penetrating into the locations that can not be visually inspected, displacing moisture and forming a barrier film to prevent future moisture penetration.

Automatic Application: **OLL D-2** may be applied with the CoreLube 2100 system. The CoreLube 2100 system thickens the product to reduce potential drippage and provides uniform coverage to the entire circumference of the cable. The CoreLube 2100 system will allow splices and other deformities to pass through the applicator without hindrance.

Manual Application: **OLL D-2** may be applied by brush or swab. If desired the product may be thickened by mechanical means (drill mixer) and swabbed or brushed onto the cable. When the product has been thickened and applied to the cable, it will return to its original state penetrating into the cable and will leave a light protecting film on the crown wires.

Advantages:

- Long Lasting Atmospheric and Tidal Corrosion Inhibition
- Lubricates Wires and Metal Parts
- Clings to Metal Surface Reducing Run-Off
- Penetrates Between Wires into Valleys
- Non-Flammable / No Solvents / Non-Toxic
- Compatible With Manufacturers Lubricants
- Extreme Pressure & Anti-Ware Protection

Lubricating Data:

<u>Test Method</u>	<u>Description</u>	<u>Results</u>
ASTM D- 2783	Load Wear Index	56.81
	Last Non-Seizure(scar)	80 kg (0.39 mm)
	Last Seizure Load(scar)	315 kg (195 mm)
	Weld Load	400 kg

OLL D-2 Regulatory Compliance

Umbilical and Wire Rope Field Maintenance Applications

For the Gulf of Mexico OLL D-2 meets EPA -821-R-02-014: Method 1006

- M.beryllina Survival NOEC/LOEC – PASS
- M.beryllina Growth NOEC/LOEC – PASS
- M.bahia Survival NOEC/LOEC – PASS
- M.bahia Growth NOEC/LOEC – PASS

OLL D-2 meets VGP December 2013 (Vessel General Permit) requirements:

- OECD 302 B Inherent Biodegradability – PASS
- OECD 301 F Readily Biodegradable >60% - PASS
- OECD 203 Acute Toxicity – PASS

Dirrect Power Blue and Dirrect Power Green meet VGP December 2013 requirements for cleaners and are labeled in accordance with the EPA's DfE program and are certified as direct release products for cleaning operations in marine environments. Additional information at www.grignard.com.

OLL D-2 migration

