# Technical Data Sheets | FLUID FILM WRO-EP

### Wire Rope Lubricant, Extreme Pressure

WRO-EP is recommended for the general maintenance of wire rope. It provides corrosion protection and lubrication for standing and running rigging, drag lines and bridge cable. The high tackiness of WRO-EP minimizes throw-off on higher speed running rigging and provides higher resistance to water abrasion and washout when used in tidal areas. Extreme pressure properties provide excellent lubrication for both wire rope and open gear applications.



## FLUID FILM WRO-EP DETAILS

#### Description

Permanently soft gel. Conforms to MIL-PRF-18458 C. Submarine Material Usage Category-Limited-100°F Maximum Temperature.

Color

Greenish black

#### **Usage Details**

Rusty wire rope and cable should be first treated with FLUID FILM Liquid A to attain maximum penetration.

Where a low viscosity material is desired for a slushing compound, the use of FLUID FILM Gel-WRL is recommended. This product also has extreme pressure properties. See Technical Bulletin #206.2. **Application Methods** 

WRO-EP Wire Rope Lubricant may be applied using a leather or lambs wool glove. When a considerable length of wire is to be coated, it may be advantageous to apply as follows: Form a cone of leather, about two feet long and six inches in diameter at the base. Both base and apex are left open with the wire rope passing through the apex. The apex is tightly lashed around the wire with marlin for about six inches. WRO-EP is applied to the wire with a rag, then the leather cone is dragged along the wire (or vice versa) so that the excess is scraped off into the cone, the remainder being well worked into the rope crevices. The amount of material left on the wire can be regulated by adjusting the marlin lashing. Too heavy an application not only wastes material but also can result in throw-off, particularly in running cable.

TYPICAL PROPERTIES
PROPERTY
VALUE
ASTM
IP NLGI Grade
1-2
D-217
Specific Gravity 0.928-0.938
-
-
Dropping Point 235°
D-566
132/65
Flash Point
490° D-92
36/67
Specific Conductivity
Less than 10º mho/cm @ 1M Hz Effect on Rubber
None on neoprene and buna-n. May cause swelling on non oil-resistant rubber goods.
VOC
Less than 0.1% (CARB 310)
COMPARISON WITH MIL-PRF-18458 C
PROPERTY
TYPICAL VALUE SPECIFICATION
Worked Penetration(ASTM D-217)
290
200-350
Oil Separation 1.6%
10% Max.
Lead Wear Index(ASTM D-2596)
46.7 30 Min.
Accelerated Weathering (ASTM G-23)
pass
Salt Spray 20%(240 hours) pass
pass
Low Temperature Flexibility(20°F)
pass pass
Volatile Matter
1.7%
2% Max
Adhesiveness 99.8%
95% Min.