



FLUID FILM®

“RUST’S WORST ENEMY” **MARINE & INDUSTRIAL** **TANK / VOID AREA COATING** **& WIRE ROPE DRESSING**



ENVIRONMENTALLY FRIENDLIER
SOLVENT-FREE • NON-TOXIC



“WOOL WAX FORMULA”
APPLY OVER DRY
OR DAMP SURFACES
NOT WATER SOLUBLE
HIGHLY THIXOTROPIC
NON-CONDUCTOR OF
ELECTRICITY



ALWAYS REMAINS ACTIVE

 **NLS PRODUCTS**

Box 790, 1 Lakewood Cres., Bobcaygeon, ON K0M 1A0
Ph: 705-738-2321 Fax: 705-738-4550
www.nlsproducts.ca • mail@nlsproducts.ca

UNIQUE RUST PROVENTIVE SOFT COATING

Fluid Film Rust and Corrosion Preventive has a long and dependable history of stopping rust under the most corrosive conditions on earth. Over 70 years ago the Eureka Chemical Company developed a solution to this type of metal deterioration through laboratory research and field testing. This was the Fluid Film line of rust and corrosion preventives, penetrants and lubricants which have since been employed continuously by the United States Navy, the worldwide shipping industry, offshore exploration and heavy equipment operators. Fluid Film is made from a specially processed Wool Wax, penetrants and corrosion control constituents in a non-volatile vehicle. These properties provide a highly effective and economical product which will last for years without drying, flaking or cracking. Fluid Film's spreading action seals metallic surfaces against oxidation and inhibits corrosion while its absorbing properties hold existing rust particles in suspension.

Fluid Film also provides exceptional penetration and lubrication for all metal parts or surfaces where sliding, rubbing, hinging, bearing or threading action is involved.

Here are some selected uses:

- Maintain plant beams and structural integrity
- Parts Storage
- Materials Storage
- Assembly Protection
- Non-Insulated Pipe Exteriors
- Moving and Handling Equipment
- Transportation Equipment
- Cranes
- Metal Forming Equipment
- Machine Tools
- Machine, Measuring and Hand Tools
- Electrical Shafts
- Casings
- Cabinets
- Pumps

Fluid Film is the most effective, economical and long lasting corrosion control product you will ever buy. Compare it with anything you may now be using. No matter where your business is. Always remains active.

PRACTICAL ADVANTAGES (Marine)

1. Requires minimum surface preparation.
2. Penetrates existing rust, displaces water, forming a durable film.
3. Adheres to and gives full protection to wet or dry surfaces.
4. Does not dry out, harden or crack.
5. Resists water washing yet can easily be removed when required.
6. Due to its physical properties the coating is selfhealing in case of mechanical scoring or similar damage.
7. Because the coating remains soft it is highly flexible and readily compensates for metal expansion.
8. Low cost long term preservation of steel (new and repair) in ballast tanks, drydocks, cofferdams, barges, chain lockers, and any metal surface subjected to corrosive marine atmospheres.



Examples of FLUID FILM usage as an economical easily applied protection against corrosion on exposed deck equipment.



UNIQUE RUST PROVENTIVE SOFT COATING

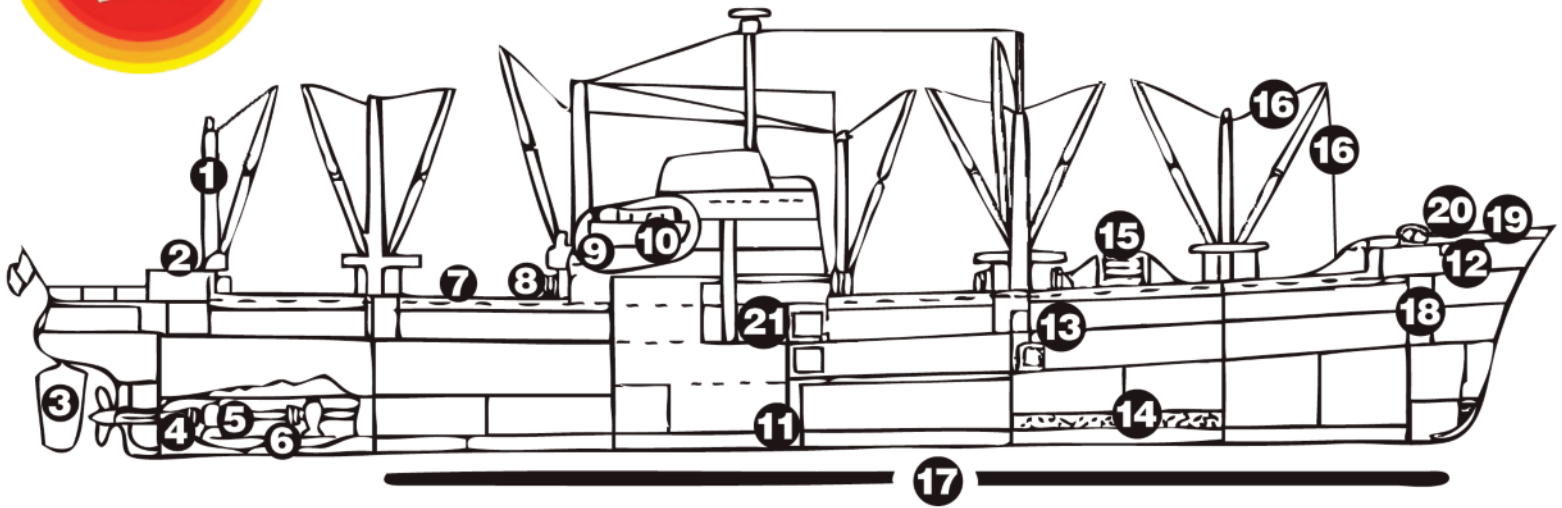
SELECTION OF FLUID FILM PROTECTION SYSTEMS

FLUID FILM MARINE & INDUSTRIAL TANK / VOID AREA COATING	
STOCK # A379 3.78 L A20 18.9 L A208 208 L	FLUID FILM Liquid "A" Flotation Coating: Used in heavily rusted ballast tanks, void spaces. Can be used as heavy rust descaler to soften rust & scale. After 6-12 months, tank can be pressure washed or scraped & mucked out. Re-applied with life expectancy up to 2 years in active ballast tanks & up to 5 years in void spaces. Liquid "A" 208 L drum; Spray, Roll or Brush, at a thickness of 2 to 3 mils, coverage is 17,000 sq. ft. Flotation application coverage area for light & moderately rusted tanks is 5,500 sq. ft. For heavy scale deposits coverage would be 2,200 sq. ft. per drum. Conforms to MIL-Spec R-21006. Liquid A meets & exceeds the corrosion performance requirements of MIL-C-16173 Class 2 Grade 3 while containing no solvents. National Stock Numbers: # A379 (8030-01-386-3877), # A20 (8030-01-387-1051), # A208 (8030-01-387-1065)
STOCK # AR379 3.78 L AR20 18.9 L AR208 208 L	FLUID FILM Semi-Liquid "AR" Marine & Industrial: Protection against corrosion in ballast tanks, void spaces, dry-docks, dock equipment, chain-lockers, anchor chains, hoists, wire ropes, winches, turnbuckles, conveyors, bearings, etc. Preservation of metal parts in protected & unprotected storage. Life expectancy up to 5 years (20 mils) in active ballast tanks & up to 10 years in void spaces. Semi-Liquid "AR" 208 L drum sprayed at 12 mils thickness (New Steel) covers 7,330 sq. ft., 15 mils thickness covers 5,860 sq. ft., 20 mils thickness covers 4,400 sq. ft. National Stock Number: # AR379 (8030-01-381-7311)
STOCK # BW20 18.9 L BW208 208 L	FLUID FILM Gel "BW": Protection against corrosion in ballast tanks, void spaces, etc., on New & Old constructions steel, anti-corrosive coating for all metals in Marine & Industrial Atmospheres. Life expectancy up to 10 years for active ballast tanks, up to 20 years for submersibles. Gel "BW" 208 L drum sprayed on New Steel, based on 48 mils thickness, covers 1,830 sq. ft. Rusty Steel, based on 56 mils thickness, covers 1,570 sq. ft. Very heavy rust, visual inspection is required for best thickness recommendation. See Technical Bulletin # 202.4. Meets the requirements of MIL-C-23050.
FLUID FILM INDUSTRIAL WIRE ROPE DRESSING	
STOCK # WRO20 18.9 L WRO208 208 L	FLUID FILM "WRO-EP" Wire Rope Dressing: Corrosion protection & lubrication of standing & running rigging. It is also used for drag lines, bridge cables & general wire rope maintenance. Extreme pressure properties for improvement of the gliding factor. High tackiness minimizes throw-off on high speed running rigging. Stays flexible in the temperature range of -60°C up to 70°C. It displaces moisture & can be applied on rusty surfaces. Very Rusty wire rope & cable should be first treated with FLUID FILM Liquid "A" to attain maximum penetration then apply WRO-EP in a few days. Specially designed to the requirements of the Navy & conforms to the US Navy MIL-G 18458 B (SH). NOTE: 15.9 kg. (35 lbs) Pail covers 3/8 in. wire/700 ln. ft.; 1/2 in. wire/606 ln. ft.; 3/4 in. wire/455 ln. ft.; 1 in. wire/303 ln. ft.; 1-1/8 in. wire/233 ln. ft.; 1-1/2 in. wire/216 ln. ft.; 1-3/4 in. wire/195 ln. ft.; 2 in. wire/152 ln. ft. Conforms to MIL-PRF-18458C. National Stock Number: # WRO20 (9150-00-530-6814)
FLUID FILM "AS" AEROSOL & "NAS" BULK	
STOCK # "AS" (Aerosol) 1450 145g 3300 333g "NAS" (Bulk) 5207 237 mL 3700 3.78 L 4300 18.9 L 4500 208 L PC354 354 mL	FLUID FILM "AS" (Aerosol) & "NAS" (Bulk): Unparalleled, Powerful Rust & Corrosion Protection Control System, Superior Lubricant, Long-Term Penetrant, Always Active, Non-Evaporating, Non-Drying & Displaces Moisture. Stays in place, forming a continuous, durable, protective barrier. Utilizes the unique molecular action of Wool Wax Formula along with other corrosion inhibiting ingredients. Highly Thixotropic & Emulsifier. Repels water, resists washout. Excellent "No Drip" Vehicle Undercoating. Penetrates through rust, stopping all metal deterioration on contact. Migrates to inaccessible areas by capillary action. Impregnates pores of exposed metal; keeps moisture & oxygen out. Stops corrosion caused by both Natural & Industrial sources. Eliminates the destructive corrosive effects of harsh minerals & chemicals such as salt, salt air, brine solution, acid, calcium, sodium chloride, fertilizer, herbicide & pesticide. Stops steel from rusting, aluminum, magnesium, copper, tin, zinc & bronze from oxidizing, chrome & brass from pitting. Non-conductor; will not cause static electricity. Will not harm painted surfaces, plastic, or most synthetic rubbers. Protection for all tools and equipment. Acceptable for use in Food Plants in Canada. National Stock Numbers: # 3300, 333g Aerosol (8030-01-387-1131), # 3700 (8030-01-386-3871) # 4300 (8030-01-387-1070), # PC354 (8030-01-381-6357).

Uncontrolled WHMIS material, excluding Stock # 3300, # 1450 Aerosols



Stem to Stern - Keel to Truck Complete Corrosion Control



Listed below are the recommended forms of FLUID FILM along with the locations on board a ship where it would be advantageous to use the FLUID FILM products.

<u>LOCATION</u>	<u>RECOMMENDED MATERIAL</u>
1. Kingpost interiors	BW
2. Stays and other standing rigging	WRO-EP
3. Rudders and bilge keels	Liquid A
4. Shaft alley recesses	BW, WRO-EP
5. Shaft bearing pedestals	WRO-EP
6. Shaft alley	BW, WRO-EP
7. Wooden decks (as a bedding compound)	BW, Semi-Liquid AR
8. Hatch cover interiors	BW, WRO-EP
9. Boat davits	BW, WRO-EP
10. Boats, International Orange (in accessible areas)	BW, Semi-Liquid AR
11. Voids, cofferdams and drain wells	BW, Liquid A, Semi-Liquid AR
12. Deck machinery	BW, WRO-EP, Semi-Liquid AR
13. Cargo holds, as bedding under wood ceilings	BW, Semi-Liquid AR
14. Permanent ballast tanks	BW, Liquid A, Semi-Liquid AR
15. Cargo grips, hatch dogs	BW, AS Aerosol, NAS Bulk
16. Running rigging	WRO-EP
17. Ballast tanks	BW, Liquid A, Semi-Liquid AR
18. Chain lockers	BW, Semi-Liquid AR
19. Anchor chains	Liquid A, Semi-Liquid AR
20. Rusty deck	Liquid A
21. Brine systems	BW

Pictorial Surface Preparation Standards



BALLAST TANK CORROSION PROTECTION

Photo 1.
Surfaces prepared for
FLUID FILM Gel B
(new construction).

Steel surface which has begun to rust, and from which the mill scale has begun to flake, has been cleaned using hand wirebrushing.



Photo 2.
Surfaces prepared for:
FLUID FILM Gel B
FLUID FILM Liquid AR
FLUID FILM Liquid A

Steel surface on IN-Service ship covered with stratified rust, loose and non-adherent rust, loose paint and rust tubercles, has been cleaned using high pressure washing and hand scraping.



Photo 3.
Surfaces prepared for:
FLUID FILM Liquid A

Coating by flotation, for corrosion protection and/or descaling.

Steel surface as described on Photo. 2, cleaned only by high pressure washing.