FLUID FILM® AEROSOL (AS) & NON-AEROSOL (NAS) BLACK® / BULK

Technical Data Sheets | Aerosol & Non-Aerosol BLACK® / Bulk

FLUID FILM BLACK® is a penetrant and lubricant also used for corrosion prevention. It is a non-toxic, long lasting, thixotropic liquid that has been used for over fifty years in the highly corrosive marine environment of ships and offshore drilling rigs. More recently they have been introduced and successfully utilized in the Automotive and snow handling industries as a vehicle undercoating. The wet barrier creeps and migrates into tight seams and into the metal chassis to provide corrosion protection from salts and brines. The addition of FLUID FILM BLACK® allows customers to protect their vehicle while restoring a rich black colour to the chassis or cover existing rust.

FLUID FILM BLACK® is formulated from specially processed wool-wax, highly refined petroleum oils and selected agents to provide corrosion control, penetration, metal wetting and water displacement. The long lasting product contains no solvents, will not dry out and will penetrate to the base of all metals, providing corrosion protection from both natural and industrial atmospheres. Heavily corroded and/or frozen parts such as nuts, bolts, shafts, etc. that would normally be damaged during maintenance, can be salvaged by applying FLUID FILM BLACK®

NOTE: ENVIROMENTALLY FRIENDLY – NAS is solvent Free and essentially Non-Toxic

FLUID FILM BLACK® PENETRANT, LUBRICANT and CORROSION PREVENTATIVE (NAS)







TYPICAL PROPERTIES

Unless designated otherwise, the following data refers to FLUID FILM BLACK® NAS or FLUID FILM BLACK® AS after the propellant has evaporated away following spray application.

Appearance	Black coloured Liquid
Viscosity	Brookfield HBF, 21°C or 70 ° F #2 Spindle at 2 RPM 10 - 20 reading (16,800 - 32,000 cps)
Flash Point, Bulk Liquid: ASTM-92 Cleveland Open Cup	207°C minimum.
Non-Volatile	89% minimum (3 hours @ 104°C).
VOC. CARB 310	AS: Less than 25%, NAS: Less than 1%
Specific Conductivity	Less than 10 -9 ohm/cm @ 1 mHz.
Specific Gravity	0.875 - 0.885 (less propellant).
Effect on Rubber ASTM D-471 @ ± 158°F 70 hours	None on neoprene and buna-n. May cause swelling on non-oil-resistant rubber goods.
Effect on Paint	None on most painted surfaces.
Effect on Aluminium	No pitting.
Extreme Pressure ASTM D-2782 Timken Method	Fail load - 15 pounds.
Wear Prevention - Characteristics ASTM D-2266 Four Ball Method	40 Kg., 1200 RPM for 1 hour @ 75°C. Results: Scar diameter of 0.49mm.
Repaintability	Contain no silicones. It is recommended that surfaces treated with FLUID FILM BLACK® AS or NAS be hot water or steam detergent washed (49°C), whichever is most effective.
Corrosion Protection ASTM D-1735 Humidity Cabinet	Passes 50 days.



ASTM D-1748 Humidity Cabinet	Passes 30 days.
MIL-C-16173 Corrosion Requirement	Grade 2 -Soft Films. Meets & exceeds salt spray requirements.
Water Replacement	Displaces water from all metal surfaces (MIL-C-23411, Paragraph 3.6).
Toxicity	Non-toxic, LD-50 greater than 3 grams per kilogram. Non-irritating skin response. Very slight irritation to the eyes. (Toxicity tests performed according to standard methods by an independent laboratory).
Warning	AS BLACK: Extremely flammable. Contents under pressure. Do not puncture, incinerate or store above 49°C. Keep from open flame. NAS BLACK: Combustible. Do not incinerate
Spray Nozzle Cleaning	Turn can upside down, point in a safe direction and spray until only propellant escapes. If spray button becomes clogged during use, pull it from the can and clean it with a fine wire or needle. Replace the button with a gentle twisting motion, keeping it pointed in a safe direction. Do not stick pins or other objects into nozzle tube.
Coverage	Fluid Film NAS can be applied by spraying or brushing to a thickness of 3 to 4 mils. Coverage rate is 4.4 m² / litre. However, from experience when applied by hand in difficult locations, typically the application is thicker, and coverage rate is often 2.2 m² / litre. This is simply a function of being able to access locations in hulls and voids etcetera

KEEP OUT OF REACH OF CHILDREN.

This document is subject to revision without notice.

