MATERIAL SAFETY DATA SHEET

Legal Disclaimer: MSD SHEET IS EXCLUSIVE TO CANADIAN LABEL FLUID FILM PRODUCTS ONLY!

FLUID FILM "NAS" NON-AEROSOL BULK # 3700, 4300, 4500, 5207

DATE PREPARED: 09/2016

"NAS" UNCONTROLLED WHMIS MATERIAL

1. Identification of the Substance/Preparation & Supplier

Name of Supplier: NLS Products

Box 790, 1 Lakewood Crescent

Bobcaygeon ON K0M 1A0

Tel: (705) 738-2321 Fax: (705) 738-4550

Product Name: FLUID FILM NON-AEROSOL "NAS" BULK

FLUID FILM MSD SHEET APPLIES ONLY TO CANADIAN LABELLED PRODUCTS.

Product "NAS" Stock #'s: # 3700 (3.79 L can), # 4300 (18.9 L pail),

4500 (208 L drum), # 5207 Brush Top Can (237 ml)

WHMIS CLASSIFICATION: Not Regulated

TDG: Not regulated by road. **D.O.T.:** Not Regulated.

US NATIONAL STOCK NUMBERS (NSN): SOLVENT FREE & NON-TOXIC

"NAS" UNCONTROLLED WHMIS MATERIAL

STOCK "NAS" # 3700 3.79 L NON-AEROSOL BULK "NAS": 4/CTN. 8030-01-386-3871 STOCK "NAS" # 4300 18.9 L PAIL NON-AEROSOL BULK "NAS": 8030-01-387-1070

STOCK "NAS" # 4500 208 L DRUM NON-AEROSOL BULK "NAS":

STOCK "NAS" # 5207 237 ml BRUSH TOP CAN NON-AEROSOL BULK "NAS": 12/CTN.

2. Composition/Information on Ingredients

CONTAINS NO SOLVENTS, SILICONES, TEFLON OR KNOWN CARCINOGENS.

Hazardous components: Petroleum Oil mist (Only when sprayed) CAS No. 64742-54-7

Not regulated

3. Hazards Information

Eye Contact: May cause mild irritation. **Ingestion:** No information available

Skin Contact: Prolonged contact could cause irritation.

Inhalation: Prolonged exposure to mist, without benefit of protective gear, may irritate

respiratory tract.

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4. First Aid Measures

Eye Contact: Flush with plenty of clean water for at least 15 minutes. If irritation persists,

obtain medical attention.

Skin Contact: Wipe excess material from the skin with a cloth, followed by washing with soap and

water. A waterless skin cleaner is beneficial in removing the material from the skin.

Inhalation: If respiratory symptoms develop, move victim away from source of exposure

and into fresh air. If symptoms persist, seek medical attention.

Ingestion: If symptoms develop, seek medical attention.

5. Fire Fighting Measures

Flash Point: 207°C (405°F) (COC)

Extinguishing Media: Extinguish with dry chemical, CO₂, water spray, foam Special Fire Fighting Procedures: None. Unusual Fire and Explosion Hazards: None

6. Accident Release Measures

Do not allow product to enter drains or watercourses. Transfer bulk of material into another container. Absorb remaining residue with proper absorbents such as earth or vermiculite. Sweep up and dispose of as solid waste in accordance with applicable regulations.

7. Handling and Storage

Storage Temperature: 0 to 49°C

Storage Precautions: No special requirements. Keep in closed containers.

Handling: Avoid contact with skin and eyes. Observe good standards of

industrial hygiene.

8. Exposure Controls/Personal Protection

Engineering Measures: Provide forced air ventilation when applying in confined spaces. **Respiratory Protection:** Use approved respirator with organic vapor cartridges when spray

applying in tanks and confined spaces.

Eyes: Chemical eye goggles when spray applying

Hands: Non-natural, non-butyl rubber gloves are recommended.

Skin: Use protective clothing. Remove contaminated clothing and

wash the affected area with soap and water.

Exposure Limits: Not determined.

9. Typical Physical and Chemical Properties

Appearance: Straw colored liquid. Odor: Mild piney odor (less propellant). Water Solubility: Not soluble. PH Neat: 7.8 Specific Gravity (25°C): 0.880

Freezing Point: Not determined.

Boiling Point: Not determined.

Vapor Pressure: Not determined.

Flash Point: 207°C (405°F) (COC).

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10. Stability and Reactivity

Stability: Stable under normal conditions. Hazardous polymerization will not occur.

Hazardous Decomposition Products: Combustion can produce a variety of compounds including oxides of sulfur, oxides of carbon, water vapor and unidentified organic and inorganic compounds, some of which may be toxic.

Conditions to Avoid: Exposed flames, high temperature sources and strong oxidizers.

11. Toxicological Information

LD50 (Animal/Oral): Greater than 14 Grams/Kilogram

Health Effects:

Eyes: Minimally irritating.

Skin: Prolonged contact could cause skin irritation.

Inhalation: Excessive exposure due to lack of protective gear or proper ventilation

could result in pulmonary abnormalities.

Ingestion: Ingestion of this product is not regarded as a significant health hazard

likely to arise in normal use.

12. Ecological Information

No data available.

13. Disposal Recommendations

Product should be disposed of via authorized waste disposal contractors in accordance with all local and national regulations.

14. Transportation Information

Non-hazardous, UNCONTROLLED WHMIS MATERIAL

15. Regulatory Information

Safety Phrases: Children can fall into bucket and drown. Keep children away from buckets containing even a small amount of water. KEEP OUT OF REACH OF CHILDREN.

16. Other Information

Do not mix with other chemicals.

This data sheet does not constitute an assessment of the workplace risks as required under the provisions of the Health & Safety at Work act and the Control of Substances Hazardous to Health (COSHH).

Legal Disclaimer: The information supplied above is based upon the present state of our knowledge of the product at the time of publication. It is given in good faith and no warranty is implied with respect to the specification or quality of the product. The user must satisfy himself that the product is entirely suitable of his purpose.

TECHNICAL BULLETIN: PRODUCT DATA # 216 FLUID FILM "AS' AEROSOL FLUID FILM "NAS" NON-AEROSOL BULK

DATE PREPARED: 02/14 *CFIA # N184 - Acceptable for Food Plant Use in Canada

US NATIONAL STOCK NUMBERS: SOLVENT FREE & NON-TOXIC

* STOCK # 1450 145 g AEROSOL "AS" 12/CTN.

* STOCK # 3300 333 g AEROSOL "AS": 12/CTN. 8030-01-387-1131

"NAS" UNCONTROLLED WHMIS MATERIAL

STOCK # 3700 3.79 L NON-AEROSOL BULK "NAS": 4/CTN. 8030-01-386-3871 STOCK # 4300 18.9 L PAIL NON-AEROSOL BULK "NAS": 8030-01-387-1070

STOCK # 4500 208 L DRUM NON-AEROSOL BULK "NAS":

STOCK # 5207 237 ml BRUSH TOP CAN NON-AEROSOL BULK "NAS": 12/CTN.

FLUID FILM Aerosol (AS) and Bulk (NAS) meet and greatly exceed mil spec # C 16173 (Army/Navy), and mil spec # C 81309, C 85054 (Military Aviation). Boeing spec # MB0110-020.

FLUID FILM "AS" & "NAS" LUBRICANTS, PENETRANTS, & CORROSION PREVENTATIVE

Belongs to a family of **FLUID FILM** products that are Environmentally Friendlier, Solvent Free, Non-Toxic, long lasting, thixotropic liquids that have been used for over fifty (50) years in the highly corrosive marine environment of ships and offshore drilling rigs. More recently products have been introduced and successfully utilized in the aerospace, aircraft and automobile industries as well as for home maintenance. Facilities where they are used include the following: Government facilities, commercial fishing concerns, gas companies, agriculture, salt plants, municipal plants, power plants, manufacturing plants and pulp and paper mills.

FLUID FILM "AS" & "NAS" are formulated from specially processed wool-wax, highly refined petroleum oils and selected agents to provide corrosion control, penetration, metal wetting and water displacement. These long lasting products contain no solvents, will not dry out and will penetrate through rust to the base metal, 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**.

PROPERTIES: (TYPICAL)

APPEARANCE: Light milky liquid that becomes clear amber on exposure to air.

VISCOSITY: 8000 centipoises @ 70°F (19°C) / 6560 centipoises @ 100°F (40°C)

Brookfield HBF #2 Spindle @ 2 RPM

FLASH POINT 207°C (405°F) (COC) Minimum. (ASTM-92) CLEVELAND OPEN CUP

NON-VOLATIVE: 89% minimum (3 hours @ 220°F) Aerosol / 99.5% Bulk

SPECIFIC GRAVITY: (NAS) 0.881 – 0.891 SPECIFIC CONDUCTIVITY: Less than 10⁻⁹ mho/cm @ 1Hz.

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EFFECT ON RUBBER: None on neoprene, buna-n and most synthetics.

ASTM D-471 Some swelling on natural and butyl rubbers.

@+\- 158°F 70 hours

EFFECT ON PAINT: None on most painted surfaces.

EFFECT ON ALUMINUM: No pitting.

EXTREME PRESSURE: Fail load – 15 pounds

ASTM D-2782 Timken Method

WEAR PREVENTION - 40 Kg., 1200 RPM for 1 hour @ 167°F. Results: Scar diameter of 0.49mm.

Four Ball Method

REPAINTABILITY: CONTAINS NO SILICONES OR TEFLON. It is recommended that surfaces

treated with FLUID FILM are hot water or steam detergent washed (120°F),

whichever is most effective.

CORROSION PROTECTION: Passes 50 days, Humidity Cabinet. ASTM D-1735

Passes 30 days, Humidity Cabinet ASTM D-1748

Corrosion Requirement (Mil-C-16173, Grade 2 – Soft Films), passes 5%.

Salt Fog, passes 1298 hours.

WATER REPLACEMENT: Displaces water from all metal surfaces, (Mil-C-23411, Paragraph 3.6)

TOXICITY: Extremely low, 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).

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