Material Safety Data Sheet

Product Name: Northern Fuel Tank Liner

A liquid fuel tank liner. Revised: 2/8/06

Number: RW0125

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Section 2 - Composition / Information on Hazardous Ingredients

 Ingredient
 C.A.S. No.
 Percent (w/w)
 Carcinogen

 2-Butanone
 78-93-3
 60 - 100%
 No

 1,2 Butylene Oxide
 106-88-7
 1 - 5%
 No

Section 3 - Hazards Identification

Emergency Overview: Liquid is moderately irritating to the eyes and mildly irritating to the skin. Flammable concentrations of vapors in air are possible, may travel considerable distance and may flash back to the container. Vapors are heavier than air, but the low vapor pressure and evaporation rate make flammable mixtures in the air unlikely. It may be extinguished by CO₂, dry chemical or foam. A clear, blue, viscous liquid with a solvent odor.

Health Hazards: Eye Irritant, Possible Skin Irritant

Physical Hazards: Flammable

Primary Routes of Entry: X Through Skin X Inhalation X Ingestion

Potential Health Effects:

Eyes - liquid causes irritation, redness and blurred vision. Sticks to eyes, lids and lashes.

Skin - Prolonged or repeated contact may cause defatting and drying, which may result in skin irritation or dermatitis.

Swallowing - Moderately toxic. May obstruct airway. Can cause CNS depression.

Breathing - excessive breathing of vapors may cause nasal and respiratory irritation, dizziness, headache, and nausea. High concentrations may cause CNS depression.

Section 4 - First Aid Measures

Eye Contact: Immediately flush eyes with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention immediately.

Skin Contact: Wipe off wet material with a paper towel or rag. If dry, it will often peel or rub off. If not, use M.E.K., acetone or lacquer thinner to remove it. Thoroughly wash the exposed area with soap and water. Wash the exposed skin with soap and water. Remove contaminated clothing and shoes. Will not wash out of clothing. If irritation develops and persists, get medical attention.

Inhalation: If affected, move the affected person to fresh air. If irritation persists get medical attention. If breathing has stopped, give artificial respiration and get medical attention immediately.

Ingestion: Get medical attention. If the product is swallowed, do NOT induce vomiting. Product may block the airway. Get medical attention immediately.

Section 5 - Fire-Fighting Measures

Flash Point: 21° F. / -6° C. (ASTM D-56 closed cup)
Lower Explosive Limit: 1.74% @ 200°F

Autoignition Temp.: 885°F / 474° C.

Upper Explosive Limit: 11.4% @ 200°F

Extinguishing Media: Water, carbon dioxide, dry chemical, alcohol foam.

Special Fire Fighting Procedures: None.
Unusual Fire And Explosion Hazards: None

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Eliminate all ignition sources and use a respirator if the spill is large. Dike to prevent entry into drains, sewers, streams and other bodies of water. If wet, small spills may be wiped up. When the material is tacky it may be shoveled or scraped up. Clean-up residue with a solvent such as MEK or acetone. Larger spills can be scooped into metal containers for disposal or absorbed onto oil dry or vermiculite. Rags and absorbent material are very flammable until the solvent has evaporated.

Section 7 - Handling and Storage

Do not use, pour, spill or store near heat, sparks, heating elements or open flame. Vapors could be ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at a considerable distance from the source. When pouring or transferring, ground the container being poured from to the container or tank being poured into with a wire and alligator clips.

Do not attempt to paint the inside of a large tank from the inside unless wearing a self-contained breathing apparatus to avoid being overcome by fumes. Death could result.

Empty containers retain product residue. Observe all hazard precautions given in this data sheet.

<u>Ingredient</u>	C.A.S. No.	Percent (w/w)	TWA(source)	<u>STEL</u>	Ceiling
2-Butanone	78-93-3	60 - 100%	20 ppm(1,2,3,4)	300 ppm(2,3,4)	-

1,2 Butylene Oxide 106-88-7 1 - 5% No official limits established.

(1)=OSHA (2)=NIOSH (3)=ACGIH (4)=CANADA TWA=8 hr Time Weighted Average STEL=15 minute TWA Ceiling=Instantaneous

<u>Ventilation</u>: At least 10 air changes per hour for good general room ventilation are recommended. If the exposure limits of an ingredient will be exceeded, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below the limits.

<u>Respiratory Protection</u>: None expected when used as directed. If the exposure limits of an ingredient will be exceeded wear a NIOSH approved respirator with an organic vapor cartridge or SCBA

<u>Gloves:</u> If the product will contact hands wear resistant gloves such as neoprene or Nitrile. Do not use disposable latex gloves. Nitrile disposable gloves are good.

Eye Protection: If splashing is possible wear safety glasses with side shields or chemical goggles.

Other Protective Equipment: None.

Section 9 - Physical and Chemical Properties

Boiling Point: 175° F. **Vapor Pressure:** 70mm Hg **Specific Gravity:** 0.8 **Vapor Density:** 2.5 (Air = 1)

Percent Volatiles: 75% Evaporation Rate: 1.5 (Butyl Alcohol = 1).

Solubility In Water: Negligible pH: Not Applicable

Appearance and Odor: A clear, blue, viscous liquid with a solvent odor.

Section 10 - Stability and Reactivity

Incompatibility: Oxidizers. Hazardous Decomposition Products: CO₂, CO, HCl

Section 11 - Toxicological Information

2-Butanone LD_{50} - 3.4 g/kg rat oral LC_{50} - 8,000 ppm/8H rat

1,2 Butylene Oxide LD₅₀ - 1-2 g/kg rat oral

Butylene oxide is not rated as a carcinogen by OSHS or NTP. IARC rates it in Group 2b, possibly carcinogenic, for the reasons stated below.

Butylene oxide has been shown to produce benign and malignant tumors in rats but not in mice. These tumors occurred only following high exposure levels. Butylene oxide is not believed to pose a carcinogenic risk to man. The small percentage of butylene oxide in Northern Fuel Tank Liner makes a high exposure level impossible.

In female rats exposed by inhalation to > 1000 ppm 2-Butanone (5X TLV), minor embryotoxic/fetotoxic effects were observed.

Section 12 - Ecological Information

Do not dispose of in the environment.

Section 13 - Disposal Considerations

<u>Waste Disposal Method</u>: wet material may be poured on ground far away form all sources of ignition and allowed to evaporate and dry. The dry plastic is non-hazardous and may be thrown in the trash. Avoid open burning of the plastic as it gives off dense black smoke. Wet material should be properly incinerated or disposed of in an approved landfill. Comply with all state, local and federal regulations.

Section 14 - Transport Information

D.O.T. Hazard Class: Quarts or smaller (except by air) - Consumer Commodity ORM-D.

Gallons (and quarts by air) - PAINT, 3, UN 1263, P.G. II

Section 15 - Regulatory Information

The components of this product are on the TSCA inventory of chemical substances.

Section 313 Supplier Notification: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and CFR 372.

 Chemical Name
 C.A.S. No.
 % (w/w)
 Lbs./Gallon

 METHYL ETHYL KETONE (2-Butanone)
 78-93-3
 67%
 4.9

 1,2 BUTYLENE OXIDE
 106-88-7
 2.7%
 .184

Section 16 - Other Information

NFPA: H:1 F:2 I:0 **HMIS**[®] **III:** H:1 F:3 P:0 These ratings estimates are to be used only with a fully implemented training program in the workplace. NFPA[®] is a mark registered by the NFPA. HMIS[®] is a mark registered by the NPCA.

The information accumulated herein is believed to be accurate but is not warranted to be. Recipients are advised to confirm in advance that the information is current, applicable, and suitable to their circumstances.