MATERIAL SAFETY DATA SHEET **NATRO-LUBE T4**

Date Revised: September 26, 2003.

Page 1 of 4.

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

TRADE NAME: Natro-Lube T4 CHEMICAL NAME: Chemical Mixture

Company:



NATROCHEM, INC. P.O. Box 1205

Savannah, GA 31402-1205

HMIS RATING HEALTH 3 **FLAMMABILITY** REACTIVITY 0

Telephone Numbers:

Transportation Emergencies:

CHEMTREC (U.S.A.):

(800) 424-9300 (24 hours)

CHEMTREC (International):

(202) 483-7616 (24 hours, call collect)

Product Information:

(912) 236-4464 (EST, 8:00AM - 4:00PM M-F)

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS#	PERCENT
Water		45
Ammonium Hydroxide Solution*	1336-21-6	22
Petroleum Hydrocarbon	64742-43-4	8
Stearic Acid	57-11-4 .	5
Silicone	63148-62-9	20
* Composition: 19.2% by weight of NH3 dissolved in water		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING: Irritant and corrosive to skin, eye, respiratory tract and mucous membranes.

EYE: Avoid contact with eyes, may cause severe eye injuries, burns.

SKIN: Avoid prolonged, repeated, or excessive contact with skin, may cause severe burns, local irritation, burns, blister formation.

INGESTION: May cause severe lung injuries, constriction of throat, coughing, followed by vomiting or diarrhea. Possible lethal ingestion dose is 3-4 mil.

INHALATION: Avoid prolonged or repeated inhalation. Product will irritate the respiratory tract, causing headaches, coughing, severe lung congestion, breathing difficulty, convulsion, shock.

4. FIRST AID MEASURES

INHALATION: If inhaled, remove from area to fresh air. Administer oxygen or artificial respiration if necessary. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

EYE/SKIN CONTACT: In case of contact, immediately flush eyes and skin with plenty of water (soap and water on skin) for at least 15 minutes. Eyelids should be held apart and away from eyeball for thorough rinsing. Do not rub or apply ointment on affected area. Get medical attention if irritation persists.

INGESTION: If conscious, give large amount of water to drink. Refer immediately to physician.

NOTES TO PHYSICIAN: Injury to eye may appear as delayed phenonmenon. Pulmonary edema may follow

4. FIRST AID MEASURES

chemical bronchitis. Supportive treatment with necessary ventilatory actions, including oxygen, may warrant consideration.

5. FIRE FIGHTING MEASURES

FLASH POINT: >250°F (PMCC)

EXTINGUISHING MEDIA: On large fires, use dry chemical, foam or water spray. On small fires use carbon dioxide, dry chemical or water spray. Water can be used to cool fire exposed containers.

SPECIAL FIREFIGHTING PROCEDURES: Not considered a primary fire hazard, but care should be taken to avoid exposure to liquid product involved in fire. Wear splash-proof, gas-tight goggles, respiratory protection, rubber gloves and clothing to avoid contact as needed. Cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: When heated, material will give off ammonia gas, a strong irritant to eye, respiratory tract, and most skin. Closed containers exposed to extreme heat may develop pressure. Combustion of released ammonia may form nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wear respiratory protection and protective clothing. Stop source if possible. Stay upwind and use water spray to absorb the evolved gas. Dilute withy large amounts of water. Contain spill by diking.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE: Store in cool (26.7°C) and well ventilated area. = 80.06° F

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

OSHA: 35 ppm

27 mg/m3 STEL

15 minutes

25 ppm

18 mg/m3 PEL

ACGIH: 25 ppm

18 mg/m3 TLV

8 hour TWA

35 ppm

27 mg/m3 STEL

15 minutes

RESPIRATORY PROTECTION: MSHA/NIOSH approved respiratory protection with full facepiece for gas and vapor contaminants effective for ammonium hydroxide and able to be used for entry and escape emergencies. Refer to 29 CFR 1910.134 and ANSI Z88.2 for requirements and selection.

VENTILATION: Local exhaust sufficient to keep ammonia gas to 22 ppm or less. Refer to 29 CFR 1910.134 and ANSI Z9.2 for requirements and selection.

EYE AND FACE PROTECTION: Splash-proof, gas-tight chemical safety goggles.

PROTECTIVE GLOVES: Rubber gloves and boots to prevent contact.

OTHER PROTECTIVE EQUIPMENT: Boots, apron, or chemical suits should be used when necessary to prevent skin contact. Personal protective clothing and use of equipment must be in accordance with 29 CFR 1910.132 (general requirements), .133 (eye and face protection), and .138 (hand protection).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: N/A

SPECIFIC GRAVITY (Water = 1): N/D

SOLUBILITY (wt.% in water): N/D

VAPOR PRESSURE: N/D

PHYSICAL STATE: Liquid emulsion

COLOR: White

VAPOR DENSITY (Air = 1): N/A FREEZING/MELTING POINT: N/D

% VOLATILE: N/D

EVAPORATION RATE: N/A

ODOR: Strong ammonia odor.

10. STABILITY AND REACTIVITY

STABILITY: Stable at room temperature. Aqua ammonia will react exothermically with acids. Release ammonia vapors when heated.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY (CONDITIONS TO AVOID): Avoid mixing with sulfuric acid or other strong mineral acids. Mixing with hypochlorites (chlorine bleach) other halogens, sodium hydroxide. Avoid contact with galvanized surfaces, copper, brass, bronze, aluminum alloys, mercury, gold, silver, and strong oxidizers. Avoid heating.

HAZARDOUS THERMAL DECOMPOSITION/COMBUSTION PRODUCTS: Ammonia decomposition to hydrogen and nitrogen gases above 450°C.

11. TOXICOLOGICAL INFORMATION

ACUTE INHALATION LC50: N/D ACUTE DERMAL LD50: N/D SKIN IRRITATION: Irritant EYE IRRITATION: Irritant ACUTE ORAL LD50: N/D

CHRONIC EFFECTS/CARCINOGENICITY: This product nor its components are listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

MEDICAL CONDITIONS AGGRAVATED: Skin and respiratory diseases aggravated by exposure.

EFFECTS OF OVEREXPOSURE:

Skin: local irritation, burns, blister formation. Eye: burns, constriction of throat, coughing, followed by vomiting or diarrhea. Probable lethal ingestion does is 3-4 ml. Inhalation irritation, headache, coughing, severe lung congestion, breathing difficulty, convulsion, shock.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: N/DA

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Ammonium hydroxide is listed as a hazardous waste under CWA (40CFR 1164.40, CFR 117.3 Reportable Quantity Category C. 1000#/454kg). Comply with all regulations. Keep spills from entering streams or lakes.

14. TRANSPORT INFORMATION

USA DOT DESCRIPTION: 8 (Corrosive)

Proper Shipping Name: Corrosive Liquid, n.o.s. (Contains Ammonium Hydroxide Solution) UN1760, PGIII,

RQ

15. REGULATORY INFORMATION

USA TSCA: Components are listed on the TSCA Inventory.

SARA TITLE III:

SARA (311,312) Hazard Class: Ammonium Hydroxide solution - Acute Health Hazard.

SARA (313) Chemicals: Ammonium Hydroxide solution.

SARA Section 302: Not listed as an Extremely Hazardous Substance.

16. OTHER INFORMATION

Revision Note: New MSDS issue. Prepared by: James L. Pye, Jr. Title: Safety Coordinator

N/A = Not applicable N/D = Not determined N/DA = No Data Available N/E = Not established

The information given in this MSDS was obtained from sources, which we believe are reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, Natrochem, Inc. makes no warranty express or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon.