

MATERIAL SAFETY DATA SHEET

P.O. BOX 1603 EUNICE, LA 70535 866-457-0064 or 337-457-0064

DEL-LUBE

SECTION I - IDENTIFICATION

Manufacturer's Name: Delta Drilling Products & Services, LLC

Physical Address: 154 Eastpark Drive

Eunice, LA 70535

Emergency Number: 866-457-0064 or 337-457-0064

Chemical Family: Amide Ester CAS Number: 70321-73-2

DOT Classification: Non-Hazardous/Non-Regulated

SARA Hazard: Acute, Chronic (Section 311/312) Title III Section 313 – Contains 0.15-

0.18%

Nickel Salt

Other Regulatory Requirements: Listed in TSCA Inventory

Trade Name: Del-Lube

 LC_{50} at 1.5% by volume in Generic Mud #7 = 1,000,000+ ppm

SECTION II - INGREDIENTS

Hazardous Component: Nickel Salt (as a fatty acid soap)

Percent: 0.15-0.18% by Weight

SECTION III – HEALTH INFORMATION

Inhalation: Unknown

Ingestion: LD₅₀: >10 g/kg (Albino rats) (Stearic, Oleic, Linoleic and Palmitic Acids).

Ingestion of nickel salts may cause an allergic reaction, nausea, vomiting or diarrhea. High doses of

soluble salts induce giddiness and nausea. Large doses of nickel salts cause acute gastrointestinal

tract

irritation, with vomiting and diarrhea (dogs). Chronic dosing of inorganic nickel salts is well

tolerated by

rodents.

Eye Contact: Stearic-Palmitic mixtures produced only mild conjunctival erythema in two of six rabbits at the 24

and

48-hour readings. No other signs of irritation were observed. All signs of irritation had subsided

completely at the 72-hour reading. Oleic Acid produced mild conjunctivitis in five of six rabbits.

No

other irritative signs were observed and all except one rabbit showed no irritative signs at the 72-

hour

reading. Nickel salts may cause eye irritation or conjunctivitis.

Skin Contact: Exposure to Stearic-Palmitic Acid mixtures caused no signs of irritation or corrosivity at either

intact or

abraded sites on albino rabbits. Exposure to Oleic Acid resulted in very slight erythema in six

intact and

six abraded sites on albino rabbits at the 24-hour reading only. No edema was observed at either

observation. Prolonged or repeated contact of nick salts with the skin may result in an allergic reaction

(dermatitis) in sensitive individuals. Primary irritation index for Stearic, Palmitic and Oleic Acids was

0.0-0.5. 75 mg of Stearic Acid applied intermittently to human skin over a 3-day period resulted in mild

irritation. 500 mg of Stearic Acid applied to rabbit skin over a 24-hour period resulted in moderate

irritation. 15 mg of Oleic Acid intermittently applied to human skin over a 3-day period resulted in

moderation irritation. 500 mg of Oleic Acid applied to rabbit skin in an open draize test resulted in mild

irritation.

SECTION IV - OCCUPATIONAL EXPOSURE LIMITS

PEL: No OSHA PEL

SECTION V - EMERGENCY & FIRST AID PROCEDURES

Ingestion: If victim is conscious and able to swallow, quickly have victim drink water or milk to dilute. Do not give

Sodium Bicarbonate, fruit juices or vinegar. Never give anything by mouth if victim is unconscious or

having convulsions. Induce vomiting only if advised by physician or poison control center. Call physician or poison control center immediately.

Skin Contact: Immediately flush skin with plenty of water while removing contaminated clothing. Wash contaminated

clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes. Do not let victim rub

eyes. Get medical attention immediately.

Inhalation: Immediately remove victim to fresh air. If victim has stopped breathing give artificial respiration,

preferably by mouth-to-mouth. Get medical attention immediately.

SECTION VI - PHYSICAL DATA

Boiling Point: Approximately 182°C at 1 mm hg pressure

Specific Gravity: 0.89 at 25/20°C

Vapor Pressure (mm hg): Approximately 1 mm hg pressure at 180°C

Solubility in Water: Negligible

Appearance & Color: Black viscous liquid at 25°C

SECTION VII - FIRE & EXPLOSION HAZARDS

Flash Point (Method Used): 365°F (185°C) C.O.C.

Special Fire Fighting Procedures & Precautions: (Individuals should perform only those fire fighting procedures for which

they have been trained.) Water or foam may cause frothing when applied to flammable liquids having flash points above $212^{\circ}\mathrm{F}$

(100°C). The remark is included only as a precaution and does not mean

that

water or foam should not or could not be used in fighting fires in

such

liquids. The frothing may be quite violent and could endanger the

life of

the fire fighter particularly when solid streams are directed into

the hot

burning liquid. On the other hand, water spray carefully applied

has

frequently been used with success in extinguishing such fires by

causing

the frothing to occur only on the surface and this foaming action blankets

and extinguishes the fire (NFPA 325M-1984).

Unusual Fire & Explosion Hazards:

Fire fighters should wear self-contained breathing apparatus in the positive-pressure mode with a full face piece when there is a

possibility

of exposure to smoke, fumes or hazardous decomposition

products.

SECTION VIII - REACTIVITY DATA

Generally stable Stability: Hazardous Polymerization: None likely

Conditions & Materials to Avoid: Avoid contact with strong oxidizing agents and strong alkalies. Hazardous Decomposition or Byproducts: Decomposition may produce Carbon Monoxide and Carbon

Dioxide.

SECTION IX - EMPLOYEE PROTECTION

Handle in the presence of adequate ventilation. Measures:

Respiratory Protection: Recommended exposure limits (i.e., OSHA PEL and ACGIH TLV) have not been

established for

this material. Whether there is a need for respiratory protection under your conditions of

Wear gloves and protective clothing which are impervious to the product for the duration

handling of this material should be evaluated by a qualified health specialist.

Protective Clothing:

of

Eye Protection:

anticipated exposure if there is potential for prolonged or repeated skin contact. Wear safety glasses meeting the specifications of ANSI Standard Z87.1 where no contact

with the

eye is anticipated. Chemical safety goggles meeting the specifications of ANSI Standard

Z87 1

should be worn whenever there is the possibility of splashing or other contact with the

eyes.

SECTION X - ENVIRONMENTAL PROTECTION

Environmental Precautions:

comprehensible

Avoid uncontrolled releases of this material where spills are possible. A

spill response plan should be developed and implemented.

Spill or Leak Precautions:

Contain

Wear appropriate protection and protective clothing as described in Section IX.

spilled material. Transfer to secure containers. Where necessary, collect using absorbent

media. In the event of an uncontrolled release of this material, the user should determine

if the release is reportable under applicable laws and regulations.

Waste Disposal: disposed or

All recovered material should be packaged, labeled, transported, and

reclaimed in conformance with applicable laws and regulations and in conformance with

good engineering practices. Avoid land filling of liquids. Reclaim where possible.

SECTION XI - PRECAUTIONS: HANDLING, STORAGE & USAGE

Store in a cool, dry, well-ventilated area. Store away from heat and moisture, and out of sunlight. Area should be protected from contamination by corrosive fumes. Should be stored away from fire hazard areas.

Storage area should not contain drain to which toxicant could be flushed. Containers should be sealed as tightly as possible. Inspect periodically for deficiencies. A spill control plan should be provided.

Isolate from acids and acid fumes, corrosives, fire hazards, heat and moisture. Container hazardous when emptied. Since emptied containers retain product residue, all hazard precautions described in this MSDS must be observed. Keep in covered containers and do not store near heat or open flames.

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