

DIAPAC**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME

NIAD I

EFFECTIVE DATE

August 6, 1992

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SECTION 1 - PRODUCT IDENTIFICATION AND USE

| | | |
|--|---|--|
| PRODUCT NAME NIAD I | TDG SHIPPING NAME Corrosive Liquids N.O.S. (Polyhydroxy aluminum chloride) | HMIS RATINGS Health 3 Flammability 0 Reactivity 0 Personal Protection X |
| PRODUCT USE Flocculant | TDG CLASS 8 II | WHMIS CLASS D2B E |
| MANUFACTURER DIAPAC INDUSTRIES INC. 39501 Galbraith Avenue Squamish, B.C. V0N 3G0 | UN/PIN NUMBER 1760 | |

EMERGENCY TELEPHONE NUMBER (CANUTEC 24 Hours) (613) 996-6666

SECTION 2 - HAZARDOUS INGREDIENTS

| HAZARDOUS INGREDIENTS | APPROX. CONC % | C.A.S. NUMBER | EXPOSURE LIMITS | LD ₅₀ /LC ₅₀ - SPECIES AND ROUTE |
|-------------------------------|----------------|---------------|-----------------|--|
| Polyhydroxy aluminum chloride | 30 - 60 | Unavailable | Not available | Not available |

SECTION 3 - PHYSICAL DATA

| | | | |
|---|---|---|--|
| PHYSICAL STATE Liquid | APPEARANCE Clear yellow liquid | | ODOUR Slight hydrochloric acid odour |
| ODOUR THRESHOLD (ppm) Unavailable | VAPOUR PRESSURE (mm Hg) Not established | VAPOUR DENSITY (Air = 1) Not available | EVAPORATION RATE Slow |
| BOILING POINT (°C) 105 | FREEZING POINT (°C) Approximately -20 | SOLUBILITY IN WATER (20°C) Appreciable | % VOLATILE (by weight) > 50 |
| pH < 1 | DENSITY (g/mL) (20°C) 1.4 | COEFFICIENT OF WATER/OIL DISTRIBUTION 1 | |

SECTION 4 - REACTIVITY DATA**CHEMICAL STABILITY**
Stable**INCOMPATIBILITY WITH OTHER SUBSTANCES**

Avoid contact with strong acids, strong bases, aluminum and zinc.

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen chloride is evolved on boiling. Explosive hydrogen gas is evolved on contact with aluminum or zinc.

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SECTION 5 - FIRE AND EXPLOSION HAZARDS

FLAMMABILITY/COMBUSTIBILITY

This product is not classified as flammable or combustible according to WHMIS.

MEANS OF EXTINCTION

As required for surrounding fire.

SPECIAL PROCEDURES

Wear full protective clothing and self-contained breathing apparatus. Corrosive acid gases evolved on boiling.

HAZARDOUS COMBUSTION PRODUCTS

Hydrogen chloride is evolved on boiling.

FLASH PT. (°C) & METHOD

None to boiling (PMCC)

UPPER EXPLOSION LIMIT (% BY VOLUME)

Not applicable

LOWER EXPLOSION LIMIT (% BY VOLUME)

Not applicable

AUTO IGNITION TEMP.(°C)

Not available

TDG FLAMMABILITY CLASS

Not applicable

SENSITIVITY TO STATIC DISCHARGE

Not sensitive

SENSITIVITY TO MECHANICAL IMPACT

Not sensitive

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY

Skin [x]
Contact

Skin []
Absorption

Eye [x]
Contact

Inhalation []
Acute

Inhalation []
Chronic

Ingestion [x]

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Contact with eyes, skin, or mucous membranes will cause irritation. Corrosive if ingested.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

Not available

LD₅₀

Not available

LC₅₀

Not available

EXPOSURE LIMITS

Not available

Carcinogen []

Reproductive []
Effects

Teratogen []

Mutagen []

Irritant [x]

Sensitizer []

SECTION 7 - PREVENTIVE MEASURES

PROTECTIVE GLOVES

Rubber gloves recommended.

RESPIRATORY PROTECTION

Generally not required. Wear an approved NIOSH/MSHA respirator with mist cartridge if necessary.

EYE PROTECTION

Chemical goggles or safety glasses essential. Face shield recommended.

PROTECTIVE FOOTWEAR

Rubber boots recommended.

PROTECTIVE CLOTHING

As required to eliminate skin contact.

OTHER PROTECTIVE EQUIPMENT

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SECTION 7 - PREVENTIVE MEASURES (Continued)

ENGINEERING CONTROLS

General ventilation usually adequate.

LEAK AND SPILL PROCEDURES

Do not flush to sewer. Dike or contain. Absorb onto inert medium, package, and label for legal disposal. Spill can be neutralized with sodium carbonate - caution - carbon dioxide will be evolved.

WASTE DISPOSAL

Dispose of in accordance with Federal, Provincial, and Municipal regulations.

HANDLING PROCEDURES AND EQUIPMENT

Handle in accordance with good industrial hygiene practice. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

STORAGE REQUIREMENTS

Store in original container in a cool, dry location. Keep container closed. Keep away from incompatible materials and from fire, sparks, and flame.

SPECIAL SHIPPING INFORMATION

Prevent from freezing. Maintain above 0°C.

SECTION 8 - FIRST AID MEASURES

SKIN

Immediately and thoroughly wash affected area with water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists or in cases of substantial or prolonged contact.

EYE

Immediately and thoroughly flush eyes, holding the eyelids open, with lukewarm, gently flowing water for at least 20 minutes, then seek immediate medical attention.

INHALATION

Remove victim from hazard. Apply artificial respiration if indicated. Seek medical attention.

INGESTION

Do not induce vomiting. Give conscious patients fluids. Call a physician and/or transport victim to an emergency medical facility. If victim is unconscious never induce vomiting or give fluids. Place victim in a stable side position and keep warm.

GENERAL ADVICE

SECTION 9 - PREPARATION OF M.S.D.S.

PREPARED BY

Regulatory Affairs Department

PHONE NUMBER

(604) 271-8855

DATE

August 6, 1992

ADDITIONAL INFORMATION AND COMMENTS

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