HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: NITROGEN LIQUEFIED

Revision Date: 20-Dec-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature Non-Hazardous according to the criteria of NOHSC, Dangerous Goods according to

the criteria of ADG.

Manufacturer/Supplier Halliburton Australia Pty. Ltd.

15 Marriott Road

Jandakot WA 6164 Australia

ACN Number: 009 000 775

Telephone Number: 61 (08) 9455 8300 Fax Number: 61 (08) 9455 5300

Product Emergency Telephone

Australia: 08-64244950

Papua New Guinea: 05 1 281 575 5000

NewZealand: 06-7559274

Fire, Police & Ambulance - Emergency Telephone

Australia: 000

Papua New Guinea: 000 New Zealand: 111

Identification of Substances or Preparation

Product Trade Name: NITROGEN LIQUEFIED

Synonyms: None

Chemical Family: Not applicable UN Number: , UN1977

Dangerous Goods Class: 2.2

Subsidiary Risk: None

Subsidiary Risk: None Hazchem Code: 2RE

Poisons Schedule: None Allocated

Application: Fluid

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT		New Zealand WES	ACGIH TLV-TWA
Nitrogen	7727-37-9	60 - 100%	1000 ppm	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview May cause freeze burns. Reduces oxygen available for breathing.

Risk Phrases None

HSNO Classification Not Determined

4. FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably

mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin For exposure to liquid, immediately warm frostbite area with warm water (not to

exceed 105 F or 41 C). In case of massive exposure, remove clothing while

showering with warm water. Get medical attention.

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Ingestion Get immediate medical attention.

Notes to Physician Not Applicable

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media All standard fire fighting media

Extinguishing media which must None known.

not be used for safety reasons

Special Exposure Hazards

Not applicable.

Special Protective Equipment for Not applicable.

Fire-Fighters

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

Environmental Precautionary

Measures

None known.

Procedure for Cleaning /

Absorption

Isolate spill and stop leak where safe.

7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing.

Storage Information Store in a cool, dry location. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering ControlsUse in a well ventilated area.

NITROGEN LIQUEFIED Page 2 of 6 Respiratory Protection In high concentrations, supplied air respirator or a self-contained breathing

apparatus.

Hand Protection Substantial leather work gloves.

Skin Protection Normal work coveralls.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Clear colorless
Odor: Odorless
pH: Not Determined

Specific Gravity @ 20 C (Water=1): 0.8

Density @ 20 C (kg/l): 0.798

Bulk Density @ 20 C (kg/m³): Not Determined

Boiling Point/Range (C): -195 Freezing Point/Range (C): -210

Not Determined Pour Point/Range (C): Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (g/m³): Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (g/m³): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Vapor Pressure @ 20 C (mmHg): 608

Vapor Density (Air=1): Not Determined

Percent Volatiles: 100

Evaporation Rate (Butyl Acetate=1):

Solubility in Water (g/100ml):

Not Determined
Insoluble

Solubility in Solvents (g/100ml):

VOCs (g/l):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Not Determined

Not Determined

Molecular Weight (g/mole): 28

Decomposition Temperature (C):Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

None known.

Hazardous Decomposition

Products

None known.

Additional Guidelines Not Applicable

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11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Inhalation Reduces oxygen available for breathing.

Skin Contact Contact of material on skin may result in frostbite.

Eye Contact Contact with liquid causes frostbite.

Ingestion Irritation of the mouth, throat, and stomach.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Not determined

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Developmental Toxicity:

ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not applicable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate InformationNot determinedOther InformationNot applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

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TRANSPORT INFORMATION

Land Transportation

ADR

UN1977, Nitrogen, Refrigerated Liquid, 2.2

Air Transportation

ICAO/IATA

UN1977, Nitrogen, Refrigerated Liquid, 2.2

Sea Transportation

IMDG

UN1977, Nitrogen, Refrigerated Liquid, 2.2 EmS F-C, S-V

Other Transportation Information

Non-Flammable Gas Labels:

15. **REGULATORY INFORMATION**

Chemical Inventories

Australian AICS Inventory New Zealand Inventory of

Chemicals

US TSCA Inventory

All components listed on inventory or are exempt.

This product does not comply with NZIOC

All components listed on inventory or are exempt.

EINECS Inventory This product, and all its components, complies with EINECS

Classification Not Classified

Risk Phrases None

Safety Phrases None

16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS

Not applicable

Contact

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

New Zealand National Poisons Centre

0800 764 766

Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

Disclaimer Statement

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END OF MSDS