HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HNS

Revision Date: 21-Dec-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature 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: HNS
Synonyms: None
Chemical Family: Explosive
UN Number: , UN0392
Dangerous Goods Class: 1.1D
Subsidiary Risk: None
Hazchem Code: E

Poisons Schedule: None Allocated Application: Explosive Charge

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Hexanitrostilbene (HNS)	20062-22-0	60 - 100%	Not applicable	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause headache, dizziness, and other central nervous system effects. May be

harmful if swallowed. Explosive.

Risk Phrases R2 Risk of explosion by shock, fire, friction, or other sources of ignition.

HSNO Classification Not Determined

FIRST AID MEASURES

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

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

Wash with soap and water. Get medical attention if irritation persists. Skin

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.

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek Ingestion

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician Treat symptomatically.

FIRE FIGHTING MEASURES

Suitable Extinguishing Media Do NOT fight fire. Isolate area and evacuate personnel to a safe area. Guard

against intruders. Allow fire to burn itself out.

Extinguishing media which must None known.

not be used for safety reasons

May detonate with impact or on heating. May explode and throw fragments 1 mile or **Special Exposure Hazards**

more in fire. Evacuate all persons, including emergency responders.

Special Protective Equipment for Not applicable.

Fire-Fighters

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Use only competent persons for cleanup.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Remove ignition sources and work with non-sparking tools.

HANDLING AND STORAGE

Handling Precautions Do NOT consume food, drink, or tobacco in contaminated areas. Avoid contact with

eyes, skin, or clothing. Wash hands after use. Launder contaminated clothing before

reuse.

Storage Information Store only in ATF approved magazines. Keep away from friction, impact, and heat.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Dust/mist respirator. (N95, P2/P3)

Hand Protection Cloth gloves.

Skin Protection Cotton coveralls, undergarments, and socks. Conductive soled shoes.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder

Yellow Color: Odor: Odorless pH: Not Determined Specific Gravity @ 20 C (Water=1): Not Determined Density @ 20 C (kg/l): Not Determined Bulk Density @ 20 C (kg/m³): Not Determined **Boiling Point/Range (C):** Not Determined Freezing Point/Range (C): Not Determined Pour Point/Range (C): Not Determined 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 Not Determined Flammability Limits in Air - Lower (%): Flammability Limits in Air - Upper (g/m³): Not Determined Flammability Limits in Air - Upper (%): Not Determined Vapor Pressure @ 20 C (mmHg): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined Insoluble

Evaporation Rate (Butyl Acetate=1):

Solubility in Water (g/100ml):

Solubility in Solvents (g/100ml):

VOCs (g/l):

Viscosity, Dynamic @ 20 C (centipoise):

Not Determined

Not Determined

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Not Determined

Not Determined

Decomposition Temperature (C): > 190

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid May detonate with friction, impact, heat, and low level electrical current.

Incompatibility (Materials to

Avoid)

Strong acids. Strong alkalis.

Hazardous Decomposition

Products

Shrapnel. Oxides of nitrogen. Metal oxides. Carbon monoxide and carbon dioxide.

HNS Page 3 of 6 Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Product does not present exposures health hazards during normal handling and use.

However, this product is an explosive material and uncontrolled detonation may cause severe physical injury including death. All explosives are dangerous and must be handles carefully and used following approved safety procedures under the direction of competent, experience persons in accordance with all applicable

regulations and ordinances. Eye or skin contact, inhalation.

Sympotoms related to exposure

Inhalation May cause effects to the blood and blood system. May cause central nervous system

depression including headache, dizziness, drowsiness, incoordination, slowed

reaction time, slurred speech, giddiness and unconsciousness.

May cause damage to the nervous, urinary, and reproductive systems. Nitrogen

oxides generated during use are irritating to the respiratory system.

Skin ContactMay be absorbed through the skin and contribute to the symptoms listed under

ingestion. Nitrogen oxides generated during use are skin irritants.

Eye Contact May cause eye irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause blood forming system, nervous, urinary

tract and reproductive system damage.

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

Developmental Toxicity:

Reproductive / Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not applicable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined

HNS Page 4 of 6 Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Do NOT reuse container. Store only in ATF approved magazines.

14. TRANSPORT INFORMATION

Land Transportation

ADR

UN0392, Hexanitrostilbene, 1.1D, II EX-9702031

Air Transportation

ICAO/IATA

UN0392, Hexanitrostilbene, 1.1D, II EX-9702031

Sea Transportation

IMDG

UN0392,Hexanitrostilbene, 1.1D, II EX-9702031 EmS F-B, S-Y

Other Transportation Information

Labels: Explosive 1.4S

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory New Zealand Inventory of All components listed on inventory or are exempt. This product does not comply with NZIOC

Chemicals

US TSCA Inventory All components listed on inventory or are exempt.

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

Classification E - Explosive.

Risk Phrases R2 Risk of explosion by shock, fire, friction, or other sources of ignition.

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Safety Phrases

S2 Keep out of reach of children.

S16 Keep away from sources of ignition - No Smoking.

S33 Take precautionary measures against static discharges.

S34 Avoid shock and friction.

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 This information is furnished without warranty, expressed or implied, as to accuracy

or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

the user.

END OF MSDS