HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HALAD® 4 CEMENT ADDITIVE

Revision Date: 02-Jan-2013

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature Non-Hazardous according to the criteria of NOHSC, Non-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: HALAD® 4 CEMENT ADDITIVE

Synonyms: None
Chemical Family: Polymer
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None

Hazchem Code:

Poisons Schedule:

Application:

None Allocated

None Allocated

Fluid Loss Additive

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
Modified acrylamide copolymer	Proprietary	60 - 100%	Not applicable	Not applicable	Not applicable

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye and respiratory irritation.

Risk Phrases None

HSNO Classification Not Determined

FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

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

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes **Eyes**

and get medical attention if irritation persists.

Ingestion Under normal conditions, first aid procedures are not required.

An early sign of overexposure is peeling of skin. Patients should be monitored for at **Notes to Physician**

least 2-3 weeks and observed for delayed neurotoxicity. Exposures may lead to weak or absent reflexes, positive Romberg's sign, loss of vibration and position

sense, and numbness.

FIRE FIGHTING MEASURES

Suitable Extinguishing Media All standard fire fighting media

Extinguishing media which must None known.

not be used for safety reasons

Decomposition in fire may produce toxic gases. Organic dust in the presence of an **Special Exposure Hazards**

ignition source can be explosive in high concentrations. Good housekeeping

practices are required to minimize this potential.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Avoid creating or inhaling dust. **Storage Information** Store in a cool, dry location.

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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 Normal work gloves.

Skin Protection Normal work coveralls.

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

Other Precautions None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: White to off white

Odor: Pungent Pungent Not Determined

Specific Gravity @ 20 C (Water=1): 1.22

Density @ 20 C (kg/l):

Bulk Density @ 20 C (kg/m³):

Not Determined

Not Determined

Not Determined

Freezing Point/Range (C): -8

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 Not Determined Flammability Limits in Air - Upper (%): Not Determined Vapor Pressure @ 20 C (mmHg): Vapor Density (Air=1): Not Determined

Percent Volatiles: <5

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): Soluble

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): >600

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

Carbon monoxide and carbon dioxide. Oxides of nitrogen. Oxides of sulfur.

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 May cause mild respiratory irritation.

Skin Contact None known.

Eye Contact May cause mild eye irritation.

Ingestion None known

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.

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:

ductive / Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: TLM96: > 3300 ppm (Crangon crangon)

Acute Algae Toxicity: Not determined

Chemical Fate InformationNot determinedOther InformationNot applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodBury in a licensed landfill according to federal, state, and local regulations.

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Contaminated Packaging

Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Transportation Information

Labels: None

15. REGULATORY INFORMATION

Chemical Inventories

Australian AICS Inventory

New Zealand Inventory of

Chemicals

All components listed on inventory or are exempt.

All components listed on inventory or are exempt. All components listed on inventory or are exempt.

US TSCA Inventory 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