HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HALAD® 447 CEMENT ADDITIVE

Revision Date: 12-Nov-2012

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Statement of Hazardous Nature 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® 447 CEMENT ADDITIVE

Synonyms: None
Chemical Family: Blend
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None
Poisons Schedule: None

Application: 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 OEL	ACGIH TLV-TWA
Polyvinyl alcohol	9002-89-5	60 - 100%	Not applicable	Not applicable	Not applicable

2. COMPOSITION/INFORMATION ON INGREDIENTS								
Calcium sulfate	7778-18-9	30 - 60%	10 mg/m ³	10 mg/m ³	10 mg/m ³			
Boric acid	10043-35-3	1 - 5%	Not applicable	Not applicable	2 mg/m ³			
Polypropylene glycol	25322-69-4	1 - 5%	Not applicable	Not applicable	Not applicable			

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May be fatal if swallowed. May effect

the blood's ability to carry oxygen.

R22 Harmful if swallowed. **Risk Phrases**

HSNO Classification 6.1D Acutely Toxic Substances

6.8A Substances that are known or presumed human reproductive or

developmental toxicants.

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

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

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

If swallowed, induce vomiting immediately by giving two glasses of water and sticking Ingestion

fingers down throat; never give anything to an unconscious person. Get medical

attention.

Notes to Physician Activated charcoal or gastric lavage may be advisable for significant ingestion.

FIRE FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide, dry chemical, foam.

Extinguishing media which must None known.

not be used for safety reasons

Special Exposure Hazards Decomposition in fire may produce toxic gases.

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 contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Wash

hands after use.

Storage Information Store away from oxidizers. Store in a cool, dry location. Keep container closed when

not in use. Product has a shelf life of 24 months.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. Localized ventilation should be used to control dust **Engineering Controls**

levels.

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

Hand Protection Normal work gloves. Skin Protection Normal work coveralls.

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

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

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Color: Off white Odor: Odorless 7 pH: 2.11

Specific Gravity @ 20 C (Water=1):

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 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): Not Determined Vapor Density (Air=1): Not Determined

Percent Volatiles: Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined

Solubility in Water (g/100ml): Soluble

Solubility in Solvents (g/100ml): Not Determined VOCs (q/l): Not Determined Viscosity, Dynamic @ 20 C (centipoise): Not Determined Viscosity, Kinematic @ 20 C (centistokes): Not Determined Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined **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)

Strong oxidizers. Strong acids. Prolonged contact with aluminum.

Hazardous Decomposition

Products

Aldehydes. Oxides of sulfur. Acetone. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause respiratory irritation.

Skin Contact May cause mild skin irritation.

Eye Contact May cause mild eye irritation.

Ingestion May cause abdominal pain, vomiting, nausea, and diarrhea. May be fatal if

swallowed. May reduce blood's ability to transport oxygen.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity Contains polyvinyl alcohol (PVA). PVA has produced local cancers in experimental

animals when PVA sponges were implanted under the skin. Implanted powder,

however, did not produce any local cancers.

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:

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: Not determined 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.

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

US TSCA Inventory EINECS Inventory

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

All components listed on inventory or are exempt. This product does not comply with EINECS

Classification Xn - Harmful.

Risk Phrases R22 Harmful if swallowed.

Safety Phrases S2 Keep out of reach of children.

S22 Do not breathe dust.

16. OTHER INFORMATION

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

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 Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

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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