

MATERIAL SAFETY DATA SHEET

Product Trade Name: UNIVERSAL CEMENT SYSTEMS

Revision Date: 20-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: UNIVERSAL CEMENT SYSTEMS

Synonyms: None

Chemical Family: Blend

UN Number: , UN1773

Dangerous Goods Class: 8

Subsidiary Risk: None

Hazchem Code: 2X

Poisons Schedule: None Allocated

Application: Cement 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
Ferric chloride	7705-08-0	10 - 30%	1 mg/m ³	TWA: 1 mg/m ³	1 mg/m ³
Mica	12001-26-2	5 - 10%	TWA: 2.5 mg/m ³	TWA: 3 mg/m ³	TWA: 3 mg/m ³

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

Hazard Overview	May cause eye and skin burns. May cause respiratory irritation. May be harmful if swallowed.
Risk Phrases	R22 Harmful if swallowed. R38 Irritating to skin. R41 Risk of serious damage to eyes.
HSNO Classification	Not Determined

4. 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	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention.
Eyes	Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.
Ingestion	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Notes to Physician	Not Applicable

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	All standard fire fighting media
Extinguishing media which must not be used for safety reasons	None known.
Special Exposure Hazards	Not applicable.
Special Protective Equipment for Fire-Fighters	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures	Use appropriate protective equipment.
Environmental Precautionary Measures	Prevent from entering sewers, waterways, or low areas.
Procedure for Cleaning / Absorption	Scoop up and remove.

7. HANDLING AND STORAGE

Handling Precautions	Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Wash hands after use.
Storage Information	Store in a cool, dry location. Product has a shelf life of 12 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use in a well ventilated area.
Respiratory Protection	Dust/mist respirator. (N95, P2/P3)
Hand Protection	Neoprene gloves.
Skin Protection	Rubber apron.
Eye Protection	Dust proof goggles.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Color:	Brown
Odor:	Odorless
pH:	4
Specific Gravity @ 20 C (Water=1):	1.47
Density @ 20 C (kg/l):	Not Determined
Bulk Density @ 20 C (kg/m ³):	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/m ³):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (g/m ³):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	0
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Not Determined
Solubility in Solvents (g/100ml):	Not Determined
VOCs (g/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	Keep away from any contact with water.
Incompatibility (Materials to Avoid)	None known.
Hazardous Decomposition Products	None known.

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Symptoms related to exposure

Inhalation May cause respiratory irritation.

Skin Contact Prolonged or repeated contact may cause ulceration of the skin.

Eye Contact Causes eye burns.

Ingestion Causes burns of the mouth, throat and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea. May cause liver damage.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause liver 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

Reproductive / Not determined

Developmental Toxicity:

12. 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 Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION**Land Transportation****ADR**

UN1773, Ferric Chloride, Anhydrous, Mixture, 8, III

Air Transportation**ICAO/IATA**

UN1773, Ferric Chloride, Anhydrous, Mixture, 8, III

Sea Transportation**IMDG**UN1773, Ferric Chloride, Anhydrous, Mixture, 8, III
EmS F-A, S-B**Other Transportation Information**

Labels: Corrosive

15. REGULATORY INFORMATION**Chemical Inventories****Australian AICS Inventory**
New Zealand Inventory of
Chemicals
US TSCA Inventory
EINECS InventoryProduct contains one or more components not listed on inventory.
This product does not comply with NZIOCAll components listed on inventory or are exempt.
This product does not comply with EINECS**Classification**

Xn - Harmful.

Risk PhrasesR22 Harmful if swallowed.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.**Safety Phrases**S2 Keep out of reach of children.
S22 Do not breathe dust.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water
S24/25 Avoid contact with skin and eyes.**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*****