HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: CLA-STA FS ADDITIVE

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, 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: CLA-STA FS ADDITIVE

Synonyms:NoneChemical Family:BlendUN Number:NoneDangerous Goods Class:NoneSubsidiary Risk:None

Hazchem Code:None AllocatedPoisons Schedule:None AllocatedApplication:Clay Stabilizer

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
Ammonium chloride	12125-02-9	10 - 30%	TWA: 10 mg/m ³	STEL: 20 mg/m ³	TWA: 10 mg/m ³
			STEL: 20 mg/m ³	TWA: 10 mg/m ³	STEL: 20 mg/m ³

Non-Hazardous Substance to Total of 100%

HAZARDS IDENTIFICATION

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

Risk Phrases R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

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.

In case of contact, immediately flush skin with plenty of soap and water for at least 15 Skin

minutes. 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.

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.

Not Applicable **Notes to Physician**

FIRE FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide, dry chemical, foam.

Extinguishing media which must None known.

not be used for safety reasons

Use water spray to cool fire exposed surfaces. Decomposition in fire may produce **Special Exposure Hazards**

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.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials.

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after

use. Launder contaminated clothing before reuse.

Storage Information Store away from oxidizers. Store in a cool well ventilated area. Keep container

closed when not in use. Product has a shelf life of 6 months.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection If engineering controls and work practices cannot keep exposure below occupational

exposure limits or if exposure is unknown, wear a NIOSH certified, European Standard EN 149, or equivalent respirator when using this product. Selection of and instruction on using all personal protective equipment, including respirators, should

be performed by an Industrial Hygienist or other qualified professional.

Organic vapor/acid gas respirator with a dust/mist filter.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

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 light straw

 Odor:
 Mild amine

 pH:
 6.5-7.5

 Specific Gravity @ 20 C (Water=1):
 1.062

 Density @ 20 C (kg/l):
 1.062

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

Boiling Point/Range (C): 100 Freezing Point/Range (C): -19

Pour Point/Range (C):

Not Determined

Flash Point/Range (C): Not DeterminedMin: > 93

Flash Point Method: PMCC

Autoignition Temperature (C):Not DeterminedFlammability Limits in Air - Lower (g/m³):Not DeterminedFlammability Limits in Air - Lower (%):Not DeterminedFlammability Limits in Air - Upper (g/m³):Not DeterminedFlammability Limits in Air - Upper (%):Not Determined

Vapor Pressure @ 20 C (mmHg): < 20 Vapor Density (Air=1): < 1

Percent Volatiles: Not Determined 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:

Molecular Weight (g/mole):

Decomposition Temperature (C):

Not Determined

Not Determined

Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid Keep away from heat, sparks and flame.

CLA-STA FS ADDITIVE Page 3 of 6 Incompatibility (Materials to

Avoid)

Strong oxidizers. Contact with metals. Amphoteric metals such as aluminum,

magnesium, lead, tin, or zinc.

Hazardous Decomposition

Products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Inhalation May cause respiratory irritation.

Skin Contact May cause moderate skin irritation.

Eye Contact Causes severe eye irritation which may damage tissue.

Ingestion Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting,

nausea, and diarrhea.

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:

Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Slowly biodegradable

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined

Acute Crustaceans Toxicity: TLM96: > 1000 ppm (Crangon crangon)

Acute Algae Toxicity: Not determined

CLA-STA FS ADDITIVE Page 4 of 6 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.

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

Product contains one or more components not listed on inventory.

This product does not comply with NZIOC

All components listed on inventory or are exempt.

This product, and all its components, complies with EINECS

Classification Xn - Harmful.

Risk Phrases R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases S2 Keep out of reach of children.

S22 Do not breathe dust.

S36/39 Wear suitable protective clothing and eye/face protection.

16. OTHER INFORMATION

The following sections have been revised since the last issue of this SDS Not applicable

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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.

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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