



MATERIAL SAFETY DATA SHEET

Product Trade Name: CALCIUM NITRATE, SATURATED SOLUTION (11300)

Revision Date: 20-Dec-2012

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: CALCIUM NITRATE, SATURATED SOLUTION (11300)
Synonyms: None
Chemical Family: Nitrate
UN Number: None
Dangerous Goods Class: None
Subsidiary Risk: None
Hazchem Code: None Allocated
Poisons Schedule: None Allocated
Application: Reagent

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 |
|-----------------|------------|----------|--------------------|--------------------|----------------|
| Calcium nitrate | 10124-37-5 | 30 - 60% | Not applicable | Not applicable | Not applicable |

Non-Hazardous Substance to Total of 100%

3. HAZARDS IDENTIFICATION

| | |
|----------------------------|---|
| Hazard Overview | May cause eye, skin, and respiratory irritation. May be harmful if swallowed. |
| Risk Phrases | None |
| 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 | Wash with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before reuse. |
| 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. |
| Ingestion | If swallowed, induce vomiting immediately by giving two glasses of water and sticking fingers down throat; never give anything to an unconscious person. Get medical attention. |
| Notes to Physician | Not Applicable |

5. FIRE FIGHTING MEASURES

| | |
|--|---|
| Suitable Extinguishing Media | Water fog, carbon dioxide, foam, dry chemical. |
| Extinguishing media which must not be used for safety reasons | None known. |
| Special Exposure Hazards | Product is not expected to burn unless all the water is boiled away. Use water spray to cool fire exposed surfaces. |
| Special Protective Equipment for Fire-Fighters | Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel. |

6. ACCIDENTAL RELEASE MEASURES

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|---|--|
| 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. |

7. HANDLING AND STORAGE

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|-----------------------------|---|
| Handling Precautions | Avoid contact with eyes, skin, or clothing. Do not allow product to dry. Dry material is an oxidizer. |
| Storage Information | Keep container closed when not in use. |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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|-----------------------------|--------------------------------|
| Engineering Controls | Use in a well ventilated area. |
|-----------------------------|--------------------------------|

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|-------------------------------|--|
| Respiratory Protection | Not normally needed. But if significant exposures are possible then the following respirator is recommended: Dust/mist respirator. (N95, P2/P3) |
| 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: | Colorless |
| Odor: | Odorless |
| pH: | 5.5-7 |
| Specific Gravity @ 20 C (Water=1): | 1.49 |
| Density @ 20 C (kg/l): | 1.49 |
| Bulk Density @ 20 C (kg/m³): | Not Determined |
| Boiling Point/Range (C): | 106 |
| Freezing Point/Range (C): | 0 |
| 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: | 50 |
| Evaporation Rate (Butyl Acetate=1): | Not Determined |
| Solubility in Water (g/100ml): | Soluble |
| 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 | Hazards increase greatly if material is allowed to dry. |
| Incompatibility (Materials to Avoid) | None known. |
| Hazardous Decomposition Products | Oxides of nitrogen. |
| Additional Guidelines | Not Applicable |

11. TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Principle Route of Exposure | Eye or skin contact, inhalation. |
| Symptoms related to exposure | |
| Inhalation | May cause respiratory irritation. |
| Skin Contact | May cause skin irritation. |
| Eye Contact | May cause eye irritation. |
| Ingestion | Irritation of the mouth, throat, and stomach. May cause headache, dizziness, vomiting, and cramps. |
| 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: | LD50: > 2000 mg/kg (Rat) |
| 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 Information | Not determined |
| Other Information | Not applicable |

13. DISPOSAL CONSIDERATIONS

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|-------------------------------|---|
| Disposal Method | Disposal should be made in accordance with federal, state, and local regulations. |
| Contaminated Packaging | Follow all applicable national or local regulations. |

CALCIUM NITRATE, SATURATED SOLUTION (11300)

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.
This product does not comply with NZIOC

**US TSCA Inventory
EINECS Inventory**

All components listed on inventory or are exempt.
This product, and all its components, complies with EINECS

Classification

Not Classified

Risk Phrases

None

Safety Phrases

Not classifiedNone

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*****