

SAFETY DATA SHEET**ALUMINUM SULFATE**

Revision Date: 01-May-2013

Revision Number: 12

1. Product Identifier & Identity for the Chemical

Statement of Hazardous Nature Hazardous according to the criteria of NOHSC, Non-Dangerous Goods according to the criteria of ADG.

Product Identifier

Product Name ALUMINUM SULFATE

Other means of Identification

Synonyms: None
Product Code: HM001734

Recommended use of the chemical and restrictions on use

Recommended Use Phosphorus Reduction in Water Treatment
Uses Advised Against No information available

Supplier's name, address and phone number

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
fdunexchem@halliburton.com

E-Mail address:**Emergency phone number**

61 (08) 9455 8300

Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

2. Hazard Identification**Classification of the hazardous chemical**

Serious Eye Damage / Eye Irritation	Category 1- (H318)
Substances/mixtures corrosive to metal.	Category 1- (H290)

Label elements, including precautionary statements**Hazard Pictograms**

2. Hazard Identification

**Signal Word****Danger****Hazard Statements**

H318 - Causes serious eye damage

H290 - May be corrosive to metals

Contains**Substances**

Aluminum sulfate

CAS Number

10043-01-3

Precautionary Statements**Prevention**

P234 - Keep only in original container

P280 - Wear eye protection/face protection

Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P390 - Absorb spillage to prevent material damage

Storage

P406 - Store in corrosive resistant container with a resistant inliner

Disposal

None

Other hazards which do not result in classification

None known

Australia Classification*For the full text of the R-phrases mentioned in this Section, see Section 16***Classification**

Xi - Irritant.

Risk Phrases

R41 Risk of serious damage to eyes.

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT
Aluminum sulfate	10043-01-3	60 - 100%

4. First Aid Measures

Description of necessary first aid measures

Inhalation	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Eyes	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.
Skin	Wash with soap and water. Get medical attention if irritation persists.
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.

Symptoms caused by exposure

May cause severe eye irritation.

Medical Attention and Special Treatment

Notes to Physician Treat symptomatically

5. Fire Fighting Measures

Suitable extinguishing equipment

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Specific hazards arising from the chemical

Special Exposure Hazards

Decomposition in fire may produce toxic gases.

Special protective equipment and precautions for fire fighters

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 precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

Methods and material for containment and cleaning up

Scoop up and remove.

7. Handling and Storage

Precautions for Safe Handling

Handling Precautions

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

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

7. Handling and Storage

Conditions for safe storage, including any incompatibilities

Storage Information

Store in a cool, dry location.

Other Guidelines

No information available

8. Exposure Controls/Personal Protection

Control parameters - exposure standards, biological monitoring

Substances	CAS Number	Australia NOHSC	ACGIH TLV-TWA
Aluminum sulfate	10043-01-3	TWA: 2 mg/m ³	2 mg/m ³

Appropriate engineering controls

Engineering Controls

Use in a well ventilated area.

Personal protective equipment (PPE)

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

Normal work gloves.

Skin Protection

Normal work coveralls.

Eye Protection

Wear safety glasses or goggles to protect against exposure.

Other Precautions

Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls

No information available

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Solid

Color: White

Odor: Odorless

Odor Threshold: No information available

Property

Values

Remarks/ Method

pH:

3.5

Melting Point/Range

No data available

Freezing Point/Range (C):

No data available

Boiling Point/Range

No data available

Flash Point

No data available

Evaporation rate

No data available

Vapor Pressure

No data available

Vapor Density

No data available

Specific Gravity

1.61

Water Solubility

Soluble in water

Solubility in other solvents

No data available

Partition coefficient: n-octanol/water

No data available

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

Explosive Properties

No information available

Oxidizing Properties

No information available

Other information

Molecular Weight

342.18

VOC Content (%)

No data available

9. Physical and Chemical Properties**10. Stability and Reactivity****Reactivity**

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

None anticipated

Incompatible Materials

None known.

Hazardous Decomposition Products

Oxides of sulfur.

11. Toxicological Information**Information on routes of exposure****Principle Route of Exposure**

Eye or skin contact, inhalation.

Symptoms related to exposure**Most Important Symptoms/Effects**

May cause severe eye irritation.

Numerical measures of toxicity

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminum sulfate	1930 mg/kg (Rat) 980 mg/kg (Mouse) >9000 mg/kg (Rat)	No data available	No data available

Immediate, delayed and chronic health effects from exposure**Inhalation**

May cause respiratory irritation.

Eye Contact

May cause moderate to severe eye irritation.

Skin Contact

May cause skin irritation.

Ingestion

Irritation of the mouth, throat, and stomach.

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 1% are chronic health hazards.

Exposure Levels

No data available

Interactive effects

None known.

Data limitations

No data available

12. Ecological Information

Ecotoxicity

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Aluminum sulfate	No information available	LC50: 100 mg/L (Carassius auratus)	No information available	EC50: 136 mg/L (Daphnia magna)

Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

No information available

Mobility in soil

No information available

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

Safe handling and disposal methods

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

Disposal of any contaminated packaging

Follow all applicable national or local regulations.

Environmental regulations

Not applicable

14. Transport Information

Transportation Information

UN Number:	Not restricted.
UN Proper Shipping Name:	Not restricted
Transport Hazard Class(es):	Not applicable
Packing Group:	Not applicable
Environmental Hazards:	Not applicable

Special precautions during transport

None

HazChem Code

None Allocated

15. Regulatory Information

Safety, health and environmental regulations specific for the product

International Inventories

Australian AICS Inventory	All components listed on inventory or are exempt.
New Zealand Inventory of Chemicals	All components listed on inventory or are exempt.
EINECS Inventory	This product, and all its components, complies with EINECS
US TSCA Inventory	All components listed on inventory or are exempt.
Canadian DSL Inventory	All components listed on inventory or are exempt.

Poisons Schedule number

None Allocated

16. Other Information

Date of preparation or review

Revision Date: 01-May-2013

Revision Note

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

Not applicable

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.

Key abbreviations or acronyms used

Not applicable

Key literature references and sources for data

www.ChemADVISOR.com/

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End of Safety Data Sheet