HALLIBURTON

SAFETY DATA SHEET

HALAD® 569XM CEMENT ADDITIVE

Revision Date: 19-Dec-2014 Revision Number: 3

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.

1.1. Product Identifier

Product Name HALAD® 569XM CEMENT ADDITIVE

Other means of Identification

Synonyms: None Product Code: HM007298

Recommended use of the chemical and restrictions on use
Recommended Use Fluid Loss Additive

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

E-Mail address: fdunexchem@halliburton.com

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

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

criteria of ADG.

Classification of the hazardous chemical

Skin Corrosion / irritation Category 1 - H314
Serious Eye Damage / Eye Irritation Category 1 - H318

Label elements, including precautionary statements

Hazard Pictograms



Signal Word Danger

Hazard Statements H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Precautionary Statements

Prevention P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable

for breathing

P310 - Immediately call a POISON CENTER or doctor/physician

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

P405 - Store locked up **Storage**

Disposal P501 - Dispose of contents/container to an approved waste disposal plant

Contains

Substances CAS Number Sodium silicate 1344-09-8

Other hazards which do not result in classification

None known

Australia Classification

For the full text of the R/H-phrases mentioned in this Section, see Section 16

Classification - Corrosive.

Risk Phrases R34 Causes burns.

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - Australia
Sodium silicate	1344-09-8	10 - 30%	Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Met. Corr. 1 (H290)

4. First aid measures

Description of necessary first aid measures

If inhaled, remove from area to fresh air. Get medical attention if respiratory Inhalation

irritation develops or if breathing becomes difficult.

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

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

Remove contaminated clothing and launder before reuse. In case of contact.

immediately flush skin with plenty of soap and water for at least 15 minutes. Get

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.

Symptoms caused by exposure

May cause severe eye irritation. May cause severe skin 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.

Skin

Specific hazaards arising from the chemical

Special Exposure Hazards

Decomposition in fire may produce toxic gases. Use water spray to cool fire exposed surfaces.

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

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Spills of this product are very slippery.

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Neutralize to pH of 6-8. Contain spill with sand or other inert materials. Scoop up and remove. Do NOT spread spilled product with water.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Avoid breathing mist. Wash hands after use. Launder contaminated clothing before reuse.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store in a cool well ventilated area. Keep container closed when not in use. Keep from freezing. Store away from acids.

Other Guidelines

No information available

8. Exposure Controls/Personal Protection

Control parameters - exposure standards, biological monitoring

Exposure Limits

Substances	CAS Number	Australia NOHSC	ACGIH TLV-TWA
Sodium silicate	1344-09-8	Not applicable	Not applicable

Appropriate engineering controls

Engineering Controls Use in a well ventilated area. Local exhaust ventilation should be used in areas without

good cross ventilation.

Personal protective equipment (PPE)

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

Impervious rubber gloves. **Hand Protection**

Skin Protection Full protective chemical resistant clothing.

Eve Protection Chemical googles: also wear a face shield if splashing hazard exists. Eyewash fountains and safety showers must be easily accessible. **Other Precautions**

Environmental Exposure Controls No information available

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid Color: Dark brown

Odor: Ammonia Odor Threshold: No information available

Property Values

Remarks/ - Method 11 - 12 pH:

0 °C Freezing Point/Range

No data available Melting Point/Range **Boiling Point/Range** 100 - 110 °C Flash Point No data available **Evaporation rate** No data available Vapor Pressure No data available **Vapor Density** No data available

Specific Gravity 1.1 - 1.2

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 No information available **Oxidizing Properties**

9.2. Other information

No data available **VOC Content (%)**

10. Stability and Reactivity

10.1. Reactivity

Not applicable

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10.2. Chemical Stability

Stable

10.3. Possibility of Hazardous Reactions

Will Not Occur

10.4. Conditions to Avoid

None anticipated

10.5. Incompatible Materials

Strong acids. Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.

10.6. Hazardous Decomposition Products

Sulfur dioxide. Carbon monoxide and carbon dioxide.

11. Toxicological Information

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Information on routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

Sympotoms related to exposure

Most Important Symptoms/Effects

May cause severe eye irritation. May cause severe skin irritation.

Numerical measures of toxicity

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium silicate	1344-09-8	1153 mg/kg (Rat) 1100 mg/kg (Mouse) 3400 mg/kg (Rat) 5150 mg/kg (Rat)	4640 mg/kg (Rabbit) > 5000 mg/kg (Rat) (similar substance – Potassium silicate)	> 2.06 mg/L (Rat) 4 h (similar substance – Potassium silicate)

Immediate, delayed and chronic health effects from exposure

InhalationMay cause respiratory irritation.Eye ContactCauses severe eye irritation.Skin ContactCauses severe skin irritation.IngestionMay be harmful if swallowed.

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

Skin disorders.

Data limitations

No data available

Substances	CAS Number	Skin corrosion/irritation
Sodium silicate		Corrosive to skin (rabbit)
Socium silicate	11344-09-6	Corrosive to skiri (rappit)
Substances	CAS Number	Eye damage/irritation
Sodium silicate		Corrosive to eyes (rabbit)
Substances	CAS Number	Skin Sensitization
Sodium silicate	1344-09-8	Did not cause sensitization on laboratory animals (mouse) (similar substances)
Substances	CAS Number	Respiratory Sensitization
Sodium silicate		No information available

Substances	CAS Number	Mutagenic Effects
Sodium silicate	1344-09-8	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects.
Substances	CAS Number	Carcinogenic Effects
Sodium silicate	1344-09-8	No information available.
Substances	CAS Number	Reproductive toxicity
Sodium silicate		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
Substances	CAS Number	STOT - single exposure
Sodium silicate	1344-09-8	May cause respiratory irritation.
Substances	CAS Number	STOT - repeated exposure
Sodium silicate	1344-09-8	No significant toxicity observed in animal studies at concentration requiring classification.
Substances	CAS Number	Aspiration hazard
Sodium silicate	1344-09-8	Not applicable

12. Ecological Information

Ecotoxicity

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Sodium silicate	1344-09-8	EC50(72h): 207 mg/L (biomass) (Desmodesmus subspicatus)	LC50(96h): 1108 mg/L (Danio rerio) LC50(96h): 260 – 310 mg/L (Oncorhynchus mykiss)	EC0(20m): 3454 mg/L (Pseudomonas putida) EC0(18h): > 348 mg/L (Pseudomonas putida)	EC50(48h): 1700 mg/L (Daphnia magna)

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Sodium silicate	1344-09-8	The methods for determining biodegradability are
		not applicable to inorganic substances.

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Sodium silicate	1344-09-8	No information available

12.4. Mobility in soil

No information available

12.6. Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. Disposal Considerations

<u>Safe handling and disposal methods</u>
Disposal should be made in accordance with federal, state, and local regulations.

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Disposal of any contaminated packaging

Follow all applicable national or local regulations.

Environmental regulations

Not applicable

14. Transport Information

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Transportation Information

UN Number:
UN Proper Shipping Name:
Transport Hazard Class(es):
Packing Group:
Not applicable
Not applicable
Not applicable
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 New Zealand Inventory of

Chemicals

EINECS Inventory

US TSCA Inventory Canadian DSL Inventory Product contains one or more components not listed on inventory. Product contains one or more components not listed on inventory.

This product does not comply with EINECS

Product contains one or more components not listed on the inventory. Product contains one or more components not listed on the inventory.

Poisons Schedule number

None Allocated

16. Other information, including date of preparation or last revision

Date of preparation or review

Revision Date: 19-Dec-2014

Revision Note

SDS sections updated 2

Full text of R-phrases referred to under Sections 2 and 3

R34 Causes burns.

Full text of H-Statements referred to under sections 2 and 3

None

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 abreviations or acronyms used

Not applicable

Key literature references and sources for data

www.ChemADVISOR.com/

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End of Safety Data Sheet