

SAFETY DATA SHEET

HALAD® 344L CEMENT ADDITIVE

Revision Date: 15-Oct-2015

Revision Number: 14

1. Product Identifier & Identity for the Chemical

Statement of Hazardous Nature Non-Hazardous according to the criteria of the 3rd Revised Edition of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous Goods according to the criteria of ADG.

1.1. Product Identifier

Product Name HALAD® 344L CEMENT ADDITIVE

Other means of Identification

Synonyms: None
Product Code: HM000818

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 1 800 686 951
Fax Number: 61 (08) 9455 5300
E-Mail address: fdunexchem@halliburton.com

Emergency phone number

+ 61 1 800 686 951

Australian Poisons Information Centre

24 Hour Service: - 13 11 26
Police or Fire Brigade: - 000 (exchange): - 1100

2. Hazard Identification

Statement of Hazardous Nature Non-Hazardous according to the criteria of the 3rd Revised Edition of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS), Non-Dangerous Goods according to the criteria of ADG.

Classification of the hazardous chemical

Not classified

Label elements, including precautionary statements

Hazard Pictograms

Signal Word	Not Hazardous
Hazard Statements	H413 - May cause long lasting harmful effects to aquatic life
Precautionary Statements	
Prevention	None
Response	None
Storage	None
Disposal	None

Contains SubstancesHighly refined mineral oil
Modified acrylamide copolymer**CAS Number**Proprietary
Proprietary**Other hazards which do not result in classification**

None known

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

Classification	Not Classified
Risk Phrases	None

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - Australia
Highly refined mineral oil	Proprietary	60 - 100%	Asp. Tox. 1 (H304) Aquatic Chronic 4 (H413)
Modified acrylamide copolymer	Proprietary	30 - 60%	

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	Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person.

Symptoms caused by exposure

No significant hazards expected.

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 harmful 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.

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. Contain spill with sand or other inert materials. Scoop up and remove.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from oxidizers. Store in a cool well ventilated area. Keep container closed when not in use. Store locked up. Product has a shelf life of 6 months.

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
Highly refined mineral oil	Proprietary	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Modified acrylamide copolymer	Proprietary	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

Not normally needed. But if significant exposures are possible then the following respirator is recommended:
Organic vapor respirator.

Hand Protection

Impervious rubber gloves.

Skin Protection

Normal work coveralls.

Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions

None known.

Environmental Exposure Controls

No information available

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid **Color:** White
Odor: Mild kerosene **Odor Threshold:** No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
pH:	No data available
Freezing Point/Range	No data available
Melting Point/Range	No data available
Boiling Point/Range	254 °C / 490 °F
Flash Point	123 °C / 255 °F PMCC
upper flammability limit	6
lower flammability limit	0.9
Evaporation rate	No data available
Vapor Pressure	0.9
Vapor Density	> 8
Specific Gravity	1.06
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	120 cps
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

VOC Content (%) No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

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 oxidizers.

10.6. Hazardous Decomposition Products

Oxides of sulfur. Carbon monoxide and carbon dioxide.

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

No significant hazards expected.

Numerical measures of toxicity

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Highly refined mineral oil	Proprietary	> 2000 mg/kg (Rat) >5000 mg/kg (Rat) (similar substance)	> 15000 mg/kg (Rodent) > 2000 mg/kg (Rabbit) (similar substance)	> 0.210 mg/L (Rat) (similar substance)
Modified acrylamide copolymer	Proprietary	No data available	No data available	No data available

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

Under certain conditions of use, some of the product ingredients may cause the following:
In high air concentrations: May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Eye Contact

May cause mild eye irritation.

Skin Contact

May cause skin defatting with prolonged exposure. May cause mild skin irritation.

Ingestion

May cause abdominal pain, vomiting, nausea, and diarrhea. Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

Exposure Levels

No data available

Interactive effects

None known.

Data limitations

No data available

Substances	CAS Number	Skin corrosion/irritation
Highly refined mineral oil		Non-irritating to the skin (similar substances)
Modified acrylamide copolymer		Not irritating to skin in rabbits. (similar substances)

Substances	CAS Number	Eye damage/irritation
Highly refined mineral oil		Non-irritating to the eye (similar substances)
Modified acrylamide copolymer		No information available.

Substances	CAS Number	Skin Sensitization
Highly refined mineral oil		Not confirmed to cause skin or respiratory sensitization. (similar substances)
Modified acrylamide copolymer		Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
Highly refined mineral oil		No information available
Modified acrylamide copolymer		No information available

Substances	CAS Number	Mutagenic Effects
Highly refined mineral oil		In vitro tests did not show mutagenic effects (similar substances)
Modified acrylamide copolymer		In vitro tests did not show mutagenic effects. In vivo tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Highly refined mineral oil		Did not show carcinogenic effects in animal experiments (similar substances)
Modified acrylamide copolymer		No information available.

Substances	CAS Number	Reproductive toxicity
Highly refined mineral oil		No information available

Modified acrylamide copolymer		Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments. (similar substances)
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Substances	CAS Number	STOT - single exposure
Highly refined mineral oil		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Modified acrylamide copolymer		No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Highly refined mineral oil		No significant toxicity observed in animal studies at concentration requiring classification. (similar substances)
Modified acrylamide copolymer		No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Highly refined mineral oil		Aspiration into the lungs may cause chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up blood and pneumonia, which can be fatal.
Modified acrylamide copolymer		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
Highly refined mineral oil	Proprietary	No information available	LC50 (96h) >1000 mg/L (Oncorhynchus mykiss) LC50 (96h) > 100 mg/L (Lepomis macrochirus)	No information available	No information available
Modified acrylamide copolymer	Proprietary	EC50 3300 mg/L (Skeletonema costatum) ECr50 (96h) > 2000 mg/L (Pseudokirchneriella subcapitata) (similar substance)	LC50 > 1000 mg/L (Scophthalmus maximus) LC50 (96h) 170 mg/L (Lepomis macrochirus)	No information available	TLM48: > 1000 mg/l (Daphnia magna) EC50 (48h) 340 mg/L (Daphnia magna) (similar substance)

12.2. Persistence and degradability

Not readily biodegradable

Substances	CAS Number	Persistence and Degradability
Highly refined mineral oil	Proprietary	(15 - 35% @ 28d)
Modified acrylamide copolymer	Proprietary	No information available

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Highly refined mineral oil	Proprietary	5.71
Modified acrylamide copolymer	Proprietary	< 0

12.4. Mobility in soil

Substances	CAS Number	Mobility
Highly refined mineral oil	Proprietary	KOC > 3
Modified acrylamide copolymer	Proprietary	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

Safe handling and disposal methods

Disposal should be made in accordance with federal, state, and local regulations. Incineration recommended in approved incinerator according to federal, state, and local regulations. Substance should NOT be deposited into a sewage facility.

Disposal of any contaminated packaging

Follow all applicable national or local regulations. Contaminated packaging may be disposed of by: rendering packaging incapable of containing any substance, or treating packaging to remove residual contents, or treating packaging to make sure the residual contents are no longer hazardous, or by disposing of packaging into commercial waste collection.

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: 15-Oct-2015

Revision Note

SDS sections updated: 2

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

None

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 Stewardship at 1-580-251-4335.

Key abbreviations or acronyms used

bw – body weight
CAS – Chemical Abstracts Service
EC50 – Effective Concentration 50%
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
NOEC – No Observed Effect Concentration
OEL – Occupational Exposure Limit
PBT – Persistent Bioaccumulative and Toxic
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
vPvB – very Persistent and very Bioaccumulative
h - hour
mg/m³ - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
w/w - weight/weight
d - day

Key literature references and sources for data

www.ChemADVISOR.com/
NZ CCID
BIBRA
OSHA

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End of Safety Data Sheet