HALLIBURTON

SAFETY DATA SHEET

RM-63™

Revision Date: 21-Sep-2015 Revision Number: 20

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 RM-63™

Other means of Identification

Synonyms: None Product Code: HM003750

Recommended use of the chemical and restrictions on use
Recommended Use Rheology Modifier
Uses Advised Against No information available

Supplier's name, address and phone number

Manufacturer/Supplier Halliburton/Baroid 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: + 61 1 800 686 951

Papua New Guinea: + 61 1 800 686 951

NewZealand: +64 800 451719

Fire, Police & Ambulance - Emergency Telephone

Australia: 000

Papua New Guinea: 000

New Zealand: 111

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 Not Classified

Precautionary Statements

PreventionNoneResponseNoneStorageNoneDisposalNone

Contains

Substances CAS Number

Contains no hazardous substances in concentrations above

cut-off values according to the competent authority

Other hazards which do not result in classification

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

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

NA

Substances	CAS Number	PERCENT (w/w)	GHS Classification - Australia
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	60 - 100%	Not Applicable

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** Under normal conditions, first aid procedures are not required.

<u>Symptoms caused by exposure</u> 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.

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. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation.

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. Wash hands after use. Avoid breathing vapors. Ensure adequate ventilation. Launder contaminated clothing before reuse. Use appropriate protective equipment.

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, dry location. Product has a shelf life of 36 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
Contains no hazardous substances in	NA	Not applicable	Not applicable
concentrations above cut-off values according to			
the competent authority			

Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

Personal protective equipment (PPE)

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, AS/NZS 1715:2009, 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 respirator.

Hand ProtectionNormal work gloves.Skin ProtectionNormal work coveralls.

Eye Protection Wear safety glasses or goggles to protect against exposure.

Other Precautions None known.

Environmental Exposure Controls Do not allow material to contaminate ground water system

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid Color: Dark

Odor: Fatty acid Odor Threshold: No information available

<u>Property</u> <u>Values</u>

Remarks/ - Method

pH:No data availableFreezing Point/RangeNo data availableMelting Point/RangeNo data availableBoiling Point/Range300 °C / 572 °F

Flash Point 247 °C / 475 °F Cleveland Open Cup (COC)

Evaporation rate < 1

Vapor Pressure< 0.001 mmHg</th>Vapor DensityNo data available

Specific Gravity 0.95

Insoluble in water Water Solubility 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 No information available **Explosive Properties Oxidizing Properties** No information available

9.2. Other information

VOC Content (%) 0%
Liquid Density 7.9 lbs/gal

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

Carbon monoxide and carbon dioxide.

11. Toxicological Information

Information on routes of exposure

Principle Route of Exposure Eye and skin contact.

Sympotoms 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
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	No data available	No data available	No data available

Immediate, delayed and chronic health effects from exposure

Inhalation None known.

Eye Contact Skin ContactMay cause mild eye irritation.

May cause mild skin irritation.

Ingestion None known.

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
Contains no hazardous substances in concentrations above cut-off values according to the competent authority		Not applicable.

Substances	CAS Number	Eye damage/irritation
Contains no hazardous	NA	Not applicable.
substances in		
concentrations above cut-off		
values according to the		
competent authority		

Substances	CAS Number	Skin Sensitization
Contains no hazardous	NA	Not applicable
substances in		
concentrations above cut-off		
values according to the		
competent authority		

Substances	CAS Number	Respiratory Sensitization
Contains no hazardous	NA	Not applicable
substances in		
concentrations above cut-off		
values according to the		
competent authority		

Substances	CAS Number Mutagenic Effects

KIVI-03 ····		Revision Date. 21-3ep-2013
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable
Substances	CAS Number	Carcinogenic Effects
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable
Substances	CAS Number	Reproductive toxicity
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable
Substances	CAS Number	STOT - single exposure
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	Not applicable
Substances	CAS Number	CTOT remosted companies
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	STOT - repeated exposure Not applicable
Substances	CAS Number	Aspiration hazard
Contains no hazardous substances in concentrations above cut-off values according to the competent authority	NA	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	Toxicity to Invertebrates
				Microorganisms	
Contains no hazardous substances in concentrations	NA	No information available	No information available	No information available	No information available
above cut-off values according to the competent authority					

12.2. Persistence and degradability

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances in	NA	No information available
concentrations above cut-off values according to		
the competent authority		

12.3. Bioaccumulative potential

CAS Number Log Pow Substances Contains no hazardous substances in No information available concentrations above cut-off values according to the competent authority

12.4. Mobility in soil

Substances	CAS Number	Mobility
Contains no hazardous substances in concentrations	NA	No information available
above cut-off values according to the competent authority		

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.

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 Not applicable Transport Hazard Class(es): **Packing Group:** Not applicable Not applicable **Environmental Hazards:**

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** All components listed on inventory or are exempt.

Chemicals

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: 21-Sep-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 guestions about the Safety Data Sheet for this or other Halliburton products, contact

Chemical Stewardship at 1-580-251-4335.

Key abreviations 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

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End of Safety Data Sheet