HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

RHEOBOOST™

Revision Date: 09-May-2014 Revision Number: 9

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name RHEOBOOST™

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Viscosifier

Sector of use SU2 - Mining, (including offshore industries)

Product category PC20 - Products such as pH-regulators, flocculants, precipitants, neutralization agents,

other unspecific

Process categories PROC4 - Use in batch and other process (synthesis) where opportunity for exposure

arises

1.3 Details of the supplier of the safety data sheet

Halliburton Energy Services

Halliburton House, Howemoss Place

Kirkhill Industrial Estate

Dyce

Aberdeen, AB21 0GN

United Kingdom

Emergency Phone Number: +44 1224 795277 or +1 281 575 5000

www.halliburton.com

For further information, please contact

E-Mail address: fdunexchem@halliburton.com

1.4 Emergency telephone number

+44 1224 795277 or +1 281 575 5000

Emergency telephone - § Europe	112
Denmark	Poison Control Hotline (DK): +45 82 12 12 12
France	ORFILA (FR): + 01 45 42 59 59
Germany	Poison Center Berlin (DE): +49 030 30686 790
Italy	Poison Center, Milan (IT): +39 02 6610 1029
Netherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only available to health professionals)
Norway	Poisons Information (NO):+ 47 22 591300
Poland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
Spain	Poison Information Service (ES): +34 91 562 04 20
United Kingdom	NHS Direct (UK): +44 0845 46 47

2. Hazards Identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not classified

Classification according to EU Directives 67/548/EEC or 1999/45/EC

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

Classification Not Classified

Risk Phrases None

2.2 Label Elements

Not classified

Hazard Pictograms

Signal Word Not Hazardous

Hazard Statements

Not Classified

Precautionary Statements - EU (§28, 1272/2008)

Not Classified

Contains

Substances CAS Number
Contains no hazardous substances PROPRIETARY

2.3 Other Hazards

None known

3. Composition/information on Ingredients

Substances	EINECS	CAS Number	PERCENT (w/w)	EEC Classification	EU - CLP Substance Classification	REACH No.
Contains no hazardous substances	Not applicable	PROPRIETARY	60 - 100%	Not applicable	Not applicable	No data available

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

4. First aid measures

4.1 Description of 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.

4.2 Most Important symptoms and effects, both acute and delayed

May cause mild eye, skin, and respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

All standard fire fighting media

Extinguishing media which must not be used for safety reasons

None known.

5.2 Special hazards arising from the substance or mixture

Special Exposure Hazards

Decomposition in fire may produce toxic gases.

5.3 Advice for firefighters

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.

See Section 8 for additional information

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.

6.4 Reference to other sections

See Section 8 and 13 for additional information.

7. Handling and Storage

7.1 Precautions for Safe Handling

Avoid breathing vapors.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool well ventilated area. Keep container closed when not in use. Store away from oxidizers. Store away from alkalis. Product has a shelf life of 36 months.

7.3 Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

8. Exposure Controls/Personal Protection

8.1 Control parameters

Exposure	Limits	

Substances	CAS Number	EU	UK OEL	Netherlands	France OEL
Contains no hazardous	PROPRIETARY	Not applicable	Not applicable	Not applicable	Not applicable
substances					

Substances	CAS Number	Germany MAK/TRK	Spain	Portugal	Finland
Contains no hazardous	PROPRIETARY	Not applicable	Not applicable	Not applicable	Not applicable
substances					

Substances	CAS Number	Austria	Ireland	Switzerland	Norway
Contains no hazardous	PROPRIETARY	Not applicable	Not applicable	Not applicable	Not applicable
substances					

Substances	CAS Number	Italy	Poland	Hungary	Czech Republic
Contains no hazardous substances	PROPRIETARY	Not applicable	Not applicable	Not applicable	Not applicable

Substances	CAS Number	Denmark
Contains no hazardous substances	PROPRIETARY	Not applicable

Derived No Effect Level (DNEL)

Worker

No information available.

General Population

Predicted No Effect Concentration (PNEC)

No information available.

8.2 Exposure controls

Engineering ControlsUse in a well ventilated area.

Personal protective equipment

Respiratory Protection Not normally necessary.

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: Yellow

Odor: Fatty acid Odor Threshold: No information available

Property Values

Remarks/ - Method

pH: No data available

Freezing Point/Range -30 °C

Melting Point/Range No data available

Boiling Point/Range 220 °C

Flash Point 180 °C Cleveland Open Cup (COC)

Evaporation rateNo data availableVapor Pressure< 0.75 mmHg</th>

Vapor Density < 1 Specific Gravity 0.9

Water Solubility Insoluble in water Solubility in other solvents No data available

Partition coefficient: n-octanol/water 7.73 Autoignition Temperature 350 °C

Decomposition TemperatureNo data availableViscosityNo data availableExplosive PropertiesNo information availableOxidizing PropertiesNo information available

9.2 Other information

Molecular Weight 282.47

VOC Content (%) No data available

10. Stability and Reactivity

10.1 Reactivity

Not applicable

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

11.1 Information on Toxicological Effects

Acute Toxicity

Inhalation May cause respiratory irritation. Vapors given off by heated product may be harmful.

Eye Contact May cause mild eye irritation.

Skin Contact May cause skin defatting with prolonged exposure. Prolonged or repeated contact may

cause slight skin irritation.

Ingestion 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 1% are

chronic health hazards.

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Contains no hazardous substances	PROPRIETA RY	No data available	No data available	No data available

12. Ecological Information

12.1 Toxicity

Ecotoxicity Effects

Substances	CAS	Toxicity to Algae	Toxicity to Fish	Toxicity to	Toxicity to
	Number		-	Microorganisms	Invertebrates
Contains no	PROPRIETA	No information available	No information available	No information available	No information available
hazardous	RY				
substances					

12.2 Persistence and degradability

Biodegradable.

Substances	CAS Number	Persistence and Degradability
Contains no hazardous substances	PROPRIETARY	No information available

12.3 Bioaccumulative potential

Bioaccumulative potential

Substances	CAS Number	Log Pow
Contains no hazardous substances	PROPRIETARY	No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

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

13.1 Waste treatment methods

Disposal Method Contaminated Packaging Disposal should be made in accordance with federal, state, and local regulations.

Follow all applicable national or local regulations.

14. Transport Information

IMDG/IMO

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

RID

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

ADR

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

IATA/ICAO

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

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

EINECS Inventory This product, and all its components, complies with EINECS

US TSCA Inventory
Canadian DSL Inventory
All components listed on inventory or are exempt.
All components listed on inventory or are exempt.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering

Classes (WGK)

WGK 1: Low hazard to waters.

15.2 Chemical Safety Assessment

No information available

16. Other Information

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

None

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 09-May-2014

Revision Note Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 453/2010

Disclaimer Statement

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End of Safety Data Sheet