

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

RHEOZAN BIOPOLYMER

Revision Date: 02-Jan-2013

Revision Number: 10

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name RHEOZAN BIOPOLYMER

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

Recommended Use Fluid Loss Additive

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 - §45 - (EC)1272/2008	
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 None

Hazard Statements

Not Classified

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

Not Classified

Contains

Substances

Contains no hazardous substances

CAS Number

Mixture

2.3 Other Hazards

Dust can form an explosive mixture in air

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	Mixture	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

Under normal conditions, first aid procedures are not required.

4.2 Most important symptoms and effects, both acute and delayed

May cause eye 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

Water fog, carbon dioxide, foam, dry chemical.

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

Organic dust in the presence of an ignition source can be explosive in high concentrations. Good housekeeping practices are required to minimize this potential.

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. Avoid creating and breathing dust. Slippery when wet.
See Section 8 for additional information**6.2 Environmental precautions**

None known.

6.3 Methods and material for containment and cleaning up

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 creating or inhaling dust.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

7.2 Conditions for safe storage, including any incompatibilities

Store away from oxidizers. Store in a cool, dry location. Product has a shelf life of 24 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 substances	Mixture	Not applicable	Not applicable	Not applicable	Not applicable

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

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

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

Substances	CAS Number	Denmark
Contains no hazardous substances	Mixture	Not applicable

Derived No Effect Level (DNEL)

No information available.

Worker**General Population****Predicted No Effect Concentration (PNEC)**

No information available.

8.2 Exposure controls**Engineering Controls**

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.

Personal protective equipment

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	None known.
Environmental Exposure Controls	No information available

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical State: Solid	Color: Off white
Odor: Starch	Odor Threshold: No information available

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
pH:	7-9
Freezing Point/Range	No data available
Melting Point/Range	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	0.8
Water Solubility	Hydrolyzes
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

9.2 Other information

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 known.

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 mild respiratory irritation.
Eye Contact	May cause mild eye irritation.
Skin Contact	None known.
Ingestion	None known

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	Mixture	No data available	No data available	No data available

12. ECOLOGICAL INFORMATION**12.1 Toxicity
Ecotoxicity Effects**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Contains no hazardous substances	Mixture	No information available	No information available	No information available	No information available

12.2 Persistence and degradability

No information available

12.3 Bioaccumulative potential

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**

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

Contaminated Packaging

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

ADR

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

All of the components in the product are on the following Inventory lists: All of the components in the product are on the following Inventory lists:.

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.

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/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Germany, Water Endangering Classes (WGK) Not determined.

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: 02-Jan-2013

Revision Note

Not applicable

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

Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

End of Safety Data Sheet