HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

CAT®-LO

Revision Date: 29-Nov-2010 Revision Number: 8

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

Product Identifier

Product Name CAT®-LO

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

Recommended Use Viscosifier

Uses Advised Against No information available

Details of the supplier of the safety data sheet

Halliburton Manufacturing Services, Ltd. Halliburton House, Howemoss Crescent

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

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

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

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2. HAZARDS IDENTIFICATION

Risk Phrases None

Label Elements
Not classified

Hazard Pictograms

Signal Word Not Hazardous

Contains

SubstancesCAS NumberCellulose derivativeProprietary

Other Hazards

Dust can form an explosive mixture in air

3. COMPOSITION/INFORMATION ON INGREDIENTS						
Substances EINECS CAS Number PERCENT EEC EU - CLP Substance REACH N					REACH No.	
Cellulose derivative	Not Listed	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

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.

Most Important symptoms and effects, both acute and delayed

No significant hazards expected.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing mediaó

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of 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.

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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

Personal precautions, protective equipment and emergency procedures

Avoid creating and breathing dust. See Section 12 for additional information

Environmental precautions

None known.

Methods and material for containment and cleaning up

Scoop up and remove.

Reference to other sections

See Section 12 for additional information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid creating or inhaling dust. Avoid dust accumulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store away from oxidizers. Store in a dry location.

Specific End Use(s)

Exposure Scenario No information available **Other Guidelines** No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Substances	EU	UK OEL	Netherlands	France OEL	Germany MAK/TRK
Cellulose derivative	Not applicable	10 mg/m ³	Not applicable	Not applicable	Not applicable

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Cellulose derivative	Not applicable				

Derived No Effect Level (DNEL) No information available. **Predicted No Effect Concentration**

No information available.

(PNEC)

Exposure controls

Engineering Controls A well ventilated area to control dust levels. 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. Normal work coveralls. **Skin Protection**

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

Other Precautions None known.

Environmental Exposure Controls No information available

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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

White to off white **Physical State:** Solid Color: Mild Odor Threshold: No information available Odor:

Property Values

Remarks/ Method

pH: 6-7

No data available Melting Point/Range No data available Freezing Point/Range (C): Boiling Point/Range No data available

Flash Point 221°C

PMCC

No data available **Evaporation rate Vapor Pressure** No data available No data available **Vapor Density** 16

Specific Gravity

Water Solubility Soluble in water Solubility in other solvents No data available Partition coefficient: n-octanol/water No data available

400°C **Autoignition Temperature**

Decomposition Temperature No data available No data available Viscosity **Explosive Properties** No information available **Oxidizing Properties** No information available

Other information

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

10. STABILITY AND REACTIVITY

Reactivity

Not applicable

Chemical Stability

Stable

Possibility of Hazardous Reactions

Will Not Occur

Conditions to Avoid

None anticipated

Incompatible Materials

Strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation May cause mild respiratory irritation. May cause mild eye irritation. **Eye Contact Skin Contact** May cause mild skin irritation.

None known Ingestion

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1%

are chronic health hazards.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cellulose derivative	> 2000 mg/kg	No data available	No data available

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12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	
Cellulose derivative	No information available	No information available	No information available	Flea) TLM96: > 1,000,000 ppm (Musidansia babia)
				(Mysidopsis bahia)

Persistence and degradability

Readily biodegradable

Bioaccumulative potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal MethodBury 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

RID

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

ADR

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

IATA/ICAO

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

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14. TRANSPORT INFORMATION

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

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

All components listed on inventory or are exempt.

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.

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: 29-Nov-2010 Revision Note Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer Statement

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End of Safety Data Sheet