HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

Ultrazine NA

Revision Date: 18-Nov-2010

Revision Number: 8

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

	stance or mixture and uses advised against
ecommended Use	Cement Additive
ses Advised Against	No information available
etails of the supplier of the safety	
Halliburton Energy Services	
Halliburton House, Howemo	oss Place
Kirkhill Industrial Estate	
Dyce	
Aberdeen, AB21 0GN	
United Kingdom	
Emorgonov Dhono Numbor	+44 1004 705077 or +1 001 575 5000
Energency Phone Number	: +44 1224 795277 or +1 281 575 5000
www.halliburton.com	
or further information, please contac	<u>t</u>
-Mail address:	fdunexchem@halliburton.com
mergency telephone number	
+44 1224 795277 or +1 281 57	75 5000
mergency telephone §45 - (EC)12	272/2008
urope	112
enmark	Poison Control Hotline (DK): +45 82 12 12 12
rance	ORFILA (FR): + 01 45 42 59 59
ermany	Poison Center Berlin (DE): +49 030 30686 790
aly	Poison Center, Milan (IT): +39 02 6610 1029
etherlands	National Poisons Information Center (NL): +31 30 274 88 88 (NB: this service is only
	available to health professionals)
orway	Poisons Information (NO):+ 47 22 591300
oland	Poison Control and Information Centre, Warsaw (PL): +48 22 619 66 54; +48 22 619 08 97
pain	Poison Information Service (ES): +34 91 562 04 20
nited 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/ECFor the full text of the R-phrases mentioned in this Section, see Section 16ClassificationNot Classified

2. HAZARDS IDENTIFICATION

Risk Phrases

Label Elements

Not classified

Hazard Pictograms

Signal Word

None

None

Contains

Substances Modifed lignosulfonate

CAS Number Proprietary

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Modifed lignosulfonate	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 neededNotes to PhysicianTreat 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

Decomposition in fire may produce toxic gases.

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

Use appropriate protective equipment. Avoid creating and breathing dust. See Section 12 for additional information

Environmental precautions

Prevent from entering sewers, waterways, or low areas.

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 contact with eyes, skin, or clothing. Avoid creating or inhaling dust.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities Store in a cool, dry location.

Specific End Use(s)	
Exposure Scenario	
Other Guidelines	

No information available No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Madifad lignaaufanata Not applicable 10 mg/m ³ Not applicable Not applicable Not	
Modifed lignosulfonate Not applicable 10 mg/m ³ Not applicable Not applicable Not applicable	pplicable

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Modifed lignosulfonate	Not applicable				

Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC)	No information available. No information available.
Exposure controls Engineering Controls Personal protective equipment Respiratory Protection	Use in a well ventilated area. Not normally needed. But if significant exposures are possible then the following respirator is recommended:
Hand Protection Skin Protection Eye Protection Other Precautions Environmental Exposure Controls	Dust/mist respirator. (N95, P2/P3) Normal work gloves. Normal work coveralls. Wear safety glasses or goggles to protect against exposure. None known. No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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	9. PHYSICAL AND CHEMICAL PROPERTIES				
Physical State:	Solid	Color: Brown			
Odor:	Woody	Odor Threshold: No information available			
Property Remarks/ Method		Values			
pH:		9.5-10.3			
Melting Point/Range		No data available			
Freezing Point/Range (C):		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		1.32			
Water Solubility		Soluble in water			
Solubility in other solvents		No data available			
Partition coefficient: n-octanol/water		No data available			
Autoignition Ten	nperature	No data available			
Decomposition 1	lemperature	No data available			
Viscosity		No data available			

Other information

Explosive Properties

Oxidizing Properties

VOC Content (%)

No data available

No information available

No information available

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

 Oxides of sulfur. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects Acute Toxicity

Inhalation Eye Contact Skin Contact

Ingestion

May cause mild respiratory irritation. May cause mechanical irritation to eye. None known. None known

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
Modifed lignosulfonate	> 5000 mg/kg	No data available	No data available

12. ECOLOGICAL INFORMATION

Toxicity Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Modifed lignosulfonate	E(B)C50: 1.6 mg/l (Skeletonema costatum) E(R)C50: 2.4 mg/l (Skeletonema costatum)	TLM24: 160-320 mg/l (Oncorhynchus mykiss); LC50: 9650 mg/l (Cyprinus carpio)		EC50: 38225 mg/l (Daphnia magna); TLM96: > 1000 ppm (Crangon crangon)

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 Method Contaminated Packaging

Bury in a licensed landfill according to federal, state, and local regulations. Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

IMDG/IMO

	UN Number: UN Proper Shipping Name: Transport Hazard Class(es):	Not restricted. Not restricted Not applicable
RID		
	UN Number: UN Proper Shipping Name: Transport Hazard Class(es):	Not restricted. Not restricted Not applicable
ADR		
	UN Number: UN Proper Shipping Name: Transport Hazard Class(es):	Not restricted. Not restricted Not applicable
ΙΑΤΑ	ICAO	
	UN Number: UN Proper Shipping Name: Transport Hazard Class(es):	Not restricted. Not restricted Not applicable
Spec	al Precautions for User	None

14. TRANSPORT INFORMATION

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 InventoriesEINECS InventoryThis product, and all its components, complies with EINECSUS TSCA InventoryAll components listed on inventory or are exempt.Canadian DSL InventoryAll 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:	18-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