HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

LITHIUM CHLORIDE

Revision Date: 29-Nov-2010

Revision Number: 5

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

Product Identifier Product Name	
	substance or mixture and uses advised against
Recommended Use	Additive
Uses Advised Against	No information available
Details of the supplier of the sa	
Halliburton Manufacturi	ng Services, Ltd.
Halliburton House, How	remoss Crescent
Kirkhill Industrial Estate	
Dyce	
Aberdeen, AB21 0GN	
United Kingdom	
Emergency Phone Nur	nber: +44 1224 795277 or +1 281 575 5000
www.halliburton.com	
For further information, please co	ontact
E-Mail address:	fdunexchem@halliburton.com
Emergency telephone number	
+44 1224 795277 or +1 28	31 575 5000
Emergency telephone §45 - (E	
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

Acute Oral Toxicity	Category 4- H302
Acute Toxicity - Dermal	Category 4- H312
Skin Corrosion / irritation	Category 2- H315
Serious Eye Damage / Eye Irritation	Category 2- H319

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

	2. HAZARDS IDENTIFICATION	
For the full text of the R-phra	ses mentioned in this Section, see Section 16	
Classification	Xn - Harmful.	
Risk Phrases	R22 Harmful if swallowed. R36/38 Irritating to eyes and skin.	

Label Elements

Hazard Pictograms



Signal Word

Warning

Hazard Statements H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

Contains

Substances Lithium chloride CAS Number 7447-41-8

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

P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P365 - UP261 - P269 - UF IN EXEC PLANE and Wash with water for acversed minutes. Demons a

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS						
Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Lithium chloride	231-212-3	7447-41-8	60 - 100%	Xn; R22 Xi; R36/38	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312)	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	Immediately flush eyes with large amounts of water for at least 15 minutes. Get
	immediate medical attention.
Skin	Wash with soap and water. Get medical attention if irritation persists.
Ingestion	If swallowed, induce vomiting immediately by giving two glasses of water and
-	sticking fingers down throat; never give anything to an unconscious person. Get
	medical attention.

Most Important symptoms and effects, both acute and delayed

May cause eye and respiratory irritation. May cause headache, dizziness, and other central nervous system effects.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIREFIGHTING MEASURES

Extinguishing mediaó Suitable Extinguishing Media All standard fire fighting media Extinguishing media which must not be used for safety reasons None known.

Special hazards arising from the substance of mixture Special Exposure Hazards

Not applicable.

Advice for firefighters Special Protective Equipment for Fire-Fighters Not applicable.

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 creating or inhaling dust. Wash hands after use. **Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store in a dry location.

Specific End Use(s)Exposure ScenarioNo information availableOther GuidelinesNo information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters					
Substances	EU	UK OEL	Netherlands	France OEL	Germany MAK/TRK
Lithium chloride	Not applicable				

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Lithium chloride	Not applicable				

Derived No Effect Level (DNEL)	No inf
Predicted No Effect Concentration	No inf
(PNEC)	

lo information available. lo information available.

Exposure controls Engineering Controls Personal protective equipment	Use in a well ventilated area.
Respiratory Protection	Dust/mist respirator. (N95, P2/P3)
Hand Protection	Neoprene gloves. Polyvinylchloride gloves.
Skin Protection	Normal work coveralls.
Eye Protection	Wear safety glasses or goggles to protect against exposure.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.
Environmental Exposure Controls	No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:

White

Information on basic physical and chemical properties Physical State: Powder

Thysical Otate.			Winte
Odor:	Odorless	Odor Threshold:	No information available
Property Remarks/ Method pH: Melting Point/Ra Freezing Point/Ra Flash Point Evaporation rate Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in othe Partition coeffici Autoignition Tem Decomposition T Viscosity Explosive Proper Oxidizing Proper	nge ange (C): nge er solvents ent: n-octanol/water nperature Femperature	Values 7-8 (5%) No data available 614 1163°C No data available No data available 1 mmHg No data available 2.068 Soluble in water No data available No data available	

9. PHYSICAL AND CHEMICAL PROPERTIES

Other information Molecular Weight VOC Content (%)

42.39 No data 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

 Avoid halogens. Strong acids. Contact with oxidizing agents.

 Hazardous Decomposition Products

 None known.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects Acute Toxicity Inhalation Causes moderate respiratory irritation. Excessive inhalation may produce symptoms similar to ingestion. Eye Contact Causes severe eye irritation Skin Contact Causes moderate skin irritation. Ingestion May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression. Coma, shock and death may occur.

Chronic Effects/Carcinogenicity Prolonged or repeated exposure may cause kidney damage. Prolonged or repeated exposure may cause liver damage. Prolonged or repeated exposure may cause damage to the thyroid gland.

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lithium chloride	526 mg/kg	No data available	No data available

Test species:

Rat

12. ECOLOGICAL INFORMATION

Toxicity Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lithium chloride	No information available	No information available	No information available	No information available

Persistence and degradability

No information available

Bioaccumulative potential

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:	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
Transport Hazard Class(es):	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

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

International Inventories

EINECS Inventory US TSCA Inventory Canadian DSL Inventory This product, and all its components, complies with EINECS 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 R22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

Key literature references and sources for data www.ChemADVISOR.com/

www.cnemADVISOR.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