HALLIBURTON

SAFETY DATA SHEET

according to Regulation (EC) No. 453/2010

CALCIUM CHLORIDE 11.6 PPG

Revision Date: 11-Nov-2012 Revision Number: 10

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

Product Identifier

Product Name CALCIUM CHLORIDE 11.6 PPG

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

Recommended Use Brine

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

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

144 1224 193211 01 11 201 310 3000				
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

Serious Eye Damage / Eye Irritation	Category 2- (H319)
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2. HAZARDS IDENTIFICATION

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 Xi - Irritant.

Risk Phrases R36 Irritating to eyes.

Label Elements

Hazard Pictograms



Signal Word Warning

Hazard Statements

H319 - Causes serious eye irritation

Contains

SubstancesCAS NumberCalcium chloride10043-52-4

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/face protection

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

Other Hazards

None known

3. COMPOSITION/INFORMATION ON INGREDIENTS						
Substances	EINECS	CAS Number	PERCENT	EEC Classification	EU - CLP Substance Classification	REACH No.
Calcium chloride	233-140-8	10043-52-4	30 - 60%	Xi; R36	Eye Irrit. 2 (H319)	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

Eyes

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

4. FIRST AID MEASURES

Skin Wash with soap and water. Get medical attention if irritation persists. Remove

contaminated clothing and launder before reuse.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Most Important symptoms and effects, both acute and delayed

May cause eye irritation.

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.

See Section 12 for additional information

Environmental precautions

None known.

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.

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 breathing vapors.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Conditions for safe storage, including any incompatibilities

Store in a cool well ventilated area. Keep container closed when not in use.

Specific End Use(s)

Exposure Scenario No information available Other Guidelines No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Control parameters							
Substances	EU	UK OEL	Netherlands	France OEL	Germany MAK/TRK		
Calcium chloride	Not applicable	10 mg/m ³	Not applicable	Not applicable	Not applicable		

Substances	Italy	Poland	Hungary	Czech Republic	Denmark
Calcium chloride	Not applicable	Not applicable	Not applicable	5 mg/m ³	Not applicable

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

(PNEC)

Exposure controls

Engineering Controls Use in a well ventilated area.

Personal protective equipment

Respiratory Protection Dust/mist respirator. (N95, P2/P3)

Hand Protection Impervious rubber gloves. Nitrile gloves. Neoprene gloves. Butyl rubber gloves.

Polyvinylchloride gloves.

Skin Protection Normal work coveralls.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists. **Other Precautions** Eyewash fountains and safety showers must be easily accessible.

Environmental Exposure Controls No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid Color: Clear

Odor: Odorless Odor Threshold: No information available

<u>Property</u> <u>Values</u>

Remarks/ Method

pH: 5.2

Melting Point/Range No data available

Freezing Point/Range (C): 4°C
Boiling Point/Range 110°C

Flash Point

Evaporation rate

Vapor Pressure

Vapor Density

No data available
No data available
No data available
No data available

Specific Gravity 1.39

Water Solubility Soluble in water 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 No information available **Explosive Properties Oxidizing Properties** No information available

Other information

VOC Content (%) 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

Amphoteric metals such as aluminum, magnesium, lead, tin, or zinc.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Inhalation May cause respiratory irritation.

Eye Contact May cause eye burns.

Skin Contact May cause severe skin irritation. May cause skin burns on prolonged contact.

Ingestion Causes burns of the mouth, throat and stomach.

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
Calcium chloride	1000 mg/kg	> 5000 mg/kg	No data available

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

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

Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

Bioaccumulative potential

Does not bioaccumulate

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 Disposal should be made in accordance with 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

14. TRANSPORT INFORMATION

RID

UN Number: Not restricted. 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 InventoryThis 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/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

R36 Irritating to eyes.

Key literature references and sources for data

www.ChemADVISOR.com/

Revision Date: 11-Nov-2012 Revision Note Not applicable

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

16. OTHER INFORMATION

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