

## SAFETY DATA SHEET

### CALCIUM CHLORIDE - HI-TEST PELLETS

Product Trade Name:

Revision Date: 16-Jun-2015

Revision Number: 12

#### 1. Identification

##### 1.1. Product Identifier

**Product Trade Name:** CALCIUM CHLORIDE - HI-TEST PELLETS  
**Synonyms:** None  
**Chemical Family:** Inorganic Salt  
**Internal ID Code** HM001500

##### 1.2 Recommended use and restrictions on use

**Application:** Accelerator  
**Uses Advised Against** No information available

##### 1.3 Manufacturer's Name and Contact Details

**Manufacturer/Supplier** Halliburton Energy Services Inc.  
P.O. Box 1431  
Duncan, Oklahoma 73536-0431  
Emergency Telephone: (281) 575-5000

**Prepared By** Chemical Stewardship  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

##### 1.4. Emergency telephone number

**Emergency Telephone Number** (281) 575-5000

#### 2. Hazard(s) Identification

##### 2.1 Classification in accordance with paragraph (d) of §1910.1200

Serious Eye Damage / Eye Irritation

Category 2 - H319

##### 2.2. Label Elements

###### Hazard Pictograms



**Signal Word** Warning

**Hazard Statements** H319 - Causes serious eye irritation

**Precautionary Statements**

- Prevention** P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear eye protection/face protection
- Response** 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
- Storage** None
- Disposal** None

<b>Contains Substances</b>	<b>CAS Number</b>
Calcium chloride	10043-52-4

**2.3 Hazards not otherwise classified**  
None known

**3. Composition/information on Ingredients**

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Calcium chloride	10043-52-4	60 - 100%	Eye Irrit. 2A (H319)

The exact percentage (concentration) of the composition has been withheld as proprietary.

**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, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
- Skin** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.
- Ingestion** Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

**4.2 Most important symptoms/effects, acute and delayed**  
Causes eye irritation

**4.3. Indication of any immediate medical attention and special treatment needed**  
**Notes to Physician** Treat symptomatically.

**5. Fire-fighting measures**

**5.1. Extinguishing media**

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

**5.2 Specific hazards arising from the substance or mixture**

**Special Exposure Hazards**

None anticipated

**5.3 Special protective equipment and precautions for fire-fighters**

**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.  
See Section 8 for additional information

**6.2. Environmental precautions**

Prevent from entering sewers, waterways, or low areas.

**6.3. Methods and material for containment and cleaning up**

Scoop up and remove.

**7. Handling and storage**

**7.1. Precautions for Safe Handling**

**Handling Precautions**

Avoid contact with eyes, skin, or clothing. 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**

**Storage Information**

Store in a cool, dry location.

**8. Exposure Controls/Personal Protection**

**8.1 Occupational Exposure Limits**

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Calcium chloride	10043-52-4	Not applicable	Not applicable

**8.2 Appropriate engineering controls**

**Engineering Controls** Use in a well ventilated area.

**8.3 Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment** If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

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

**Hand Protection** Normal work gloves.

**Skin Protection** Normal work coveralls.

**Eye Protection** Dust proof goggles.

**Other Precautions** None known.

**9. Physical and Chemical Properties**

**9.1. Information on basic physical and chemical properties**

<b>Physical State:</b> Solid	<b>Color:</b> White
<b>Odor:</b> Odorless	<b>Odor:</b> No information available
	<b>Threshold:</b>

<u>Property</u> <u>Remarks/ - Method</u>	<u>Values</u>
<b>pH:</b>	10
<b>Freezing Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Boiling Point/Range</b>	815 °C / 1500 °F
<b>Flash Point</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
upper flammability limit	No data available
lower flammability limit	No data available
<b>Evaporation rate</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	2.2
<b>Water Solubility</b>	Soluble in water
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available

**9.2. Other information**

<b>Molecular Weight</b>	111 (g/mole)
<b>VOC Content (%)</b>	No data available

**10. Stability and Reactivity****10.1. Reactivity**

Not expected to be reactive.

**10.2. Chemical Stability**

Stable

**10.3. Possibility of Hazardous Reactions**

Will Not Occur

**10.4. Conditions to Avoid**

None anticipated

**10.5. Incompatible Materials**

None known.

**10.6. Hazardous Decomposition Products**

None known.

**11. Toxicological Information****11.1 Information on likely routes of exposure**

<b>Principle Route of Exposure</b>	Eye or skin contact, inhalation.
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**11.2 Symptoms related to the physical, chemical and toxicological characteristics**

**Acute Toxicity**

**Inhalation** May cause mild respiratory irritation.  
**Eye Contact** Causes moderate eye irritation.  
**Skin Contact** May cause mild skin irritation.  
**Ingestion** Irritation of the mouth, throat, and stomach.

**Chronic Effects/Carcinogenicity** No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

**11.3 Toxicity data**

**Toxicology data for the components**

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium chloride	10043-52-4	> 1000 mg/kg (Rat) 2301 mg/kg (Rat) > 2000 mg/kg (Rat) 2240 mg/kg (Rat)	5000 mg/kg (Rabbit)	No data available

Substances	CAS Number	Skin corrosion/irritation
Calcium chloride	10043-52-4	Causes mild skin irritation (Rabbit)

Substances	CAS Number	Eye damage/irritation
Calcium chloride	10043-52-4	Causes severe eye irritation. (Rabbit)

Substances	CAS Number	Skin Sensitization
Calcium chloride	10043-52-4	No information available

Substances	CAS Number	Respiratory Sensitization
Calcium chloride	10043-52-4	No information available

Substances	CAS Number	Mutagenic Effects
Calcium chloride	10043-52-4	Did not show mutagenic effects in animal experiments

Substances	CAS Number	Carcinogenic Effects
Calcium chloride	10043-52-4	No information available.

Substances	CAS Number	Reproductive toxicity
Calcium chloride	10043-52-4	Animal testing did not show any effects on fertility.

Substances	CAS Number	STOT - single exposure
Calcium chloride	10043-52-4	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	STOT - repeated exposure
Calcium chloride	10043-52-4	No information available.

Substances	CAS Number	Aspiration hazard
Calcium chloride	10043-52-4	Not applicable

**12. Ecological Information**

**12.1. Toxicity**

**Ecotoxicity Effects**

**Product Ecotoxicity Data**

No data available

**Substance Ecotoxicity Data**

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Calcium chloride	10043-52-4	ErC50 (72h) 2900 mg/L (Pseudokirchnerella subcapitata) ErC50 (72h) 4000 mg/L (Pseudokirchnerella subcapitata)	LC50 (96h) 4630 mg/L (Pimephales promelas) LC50 (48h) >6560 mg/L (Pimephales promelas) LC50 (24h) >6660 mg/L (Pimephales promelas)	No information available	EC50 (48h) 2400 mg/L (Daphnia magna) EC50 (21d) 610 mg/L (reproduction) (Daphnia magna)

**12.2. Persistence and degradability**

Substances	CAS Number	Persistence and Degradability
Calcium chloride	10043-52-4	The methods for determining biodegradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

Substances	CAS Number	Log Pow
Calcium chloride	10043-52-4	No information available

**12.4. Mobility in soil**

Substances	CAS Number	Mobility
Calcium chloride	10043-52-4	No information available

**12.5 Other adverse effects**

No information available

**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****US DOT**

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

**US DOT Bulk**

**DOT (Bulk)** Not applicable

**Canadian TDG**

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

**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

**IATA/ICAO**

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

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

**Special Precautions for User:** None

<b>15. Regulatory Information</b>
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**US Regulations**

<b>US TSCA Inventory</b>	All components listed on inventory or are exempt.
<b>EPA SARA Title III Extremely Hazardous Substances</b>	Not applicable
<b>EPA SARA (311,312) Hazard Class</b>	Acute Health Hazard
<b>EPA SARA (313) Chemicals</b>	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
<b>EPA CERCLA/Superfund Reportable Spill Quantity</b>	Not applicable.
<b>EPA RCRA Hazardous Waste Classification</b>	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.
<b>California Proposition 65</b>	All components listed do not apply to the California Proposition 65 Regulation.
<b>MA Right-to-Know Law</b>	Does not apply.
<b>NJ Right-to-Know Law</b>	Does not apply.
<b>PA Right-to-Know Law</b>	Does not apply.

**Canadian Regulations**

<b>Canadian DSL Inventory</b>	All components listed on inventory or are exempt.
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<b>16. Other information</b>
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**Preparation Information****Prepared By**

Chemical Stewardship  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

**Revision Date:** 16-Jun-2015

**Reason for Revision** SDS sections updated:  
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**Additional information**

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

**Key or legend to abbreviations and acronyms**

bw – body weight  
CAS – Chemical Abstracts Service  
EC50 – Effective Concentration 50%  
ErC50 – Effective Concentration growth rate 50%  
LC50 – Lethal Concentration 50%  
LD50 – Lethal Dose 50%  
LL50 – Lethal Loading 50%  
mg/kg – milligram/kilogram  
mg/L – milligram/liter  
NIOSH – National Institute for Occupational Safety and Health  
NTP – National Toxicology Program  
OEL – Occupational Exposure Limit  
PEL – Permissible Exposure Limit  
ppm – parts per million  
STEL – Short Term Exposure Limit  
TWA – Time-Weighted Average  
UN – United Nations  
h - hour  
mg/m<sup>3</sup> - milligram/cubic meter  
mm - millimeter  
mmHg - millimeter mercury  
w/w - weight/weight  
d - day

**Key literature references and sources for data**

www.ChemADVISOR.com/  
OSHA  
ECHA C&L

**Disclaimer Statement**

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**End of Safety Data Sheet**