Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

• 94-97% Calcium Chloride Powder

SDS Number/Grade • CC-02

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

- Relevant identified use(s)
- Concrete acceleration, Drilling fluid additive, Dust control

1.3 Details of the supplier of the safety data sheet

Manufacturer • Cal-Chlor Corporation 627 Jefferson Street Lafayette, LA 70501 United States www.Cal-Chlor.com mscelsa@cal-chlor.com Telephone (General) • 1-800-245-6743

1.4 Emergency telephone number

Manufacturer

• 800-424-9300 - CHEMTREC

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

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• Acute Toxicity Oral 4 - H302 Eye Irritation 2 - H319

DSD/DPD

- Eye Irritation 2 H3 Harmful (Xn) Irritant (Xi)
- 2.2 Label Elements



R22, R36

Hazard statements .	H302 - Harmful if swallowed H319 - Causes serious eye irritation
Precautionary statements	
Prevention •	P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear eye/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. P301+P312 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. P330 - Rinse mouth.
Storage/Disposal •	P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
DSD/DPD	
	XX
Risk phrases •	R22 - Harmful if swallowed. R36 - Irritating to eyes.
Safety phrases •	S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
2.3 Other Hazards	
CLP •	According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
DSD/DPD •	This product is considered dangerous according to the European Directive 67/548/EEC.
United States (US) According to OSHA 29 CFR 1910	.1200 HCS
2.1 Classification of the su	bstance or mixture
OSHA HCS 2012 •	Acute Toxicity Oral 4 - H302 Eye Irritation 2 - H319

2.2 Label elements

OSHA HCS 2012

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WARNING



 Hazard statements • Harmful if swallowed - H302 Causes serious eye irritation - H319
 Precautionary statements
 Prevention • Wash thoroughly after handling. - P264 Do not eat, drink or smoke when using this product. - P270 Wear eye/face protection , . - P280
 Response • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338 If eye irritation persists: Get medical advice/attention. - P337+P313 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell. - P301+P312 Rinse mouth. - P330
 Storage/Disposal • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards OSHA HCS 2012

• Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Other Toxic Effects D2B
- 2.2 Label elements WHMIS



- , Other Toxic Effects D2B
- 2.3 Other hazards WHMIS
- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

	Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Calcium chloride	CAS:10043-52-4 EC Number:233- 140-8 EU Index:017- 013-00-2	94% TO 97%	Ingestion/Oral-Rat LD50 • 1 g/kg	EU DSD/DPD: Annex VI, Table 3.2: Xi R36; Additional Self Classification: Xn R22 EU CLP: Annex VI, Table 3.1: Eye Irrit. 2, H319; Additional Self Classification: Acute Tox. 4, H302 OSHA HCS 2012: Eye Irrit. 2; Acute Tox. 4 (orl)	NDA
Potassium chloride	CAS :7447-40-7 EC Number :231- 211-8	2% TO 3%	Ingestion/Oral-Rat LD50 • 2600 mg/kg	EU DSD/DPD: Self Classified: Xi R36 EU CLP: Self Classified: Eye Irrit. 2, H319 OSHA HCS 2012: Eye Irrit. 2	NDA
Sodium chloride	CAS :7647-14-5 EC Number :231- 598-3	1% TO 2%	Ingestion/Oral-Rat LD50 • 3000 mg/kg	EU DSD/DPD: Self Classified: Xi R36 EU CLP: Self Classified: Eye Irrit. 2, H319 OSHA HCS 2012: Eye Irrit. 2	NDA

3.2 Mixtures

• Material does not meet the criteria of a mixture.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation Skin	 Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention. In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
Eye	 In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
Ingestion	• Do NOT induce vomiting. Rinse mouth. Give one cup (8 ounces or 240 mL) of water or milk if available. Do not give anything by mouth to an unconscious person. Get medical attention immediately.
	 Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

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Notes to Physician
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 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media 🖕	In case of fire use media as appropriate for surrounding fire.
Unsuitable Extinguishing • Media	No data available.
5.2 Special hazards arising from the substance or mixture	
Unusual Fire and Explosion 🔒	Material does not burn.

Hazardous Combustion Products

5.3 Advice for firefighters

• Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

 Do not walk through spilled material. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Spilled material may cause a slipping hazard.

Emergency Procedures

Keep unauthorized personnel away. Ventilate closed spaces before entering.

6.2 Environmental precautions

• Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures • Avoid generating dust. SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Flush residue with plenty of water.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

• Use only with adequate ventilation. Avoid contact with skin, eyes, and clothing. Do not taste or swallow. Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 80°F, 27°C). Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Keep container tightly closed. Store in a cool, dry place. Protect from moisture.
- 7.3 Specific end use(s)
- Refer to Section 1.2 Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters Exposure Limits/Guidelines	 No applicable exposure limits available for product or components.
8.2 Exposure controls	
Engineering Measures/Controls	 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Personal Protective Equipme	ent
Respiratory	• For limited exposure use an N95 dust mask. For prolonged exposure use an air- purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.
Eye/Face	 Wear safety goggles.
Skin/Body	 Wear appropriate gloves.
Environmental Exposure Controls	 Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	White powder with no odor.
Color	White	Odor	Odorless
Odor Threshold	Not relevant		
General Properties			
Boiling Point	Not relevant	Melting Point	772 C(1421.6 F) (approximately)
Decomposition Temperature	Not relevant	pН	Not relevant
Specific Gravity/Relative Density	Not relevant	Bulk Density	65 lb(s)/ft ³ (estimated)
Water Solubility	Soluble	Viscosity	Not relevant
Explosive Properties	Not relevant.	Oxidizing Properties:	Not relevant.

Volatility

Volatility			
Vapor Pressure	Negligible	Vapor Density	Not relevant
Evaporation Rate	Not relevant		
Flammability			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	Not relevant
Flammability (solid, gas)	Not relevant.		
Environmental			
Octanol/Water Partition coefficient	Not relevant		

9.2 Other Information

• No additional physical and chemical parameters noted.

10.1 Reactivity

• No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

• Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

• Hazardous polymerization not indicated.

10.4 Conditions to avoid

• Avoid moisture.

10.5 Incompatible materials

 Heat is generated when mixed with water. Spattering and boiling can occur. Avoid contact with sulfuric acid. Corrosive when wet. Flammable hydrogen may be generated from contact with metals such as zinc and sodium. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromate.

10.6 Hazardous decomposition products

• Does not decompose.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components			
Calcium chloride (94% TO 97%)	10043-52-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1 g/kg	
	Impurities, Stabilizers, etc		
Potassium chloride (2% TO 3%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 2600 mg/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation	
Sodium chloride (1% TO 2%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 3000 mg/kg; Irritation: Eye-Rabbit • 10 mg • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Mild irritation	

GHS Properties	Classification
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Acute toxicity		EU/CLP • Acute Toxicity - Oral 4 OSHA HCS 2012 • Acute Toxicity - Oral 4	
Aspiration Hazard		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Carcinogenicity		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Germ Cell Mutagenicity		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Skin corrosion/Irritation		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Skin sensitization		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
STOT-RE		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
STOT-SE		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Toxicity for Reproduction		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Respiratory sensitization		EU/CLP • Data lacking OSHA HCS 2012 • Data lacking	
Serious eye damage/Irritation		EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2	
Route(s) of entry/exposure	 Inhalation, SI 	kin, Eye, Ingestion	
Medical Conditions Aggravated by Exposure Potential Health Effects Inhalation Acute (Immediate)	or impact ma	the lungs. dust may cause irritation. Processes such as cutting, grinding, crushing, y result in generation of excessive amounts of airborne dusts in the uisance dust may affect the lungs but reactions are typically reversible.	
Chronic (Delayed)	 No data avail 		
Skin			
Acute (Immediate)		dust may cause mechanical irritation.	
Chronic (Delayed) • No data availa		able.	
Eye	0	and the instantion of the second sector of the	
Acute (Immediate)		us eye irritation. Excessive concentrations of nuisance dust in the ay reduce visibility and may cause unpleasant deposits in eyes.	
Chronic (Delayed)	 No data avail 	able.	
Ingestion			
Acute (Immediate)	 Harmful if swallowed. Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes. 		
Chronic (Delayed)	-	 No data available. 	
Key to abbreviations LD = Lethal Dose MLD = Mild			

MOD = Moderate

Section 12 - Ecological Information

12.1 Toxicity

94	4-97% Calcium Chloride Powd	er			
Dosage	Species	Duration	Results	Exposure Conditions	Comments
8350 to 10650 mg/L	Fish: Bluegill	NDA	LC50	NDA	Data for Calcium Chloride
759 to 3005 mg/L	Crustacea: Daphnia magna	NDA	EC50	NDA	Data for Calcium Chloride
= 4236 mg/L	Fish: Rainbow Trout	96 Hour(s)	LC50	NDA	Data for Potassium Chloride
= 590 mg/L	Crustacea: Daphnia magna	24 Hour(s)	EC50	NDA	Data for Potassium Chloride
= 3470 mg/L	Water Flea: Ceriodaphnia Dubia	96 Hour(s)	LC50	NDA	Data for Potassium Chloride
= 10610 mg/L	Fish: Fathead minnow	NDA	LC50	NDA	Data for Sodium Chloride
= 4571 mg/L	Crustacea: Daphnia magna	NDA	LC50	NDA	Data for Sodium Chloride

12.2 Persistence and degradability

Biodegradation is not applicable.

12.3 Bioaccumulative potential

No bioconcentration is expected because of the relatively high water solubility.

12.4 Mobility in Soil

Potential for mobility in soil is very high (Koc between 0 and 50). Partitioning from water to n-octanol is not applicable.

12.5 Results of PBT and vPvB assessment

No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

Material is practically non-toxic to aquatic organisms on an acute basis. (LC50/EC50/EL50/LL50 >100mg/L in the most sensitive species tested).

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA

IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA
14.6 Special user	precautions	for • None specified.			
14.7 Transpo according to MARPOL 73/7 Code	Annex II of	 Data lacking. 			

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute

			Inventory			
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
Calcium chloride	10043-52-4	Yes	Yes	No	Yes	Yes
Potassium chloride	7447-40-7	Yes	Yes	No	Yes	Yes
Sodium chloride	7647-14-5	Yes	Yes	No	Yes	Yes
			Inventory (Co	n't)		
				11 t. <i>j</i>		
Component	CAS	EU ELNICS	Japan ENCS	Korea KECL	New Zealand	TSCA
Component Calcium chloride	CAS 10043-52-4	EU ELNICS No		, ,	New Zealand Yes	TSCA Yes
· · ·			Japan ENCS	Korea KECL		

Canada

Canada - WHMIS - Classifications of Substances		
Calcium chloride	10043-52-4	D2B
Potassium chloride	7447-40-7	Uncontrolled product according to WHMIS classification criteria (includir 23.8%)
Sodium chloride	7647-14-5	Uncontrolled product according to WHMIS classification criteria
Canada - WHMIS - Ingredient Disclosure List		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
vironment Canada - CEPA - Priority Substances List		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed

Germany

Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Haz	ard Classes	
Calcium chloride	10043-52-4	ID Number 220, hazard class - - low hazard to waters
Potassium chloride	7447-40-7	ID Number 230, hazard class - low hazard to waters
Sodium chloride	7647-14-5	ID Number 270, hazard class - low hazard to waters
Germany - Water Classification (VwVwS) - Annex 3		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed

United States

- Celevine eklevide		Net Liste d
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
U.S OSHA - Specifically Regulated Chemicals		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
nvironment		
J.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
J.S CERCLA/SARA - Hazardous Substances and their Repo	rtable Quantities	
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
J.S CERCLA/SARA - Radionuclides and Their Reportable Q	uantities	
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
J.S CERCLA/SARA - Section 302 Extremely Hazardous Subs	tances EPCRA RQs	
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
J.S CERCLA/SARA - Section 302 Extremely Hazardous Subs	stances TPQs	

Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
U.S CERCLA/SARA - Section 313 - Emission Reporting		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
U.S TSCA (Toxic Substances Control Act) - Section 5 - New Chemicals Progr	ram (NCP) Chemica	I Categories
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed

United States - California

ironment S California - Proposition 65 - Carcinogens List		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
.S California - Proposition 65 - Developmental Toxicity		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
.S California - Proposition 65 - Maximum Allowable Dose Levels (MA	DL)	
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
.S California - Proposition 65 - Reproductive Toxicity - Female		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed
.S California - Proposition 65 - Reproductive Toxicity - Male		
Calcium chloride	10043-52-4	Not Listed
Potassium chloride	7447-40-7	Not Listed
Sodium chloride	7647-14-5	Not Listed

15.2 Chemical Safety Assessment

• No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date

Preparation Date

Disclaimer/Statement of Liability

- 04/March/2014
- 04/March/2014

• The information presented herein, while not guaranteed, was prepared by technical personnel and is true and accurate to the best of our knowledge. No warranty of merchantability or fitness for a particular purpose, or warranty or guaranty of any other kind, express or implied, is made regarding performance, safety, suitability, stability or otherwise. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, storage, disposal and other factors that may involve other or additional legal, environmental, safety or performance considerations, and Cal-Chlor assumes no liability whatsoever for the use of or reliance upon this information. No suggestions for the use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or to violate any federal, state, local or foreign laws. OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees.

Key to abbreviations

NDA = No data available