SAFETY DATA SHEET

SDS01963
CALCIUM CHLORIDE XTRA 83-87% FLAKE

Preparation Date: 14/Dec/2017 Version: 1

1. IDENTIFICATION

Product identifier

Product Name CALCIUM CHLORIDE XTRA 83-87% FLAKE

Other means of identification

Product Code(s) SDS01963

Synonyms Calcium chloride, flake

Recommended use of the chemical and restrictions on use

Recommended Use Concrete Acceleration, Drilling Fluid Additive, Dust Control, Ice Melting, Refrigeration, Road Base Stabilization and Full Depth Reclamation, Tire Weighting, Water Treatment (Non-potable)

Restricted Uses No information available

Initial Supplier Identifier
Univar Canada Ltd.
9800 Van Horne Way
Richmond, BC V6X 1W5
Telephone: 1-866-686-4827

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2A

Label elements

Hazard pictograms

Signal Word: Warning

Hazard statements
Harmful if swallowed
Causes serious eye irritation

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Disposal
Dispose of contents/container to an approved waste disposal plant

Other Information
Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-%	Synonyms
Calcium Chloride	10043-52-4	80 - 90%	Calcium Chloride
Water	7732-18-5	10 - 20%	Water
Potassium Chloride	7447-40-7	0 - 10%	Potassium Chloride
Sodium Chloride	7647-14-5	0 - 10%	Sodium Chloride

4. FIRST AID

Description of first aid measures

General advice
Show this safety data sheet to the doctor in attendance.

Inhalation
Remove to fresh air.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact
Wash skin with soap and water.

Ingestion
Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider
Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed:
Ingestion may cause gastrointestinal irritation or ulceration. Prolonged or repeated exposure may cause skin irritation, even a burn. No significant irritation expected from a single short-term exposure. May cause more severe response if skin is damp. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Dust may cause irritation to upper respiratory tract (nose and throat). May cause more severe response if confined to skin or skin is abraded (scratched or cut). Harmful if large amounts are swallowed. For solid: May cause slight eye irritation, mechanical injury only. Dust formation should be avoided, as dust can cause severe eye irritation with corneal injury.

Indication of any immediate medical attention and special treatment needed:

Note to physicians
If burn is present, treat as any thermal burn, after decontamination. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower GI tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the substance or mixture
This material does not burn. Fight fire for other material that is burning. Use water spray to cool fire-exposed containers and structures. Heat is generated when product mixes with water. Isolate and restrict area access.

Hazardous combustion products
None known.

Special protective equipment for fire-fighters
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 27°C). For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment.

Conditions for safe storage, including any incompatibilities

Protect against moisture. Keep containers tightly closed. Store in a cool, dry, well ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Calcium Chloride 10043-52-4	Not available	Not available	TWA: 5 mg/m^3	Not available	Not available	Not available
Water 7732-18-5	Not available	Not available	Not available	Not available	Not available	Not available
Potassium Chloride 7447-40-7	Not available	Not available	Not available	Not available	Not available	Not available
Sodium Chloride 7647-14-5	Not available	Not available	Not available	Not available	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls
Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Individual protection measures, such as personal protective equipment

Eye/face protection
Chemical safety glasses with side shields or splash proof goggles.

Hand protection
Use gloves chemically resistant to this material, examples of preferred glove barrier materials include:. Neoprene gloves. Nitrile gloves. Polyvinylchloride (PVC) gloves. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin and body protection
Wear suitable protective clothing.

Respiratory protection
If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator.

General hygiene considerations
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	
Physical state	Flakes
Color	White - off white
Odor	Odorless
Odor threshold	No information available

PROPERTIES	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	260 °C / 500 °F	
Initial boiling point/boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	<0.005 mm Hg @ 20 deg C	
Relative vapor density	No data available	None known
Specific Gravity	2.2	
Water solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	

Molecular weight	No information available
VOC Percentage Volatility	No information available
Liquid Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability
Stable Hygroscopic

Possibility of hazardous reactions
No additional remark.

Conditions to avoid
Hygroscopic (absorbs moisture from the air). Moisture.

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

Hazardous decomposition products
None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
Dust may cause irritation to upper respiratory tract (nose and throat).

Eye contact
For solid: May cause slight eye irritation, mechanical injury only. Dust formation should be avoided, as dust can cause severe eye irritation with corneal injury.

Skin contact
No significant irritation expected from a single short-term exposure. May cause more severe response if skin is damp. Prolonged or repeated exposure may cause skin irritation, even a burn. May cause more severe response if confined to skin or skin is abraded (scratched or cut).

Ingestion
Ingestion may cause gastrointestinal irritation or ulceration. Harmful if large amounts are swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury.

Information on toxicological effects

Symptoms
Potassium Chloride: In animals, effects have been reported on the following organs following ingestion: gastrointestinal tract, heart, kidney. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1,161.00 mg/kg
ATEmix (dermal) 5,888.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium Chloride 10043-52-4	= 1000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	Not available
Water 7732-18-5	> 90 mL/kg (Rat)	Not available	Not available
Potassium Chloride 7447-40-7	= 2600 mg/kg (Rat)	Not available	Not available
Sodium Chloride 7647-14-5	= 3 g/kg (Rat)	Not available	> 42 g/m^3 (Rat) 1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
No significant irritation expected from a single short-term exposure. May cause more severe response if confined to skin or skin is abraded (scratched or cut). May cause more severe response if skin is damp. Prolonged or repeated exposure may cause skin irritation, even a burn.

Serious eye damage/eye irritation
For solid: May cause slight eye irritation, mechanical injury only. Dust formation should be avoided, as dust can cause severe eye irritation with corneal injury.

Respiratory or skin sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Calcium Chloride 10043-52-4	Not available	Not available	Not available	Not available
Water 7732-18-5	Not available	Not available	Not available	Not available
Potassium Chloride 7447-40-7	Not available	Not available	Not available	Not available
Sodium Chloride 7647-14-5	Not available	Not available	Not available	Not available

Reproductive toxicity
Negative in mutagenicity assays.

Specific target organ systemic toxicity - single exposure
No information available.

Specific target organ systemic toxicity - repeated exposure
No information available.

Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

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Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Calcium Chloride 10043-52-4	Not available	10650 mg/L LC50 (Lepomis macrochirus) 96 h static	Not available	LC50: =2400mg/L (48h, Daphnia magna)
Water 7732-18-5	Not available	Not available	Not available	Not available
Potassium Chloride 7447-40-7	2500 mg/L EC50 Desmodesmus subspicatus 72 h	750 - 1020 mg/L LC50 (Pimephales promelas) 96 h static 1060 mg/L LC50 (Lepomis macrochirus) 96 h static	Not available	EC50: =825mg/L (48h, Daphnia magna) EC50: =83mg/L (48h, Daphnia magna)
Sodium Chloride 7647-14-5	Not available	4747 - 7824 mg/L LC50 (Oncorhynchus mykiss) 96 h flow-through 5560 - 6080 mg/L LC50 (Lepomis macrochirus) 96 h flow-through 6020 - 7070 mg/L LC50 (Pimephales promelas) 96 h static 6420 - 6700 mg/L LC50 (Pimephales promelas) 96 h static 12946 mg/L LC50 (Lepomis macrochirus) 96 h static 7050 mg/L LC50 (Pimephales promelas) 96 h semi-static	Not available	EC50: 340.7 - 469.2mg/L (48h, Daphnia magna) EC50: =1000mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation No information available.

Chemical Name	Partition coefficient
Calcium Chloride 10043-52-4	Not available
Water 7732-18-5	Not available
Potassium Chloride 7447-40-7	Not available
Sodium Chloride 7647-14-5	Not available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Do not flush to surface water or sanitary sewer systems. Disposal of all wastes must be done in accordance with

municipal, provincial and federal regulations.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available.

DOT (U.S.)

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available

15. REGULATORY INFORMATION

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

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Calcium Chloride - 10043-52-4	Not Listed	Not Listed	Not Listed
Water - 7732-18-5	Not Listed	Not Listed	Not Listed
Potassium Chloride - 7447-40-7	Not Listed	Not Listed	Not Listed
Sodium Chloride - 7647-14-5	Not Listed	Not Listed	Not Listed

International Inventories

TSCA	Complies
DSL/NDSL	Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA:	**Health hazards** 2	**Flammability** 0	**Instability** 0	**Physical and chemical properties** -
HMIS Health Rating:	**Health hazards** 2	**Flammability** 0	**Physical hazards** 0	**Personal protection** X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

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End of Safety Data Sheet