

MATERIAL SAFETY DATA SHEET 200-01 / 200-20

Canutec 1-613-996-6666 (24 hours)

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product identification : Product name : Chemical family : Supplier / Manufacturer :	200-01 / 200-20 Ice melter 90% calcium chloride Mixture Auto-Chem Inc. 33 de Lyon Repentigny, QC, Canada J5Z 4Z3 Tel : 450-654-9292 Fax : 450-654-0633
Contact :	www.autochem.com Jean Dagenais

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS	Percentage	Exposure limits
Calcium chloride	10043-52-4	60 - 100	LD50 900 – 2100 mg/kg, rat, oral
Potassium chloride Sodium chloride	7447-40-7 7647-14-5	1 – 5 1 – 5	LD50 2600 mg/kg, rat, oral No data.

3. HAZARDS IDENTIFICATION

Routes of entry:Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects :

- Eye contact : Dust may cause severe irritation. May cause corneal injury. Effects may be slow to heal.
- Skin contact : Brief contact is essentially non irritating to skin.
- Inhalation : Dust may cause irritation of upper respiratory tract (nose and throat). Vapours are unlikely due to physical properties.
- Ingestion : Low toxicity of swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration.

Potential chronic health effects :

Eye contact :	None known.
Skin contact :	Prolonged contact may cause skin irritation, even a burn. Unlikely to result in absorption of harmful amounts.
Inhalation : Ingestion :	None known. None known.

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

4. FIRST AID MEASURES

- Eyes : Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.
- Skin : Wash skin with plenty of water.
- Inhalation : Remove person to fresh air. In case of respiratory failure, give artificial respiration. In case of respiratory distress, obtain medical attention.
- Ingestion : Do not induce vomiting. Give 8 ounces or 240 ml or water or milk if available and transport to medical facility. Never give anything by mouth to an unconscious or convulsing person. In case of respiratory or cardiac arrest, start cardio-pulmonary resuscitation and obtain medical attention.
- Notes to physician: Due to irritant properties, swallowing may result in burns/ulcerations of the mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal / oesophageal control if lavage is done. If burn is present, treat as any thermal burn, after decontamination. 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

Flash point :	Not flammable.
Auto-ignition temperature :	Not applicable.
Flammability limits – air (%) :	Not applicable.
Extinguishing media :	According to the cause of fire.
Protective equipment :	Firefighters should wear appropriate protection equipment and
	autonomous breathing apparatus.
Hazardous combustion materia	ls : Not applicable.
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Recommendations: Heat is generated when product mixes with water.

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate protection equipment.

Restrict spill area to qualified personnel. Insure adequate ventilation. Prevent spilled product from entering sewers or waterways.

- Small spill : Contain spilled material if possible. Store residues in closed containers and identify for elimination.
- Large spill : Contain spilled material if possible. Store residues in closed containers and identify for elimination.

7. HANDLING AND STORAGE

Handling : Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving. Avoid contact with eyes, skin and clothing. Do not swallow. Wash thoroughly after handling. Wash contaminated clothing before reuse. Empty containers may contain residues. Dispose according to regulations.

Storage : Store in a cool, dry area. Protect from atmospheric moisture.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

 Engineering controls :
 General ventilation is recommended.

 Personal protection equipment for routine handling :

 Eye :
 Splash goggles.

 Skin :
 Long sleeves clothes or lab coat.

 Gloves :
 Chemicals resistant gloves.

Inhalation :	If necessary, use a NIOSH/MSHA approved mask.

Personal protection equipment for spills :

Eyes :	Splash goggles.	
Skin :	Impervious clothes.	
Gloves : Inhalation :	Chemicals resistant gloves. NIOSH/MSHA approved mask. apparatus is recommended.	If in an enclosed area, an autonomous breathing

Note : These precautions are for room temperature handling. Use at elevated temperatures or aerosol spray applications may require added protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state :	Solid.
Coulour :	White.
Odour :	Odourless.
pH :	Not applicable.
Boiling point :	Not applicable.
Freezing point :	722 C (literature)
Vapour pressure :	Not determined.
Volatiles (weight) :	Not determined.
Solubility (water) :	Soluble.
VOC (%) :	Not determined.
Viscosity :	Not determined.

10. STABILITY AND REACTIVITY

Chemical stability :	Stable. Hygroscopic.
Hazardous polymerizatio	n : None known.
Conditions to avoid :	None known. Avoid moisture.
Materials to avoid : F f f	Heat is generated when mixed with water. Spattering and boiling can occur. Sulphuric acid. Corrosive when wet. Flammable hydrogen may be generated rom contact with zinc, sodium. Reaction of bromide impurity with oxidizing naterials may generate trace levels of impurities such as bromate.
Dangerous decomposition	n products : None known.

11. TOXICOLOGICAL INFORMATION

Ingredient	CAS	Percentage	Exposure limits
Calcium chloride	10043-52-4	60 - 100	LD50 900 – 2100 mg/kg, rat, oral
Potassium chloride	7447-40-7	1 – 5	LD50 2600 mg/kg, rat, oral
Sodium chloride	7647-14-5	1 – 5	No data.

Potential acute health effects :

Eye contact :	Dust may cause severe irritation. May cause corneal injury. Effects may be slow to
	heal.
Skin contact :	Brief contact is essentially non irritating to skin.
Inhalation :	Dust may cause irritation of upper respiratory tract (nose and throat). Vapours are unlikely due to physical properties.
Ingestion :	Low toxicity of swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury. Swallowing may result in gastrointestinal irritation or ulceration.

Potential Chronic Health Effects

Carcinogenic effects:	None known.
Mutagenic effects:	None known.
Teratogenic effects:	None known.

12. ECOLOGICAL INFORMATION

Ingrédient	CAS	Test	Species
Calcium chloride	10043-52-4	LC50 8350 – 10650 mg/l	Lepomis macrochirus
		LC50 759 – 3005 mg/l	Daphnia magna
		EC50 >1000 mg/l	Microorganisms
Potassium chloride	7447-40-7	LC50 4236 mg/l, 96 hrs	Oncorhynchus mykiss
		LC 50 3470 mg/l, 96 hrs	Ceriodaphnia dubia
		EC50 590 mg/l, 24 hrs	Daphnia magna
Sodium chloride	7647-14-5	LC50 10610 mg/l	Pimephales promelas
		LC504571 ma/l	Daphnia magna
		IC50 >1000 mg/I OECD209	Microorganisms

Do not allow product or firefighting water run-off to enter sewers or waterways. No bio-concentration of the components is expected because of the relatively high water solubility. Biodegradation is not applicable. Materials are practically non-toxic to aquatic organisms on an acute basis.

13. DISPOSAL CONSIDERATIONS

Waste disposal method :Dispose according to municipal, provincial and federal regulations.Contaminated packaging :According to municipal, provincial and federal regulations.

14. TRANSPORT INFORMATION

Not regulated for transport.

15. **REGULATORY INFORMATION**

WHIMS : D2B Toxic materials with other effects.

- DSL : All components of this product are either on the Domestic Substance List (DSL), the Non-Domestic Substance List (NDSL) or exempt.
- TSCA : U.S. TSCA Inventory Status : All components of this product are either on the Toxic Substances Control Act Inventory List or exempt.

16. OTHER INFORMATION

Prepared by : Auto-Chem Inc.

Date : Sept 2015

MSDS 200-01 / 200-20 Ice melter 90% calcium chloride

Notice to reader :

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Auto-Chem makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Auto-Chem's control and therefore users are responsible to verify this data under their own operation conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.