



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Calcium chloride

CAS No. : 10035-04-8

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

Recommended uses : Laboratory chemicals

Uses advised against: Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company : Krishna Solvechem Limited.
B/503, Sahayog, S. V. Road,
Kandivali (West), Mumbai – 400067. India.

Telephone : +91-22-6123 0222

Email : exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious Eye Damage/Eye Irritation	(Category 2)
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2.2 Label elements

Pictogram :



Signal word Warning

Hazard statement (s) Causes severe eye irritation

Precautionary statement(s)

P264

Wash 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.

Supplemental Hazard Statement

None



2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition / information on ingredients

3.1

Component	CAS-No	Weight %
Calcium chloridedihydrate	10035-04-8	<=100

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice:	If symptoms persist, call a physician.
If inhalation :	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
In case of skin contact :	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact :	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion :	Clean mouth with water and drink afterwards plenty of water.
4.2 Most important symptoms and effects :	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
4.3 Notes to Physician :	Treat symptomatically

SECTION 5: Firefighting effects

5.1 Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media:	For this substance/mixture no limitations of extinguishing agents are given.
5.2 Flash Point :	No data available
Method :	No information available



Autoignition Temperature:	No information available
Explosion Limits:	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical :	Not combustible. Ambient fire may liberate hazardous vapours.
Hazardous Combustion Products :	Calcium oxide, Hydrogen chloride gas
5.4 Protective Equipment and Precautions for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
5.5 Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
SECTION 6: Accidental release measures	
6.1 Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
6.2 Environmental precautions	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
6.3 Methods and materials for containment and cleaning up	Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
SECTION 7: Handling and storage	
7.1 Precautions for safe handling	For precautions see section 2.2



7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

SECTION 8: Exposure controls/personal protection

8.1 Exposure controls

Personal protective equipment -

Eye / Face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with othersubstances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

Body protection

Protective clothing

Respiratory protection

Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the followingstandards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	white crystalline
b) Odour	Odorless
c) Odour Threshold	No information available
d) pH	4,5 - 9,2 at 50 g/l at 20 °C
e) Melting point / freezing point	No data available
f) Initial boiling point and	No data available



boiling range	
g) Flash point	No data available
h) Evaporation rate	No information available
i) Flammability (solid, gas)	Not Flammable
j) Upper/lower flammability or explosive limits	No data available No data available
k) Vapour pressure	0,01 hPa at 20 °C
l) Density	1,85 g/cm ³ at 20 °C
m) Specific Gravity	No information available
n) Solubility	745 g/l at 20 °C - (anhydrous)
o) Partition coefficient: n octanol/water	Not applicable for inorganic substances
p) Auto-ignition temperature	No information available
q) Decomposition temperature	No information available
r) Viscosity	No information available
s) Molecular formula	CaCl ₂ : 2H ₂ O
t) Molecular Weight	147.01 g/mol
SECTION 10: Stability and Reactivity	
10.1 Reactive Hazard :	No information available
10.2 Chemical stability :	The product is chemically stable under standard ambient conditions (room temperature)
10.3 Possibility of hazardous reactions :	Exothermic reaction with: boron trifluoride vinylmethyl ether Water Generates dangerous gases or fumes in contact with:Metals, Zinc
10.4 Conditions to avoid :	No information available
10.5 Incompatible materials:	No data available
10.6 Hazardous decomposition products :	In the event of fire : see section 5
10.7 Hazardous Polymerization	No information available



SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 2.120 mg/kg

Remarks: (anhydrous substance)

Symptoms: Possible damages:, mucosal irritations

LD50 Dermal - Rabbit - male and female - > 5.000 mg/kg

Remarks: (anhydrous substance)

(ECHA) The value is given in analogy to the following substances: calcium chloride

Skin corrosion/Irritation :

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

Remarks: (anhydrous substance)

The value is given in analogy to the following substances: calcium chloride

Serious eye damage / eye irritation :

Eyes - Rabbit

Result: Moderate eye

irritation(OECD Test

Guideline 405) Remarks:

(ECHA)

The value is given in analogy to the following substances: calcium chloride

Germ cell mutagenicity :

Test Type: Ames test

Test system: S. typhimurium Metabolic activation: Metabolic activationMethod: OECD Test

Guideline 471 Result: negative Remarks: (anhydrous substance)Test Type: Ames test

Result: negative Remarks: (anhydrous substance)(Lit.)

Test Type: Mutagenicity (mammal cell test): chromosome

aberration.Test system: Chinese hamster fibroblasts Metabolic

activation: without metabolic activationMethod: OECD Test

guideline 473 Result: negative Remarks: (anhydrous substance)

Reproductive Effects:	No information available.
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Developmental Effects :	No information available.
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Carcinogenicity:	No information available.
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STOT - single exposure :	None known
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STOT - repeated exposure:	None known
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Aspiration hazard :	No information available.
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Endocrine Disruptor Information :

The substance/mixture does not contain components considered to have

endocrine disrupting properties according to REACH Article57(f) or

Commission Delegated regulation (EU) 2017/2100 or Commission Regulation

(EU) 2018/605 at levels of 0.1% or higher. RTECS: EV9810000

Other Adverse Effects :

The toxicological properties have not been fully investigated.



SECTION 12: Ecological information

12.1

Toxicity:

Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
static test LC50 - Pimephales promelas (fathead minnow) - 4.630mg/l - 96 h (US-EPA)Remarks: (anhydrous substance)(ECHA) The value is given in analogy to the following substances: calciumchloride	static test EC50 - Daphnia magna (Water flea) - 2.400 mg/l - 48 h(OECD Test Guideline 202) Remarks: (anhydrous substance)(ECHA) The value is given in analogy to the following substances: calciumchloride	ErC50 - Pseudokirchneriella subcapitata - > 4.000 mg/l - 72 h(OECD Test Guideline 201) Remarks: (anhydrous substance)(ECHA) The value is given in analogy to the following substances: calciumchloride

12.2 Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganicsubstances.

Bioaccumulation/ Accumulation No information available

12.3 Mobility: No information available

12.4 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

14.1 UN number :

ADR/RID: IMDG: IATA:

14.2 UN proper shipping name

ADR/RID : Not dangerous goods

IMDG : Not dangerous goods

IATA : Not dangerous goods

14.3 Transport hazard class(es) ADR/RID: IMDG: IATA:

14.4 Packaging group: ADR/RID: IMDG: IATA:



SECTION 15: Regulatory information

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

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

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

16.1 Prepared By:	Regulatory affairs Krishna Solvechem Ltd
Email:	exports@kscl.co.in
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Print Date:	19-Jan-2023
Revision Summary:	This document has been updated to comply with the US OSH. HazCom 2012 Standard replacing the current legislation under 29 C F R 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

16.2 Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.