Safety Data Sheet

Date of Issue: 8.09.2021 Date of Expiry: 8.09.2026

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**
Address : PO Box 34125, Birkenhead, Auckland 0746
Telephone : +64 9 480 4386
Facsimile : +64 9 480 4385
Emergency phone number : 0800 243 622 (24 hours)

Product Name	Calcium Chloride Dihydrate
Product Code	1780
CAS No.	10035-04-8

Recommended use : Laboratory Investigations

2: Hazard's identification

2.1 GHS Classification
Eye irritation (Category A), , H319

2.2 GHS Label elements, including precautionary statements

Pictogram
Signal word Warning

Hazard statement(s)
H319 Causes serious eye irritation.

Precautionary statement(s)
Prevention
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ 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.

2.3 Other hazards - none

3: Composition/information on ingredients

3.1 Substances
Formula : $CaCl_2 \cdot 2H_2O$
Molecular weight : 147.01 g/mol

Hazardous ingredients

Component	Classification	Concentration
Calcium chloride dihydrate		
	6.4 A; H319	<= 100 %

4: First aid measures

4.1 Description of first-aid measures

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

If inhaled
After inhalation: fresh air.

In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5: Firefighting measures

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 Special hazards arising from the substance or mixture

Hydrogen chloride gas
Calcium oxide
Not combustible.
Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 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.

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
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
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.

6.4 Reference to other sections
For disposal see section 13.

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.
hygroscopic

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8: Exposure controls/personal protection

8.1 Control parameters
Ingredients with workplace control parameters
We are not aware of any national exposure limit.

8.2 Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

Control of environmental exposure
Do not let product enter drains.

9: Physical and chemical properties

(a) Appearance	
Physical state	: Crystalline
Colour	: white
(b) Odour	: Odourless
(c) Odour threshold	: no data available
(d) Ph	: 4.5- 6.5
(e) Melting point/freezing point	: no data available
(f) Initial boiling point and boiling range	: 176 °C
(g) Flash point	: no data available
(h) Evaporation rate	: no data available
(i) Flammability (solid, gas)	: Product is not flammable
(j) Flammability or explosive limits	
Lower explosion limit	: no data available
Upper explosion limit	: no data available
(k) Vapour pressure	: no data available
(l) Vapour density	: no data available
(m) Solubility(ies)	
Water solubility (g/L)	: 1000 g/l
Soluble (g/L) in Ethanol	: no data available
(n) Partition coefficient: n-octanol/water	: no data available
(o) Auto-ignition temperature	: no data available
(p) Decomposition temperature	: no data available
(q) Viscosity	
Kinematic viscosity	: no data available
Dynamic	: no data available
Other information:	: no further relevant information available

10: Stability and reactivity

10.1 Reactivity
No data 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
Exposure to moisture may affect product quality.
no information available

10.5 Incompatible materials
No data available

10.6 Hazardous decomposition products
In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Symptoms: After uptake of large quantities:, Stomach/intestinal disorders
Symptoms: Possible damages:, mucosal irritations
LD50 Dermal - Rabbit - > 5,000 mg/kg
Remarks: (ECHA)

Skin corrosion/irritation
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)
Remarks: (anhydrous substance)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Eye irritation
(OECD Test Guideline 405)
Remarks: (anhydrous substance)
Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available
Test Type: Ames test
Result: negative
Remarks: (anhydrous substance)
(Lit.)

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Additional Information
RTECS: EV9810000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12: Ecological information

12.1 Toxicity
Toxicity to fish
LC50 - Lepomis macrochirus (Bluegill sunfish) - 10,650 mg/l - 96 h
Remarks: (anhydrous substance)
(IUCLID)

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 144 mg/l - 48 h
Remarks: (anhydrous substance)
(IUCLID)

Toxicity to algae
IC50 - algae - 3,130 mg/l - 120 h
Remarks: (anhydrous substance)
(IUCLID)

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
Discharge into the environment must be avoided.

13: Disposal considerations

13.1 Waste treatment methods
Product
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations
14.1	**UN Number**	-	-	-
14.2	**UN Proper Shipping name**	Not dangerous goods	Not dangerous goods	Not dangerous goods
14.3	**Transport Hazard Class**	-	-	-
14.4	**Packaging group**	-	-	-
14.5	**Environmental Hazards**	no	no	no
14.6	**Special precautions for user**			
14.7	**Incompatible materials**			

Further information
Not classified as dangerous in the meaning of transport regulations.

15: Regulatory information

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

National regulatory information
HSNO Approval Code: HSR003389
HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits Group Standard 2006
Tracking Required: not required, not required
Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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