

Calcium chloride hexahydrate**12074-1KG**

Version 1.2

Revision Date 04/06/2022

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Calcium chloride hexahydrate

Number : 000000021940

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : solid

Color : colourless

Odor : odourless

Classification of the substance or mixture

Classification of the substance : Eye irritation, Category 2A
or mixture

GHS Label elements, including precautionary statements

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Symbol(s)

:



Signal word

: Warning

Hazard statements

: Causes serious eye irritation.

Precautionary statements

: **Prevention:**

Wash skin thoroughly after handling.

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.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula

: $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$

Chemical nature

: Substance

Chemical name	CAS-No.	Concentration
Calcium chloride-6-hydrate	7774-34-7	$\geq 90.00 - \leq 100.00 \%$

SECTION 4. FIRST AID MEASURES

General advice

: First aider needs to protect himself. Move out of dangerous

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area. Take off all contaminated clothing immediately.

- Inhalation : If inhaled, remove to fresh air.
- Skin contact : After contact with skin, wash immediately with plenty of water.
- Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : When swallowed, allow water to be drunk. Call a physician immediately.

Notes to physician

- Most important symptoms/effects, acute and delayed : No information available.
- Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder
- Specific hazards during firefighting : Fire may cause evolution of:
Calcium oxides
Hydrogen chloride gas
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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- | | | |
|---|---|---|
| Personal precautions,
protective equipment and
emergency procedures | : | Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons
must be kept away.
Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |
| Environmental precautions | : | Should not be released into the environment. |
| Methods and materials for
containment and cleaning
up | : | Use mechanical handling equipment.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations. |

SECTION 7. HANDLING AND STORAGE**Handling**

- | | | |
|--|---|---|
| Precautions for safe
handling | : | Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |
| Advice on protection against
fire and explosion | : | Normal measures for preventive fire protection. |

Storage

- | | | |
|--|---|---|
| Conditions for safe storage,
including any
incompatibilities | : | Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated
place. |
|--|---|---|

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | | |
|----------------------|---|--|
| Protective measures | : | Ensure that eyewash stations and safety showers are close to
the workstation location.
Legal requirements are to be considered in regard of the
selection, use and care of personal protective equipment.
Avoid breathing dust.
Avoid contact with skin, eyes and clothing. |
| Engineering measures | : | Provide adequate ventilation. |

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- Eye protection : Safety goggles
- Hand protection : Latex gloves
Gloves must be inspected prior to use.
Replace when worn.
- Skin and body protection : Protective suit
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Hygiene measures : Take off all contaminated clothing immediately.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : solid
- Color : colourless
- Odor : odourless
- Odor threshold : Note: No data available
- pH : ca. 7.0 - 8.0 at , 20 °C
- Melting point/range : 29 °C
- Boiling point/boiling range : 1,900 °C at 1,013 hPa
- Flash point : Note: Not applicable
- Evaporation rate : Note: No data available

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Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: ca. 1.680 g/cm ³ at 20 °C
Water solubility	: 745.0 g/l at 20 °C
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Decomposition temperature	: Note: Loss of water of crystallization on heating.
Viscosity, dynamic	: Note: No data available
Viscosity, kinematic	: Note: No data available
Molecular weight	: 219.08 g/mol
Bulk density	: ca. 1,000 kg/m ³

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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Protect from heat/overheating.
Incompatible materials	: Bromine Trifluoride Strong acids Methyl Vinyl Ether Boron compounds
Hazardous decomposition products	: Calcium oxides Hydrogen chloride

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: 2,307 mg/kg Species: Rat Method: OECD Test Guideline 401 Test substance: anhydrous substance
Acute inhalation toxicity	: Note: No data available
Acute dermal toxicity	: LD50: > 5,000 mg/kg Species: Rabbit Test substance: anhydrous substance
Skin irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404 Test substance: anhydrous substance

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Eye irritation	: Note: Classification based on Annex VI of regulation 1272/2008/EC.
Sensitisation	: Note: No data available
Genotoxicity in vitro	: Test Method: Ames test Metabolic activation: with and without metabolic activation Result: negative Method: OECD Test Guideline 471 Test substance: anhydrous substance
	: Test Method: Chromosome aberration test in vitro Metabolic activation: without metabolic activation Result: negative Method: OECD Test Guideline 473 Test substance: anhydrous substance
Further information Calcium chloride-6-hydrate	: Toxicological data applies only to the water free substance.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish	: static test LC50: 4,630 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) Test substance: anhydrous substance
Toxicity to daphnia and other aquatic invertebrates	: static test 2,400 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Test substance: anhydrous substance Method: OECD Test Guideline 202

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Toxicity to algae : Biomass
EC50: 2,900 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Test substance: anhydrous substance
Method: OECD Test Guideline 201

: Growth rate
EC50: 4,000 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Test substance: anhydrous substance
Method: OECD Test Guideline 201

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

Other information : Storage-/Transp.-Temp. < 15 °C

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SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemicals Act (AICC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis)

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reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : Acute Health Hazard**California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.**SECTION 16. OTHER INFORMATION**

	HMIS III	NFPA
Health hazard	: 1	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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 a 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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group