

**Calcium chloride**  
**C1016-100G**

Version 1.2

Issuing date 07/22/2016

Revision Date 10/02/2017

Print Date 08/06/2019

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Calcium chloride

Number : 000000020204

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH  
Wunstorfer Straße 40  
Seelze, 30926

For further information, please contact: : 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**  
: **In Japan: +(81)-345209637**  
: (24 hours/day, 7 days/week)

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture**

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

**GHS Label elements, including precautionary statements**

Symbol(s) :



Signal word : Warning

Hazard statements : Causes serious eye irritation.

Precautionary statements : **Prevention:**  
Wash skin thoroughly after handling.

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Wear protective gloves/ 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.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**Formula :  $\text{CaCl}_2$ 

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Calcium chloride	10043-52-4	100.00 %
Calcium chloride		

Note: none

**4. FIRST AID MEASURES**

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

**5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide ( $\text{CO}_2$ )  
Dry powder
- Specific hazards during : In case of fire hazardous decomposition products may be

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firefighting

produced such as:  
Calcium oxides  
Hydrogen chloride gasSpecial protective equipment  
for firefighters: Wear an approved positive pressure self-contained breathing  
apparatus in addition to standard fire fighting gear.

Further information

: Use extinguishing measures that are appropriate to local  
circumstances and the surrounding environment.**6. ACCIDENTAL RELEASE MEASURES**Personal precautions,  
protective equipment and  
emergency procedures: Wear personal protective equipment.  
Avoid dust formation.  
Avoid contact with skin, eyes and clothing.

Environmental precautions

: Should not be released into the environment.

Methods and materials for  
containment and cleaning up: Avoid dust formation.  
Use mechanical handling equipment.  
Sweep up and shovel into suitable containers for disposal.**7. HANDLING AND STORAGE****Handling**

Precautions for safe handling

: Wear personal protective equipment.  
Use only with adequate ventilation.Advice on protection against  
fire and explosion

: Normal measures for preventive fire protection.

**Storage**Conditions for safe storage,  
including any  
incompatibilities: Keep containers tightly closed in a dry, cool and well-  
ventilated place.  
Store in original container.  
Protect from atmospheric moisture and water.**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Individual protection measures, such as personal protective equipment**

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Respiratory protection	: In the case of dust or aerosol formation use respirator with an approved filter.
Hand protection	: Latex gloves Gloves must be inspected prior to use. Replace when worn.
Eye protection	: Safety goggles
Skin and body protection	: Protective suit
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.
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.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: solid
Colour	: colourless
Odour	: odourless
pH	: ca. 6.0 at , 20 °C
Melting point/range	: 765 °C
Boiling point/boiling range	: ca. 1,900 °C at 1,013 hPa
Flash point	: Note: Not applicable
Flammability	: The product is not flammable.
Lower explosion limit	: Note: Not applicable

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Upper explosion limit	: Note: Not applicable
Vapour pressure	: Note: no data available
Density	: ca. 2.150 g/cm <sup>3</sup> at 20 °C
Water solubility	: Note: completely soluble
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: Note: Not applicable
Decomposition temperature	: Note: No decomposition if used as directed.
Molecular weight	: 110.98 g/mol
Bulk density	: ca. 640 kg/m <sup>3</sup>

**10. STABILITY AND REACTIVITY**

Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Protect from atmospheric moisture and water. Avoid dust formation.
Incompatible materials to avoid	: Strong acids Bromine Trifluoride Methyl Vinyl Ether Zinc Boron compounds
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Calcium oxides

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Hydrogen chloride gas

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: LD50: 2,301 mg/kg Species: Rat Method: OECD Test Guideline 401
Acute inhalation toxicity	: Note: no data available
Acute dermal toxicity	: LD50: > 5,000 mg/kg Species: Rabbit
Skin irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Eye irritation	: Species: Rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405
Sensitisation	: Note: no data available
Genotoxicity in vitro	: Test Method: Ames test Metabolic activation: with metabolic activation Result: negative Method: OECD Test Guideline 471  : Test Method: Chromosome aberration test in vitro Metabolic activation: without metabolic activation Result: negative Method: OECD Test Guideline 473
Teratogenicity	: Species: Rat Application Route: Oral exposure Note: Did not show teratogenic effects in animal experiments.

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**12. ECOLOGICAL INFORMATION****Toxicity**

- Toxicity to fish : static test  
LC50: 4,630 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)
- Toxicity to daphnia and other aquatic invertebrates : static test  
LC50: 2,400 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 202
- Toxicity to algae : Biomass  
EC50: 2,900 mg/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Method: OECD Test Guideline 201
- : Growth rate  
EC50: > 4,000 mg/l  
Exposure time: 72 h  
Species: Pseudokirchneriella subcapitata (green algae)  
Method: OECD Test Guideline 201

**Persistence and degradability**

- Biodegradability : Note: The methods for determining the biological degradability are not applicable to inorganic substances.

**13. DISPOSAL CONSIDERATIONS**

- Disposal methods : In accordance with local and national regulations.

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**14. TRANSPORT INFORMATION****ADR**

Not dangerous goods

**IATA**

Not dangerous goods

**IMDG**

Not dangerous goods

**RID**

Not dangerous goods

**15. REGULATORY INFORMATION****National regulatory information**

Fire Service Law : Not relevant

Poisonous and Deleterious  
Substances Control Law : Not relevant**Other international regulations****Notification status**US. Toxic Substances  
Control Act : On TSCA InventoryAustralia. Industrial Chemical  
(Notification and  
Assessment) Act : On the inventory, or in compliance with the inventoryCanada. 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

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Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : 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

**16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 2	2
Flammability	: 0	0
Physical Hazard	: 1	
Instability	:	1

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