Calcium chloride dihydrate

12022-15KG

SECTION 1. IDENTIFICATION

Product name	:	Calcium chloride dihydrate
Number	:	000000020690
Product Use Description	:	Laboratory chemicals
Manufacturer or supplier's details	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 Seelze, 30926
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 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.
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

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Calcium chloride-2-hydrate	10035-04-8	100.00 %

SECTION 4. FIRST AID MEASURES

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

Inhalation	:	If inhaled, remove to fresh air. Call a physician if irritation develops or persists.
Skin contact	:	After contact with skin, wash immediately with plenty of water. Call a physician if irritation develops or persists.
Eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Remove contact lenses. Call a physician immediately.
Ingestion	:	Clean mouth with water and drink afterwards plenty of water. 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	:	Some risk may be expected of corrosive and toxic decomposition products. In case of fire hazardous decomposition products may be produced such as: Calcium oxide Gaseous hydrogen chloride (HCl).
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus and protective suit. No unprotected exposed skin areas.
Further information	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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	:	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not flush into surface water or sanitary sewer system.
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. The product itself does not burn. Not expected to form explosive dust-air mixtures.

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 dust formation.
Engineering measures	:	Local exhaust
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. Keep working clothes separately. Separate rooms are required for washing, showering and changing clothes. 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	:	4.5 - 8 at 5 Weight percent 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
Evaporation rate	:	Note: No data available
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	:	Note: No data available
Water solubility	:	830 g/l at 20 °C
Partition coefficient: n-octanol/water	:	Note: No data available
Ignition temperature	:	Note: Not applicable
Auto-ignition temperature	:	Note: not auto-flammable

Decomposition temperature	:	Note: No decomposition if used as directed., Loss of water of crystallization on heating.
Viscosity, dynamic	:	Note: No data available
Viscosity, kinematic	:	Note: No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Molecular weight	:	147.01 g/mol
Bulk density	:	ca. 700 kg/m3

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerisation does not occur.
Conditions to avoid	:	Protect from atmospheric moisture and water. Temperatures greater than recommended storage temperature. Keep away from direct sunlight.
Incompatible materials	:	On dilution or dissolving in water, considerable heating always occurs. Humid air
Hazardous decomposition products	:	In case of fire hazardous decomposition products may be produced such as: Calcium oxide Gaseous hydrogen chloride (HCl).

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50: 2,120 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: Rat
Skin irritation	:	Species: Rabbit Result: non-irritant Method: OECD Test Guideline 404
Eye irritation	:	Species: Rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405
Sensitisation	:	Note: No data available
Repeated dose toxicity	:	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 Cell type: Chinese Hamster Lung Cells Metabolic activation: without metabolic activation Result: negative Method: OECD Test Guideline 473

Teratogenicity	:	Species: Rat NOAEL: > 176 mg/kg bw/d Method: OECD Test Guideline 414

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	:	LC50: 13,400 mg/l Exposure time: 96 h Species: Gambusia affinis (Mosquito fish)
	:	LC50: 10,650 mg/l Exposure time: 96 h Species: Lepomis macrochirus (Bluegill sunfish)
	:	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	:	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: Selenastrum capricornutum (green algae) Test substance: anhydrous substance Method: OECD Test Guideline 201
	:	Growth rate EC50: > 4,000 mg/l Exposure time: 72 h Species: Selenastrum capricornutum (green algae)

Test substance: anhydrous substance
Method: OECD Test Guideline 201

Elimination information (persistence and degradability)

Mobility : Note: No data available

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

Further information on ecology

Ecotoxicology Assessment

Results of PBT assessment
Not applicable
Additional ecological information : No data available

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

SECTION 15. REGULATORY INFORMATION

Inventories

US. Toxic Substances : On TSCA Inventory

Control Act

Australia. Industrial Chemical (Notification and Assessment) Act	:	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) 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	:	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.
Previous Issue Date: 09/24/2016
Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group