

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 11.18.2014

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Calcium Chloride,

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Calcium Chloride,

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25223A

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Eye irritation, category 2A

Eye Irritation 2

Signal word :Warning

Hazard statements:

Causes serious eye irritation

Precautionary statements:

Wear protective gloves/protective clothing/eye protection/face protection

Wash ... thoroughly after handling

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

Other Non-GHS Classification:

WHMIS

D2B



NFPA/HMIS

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NFPA SCALE (0-4)

Health	2
Flammability	0
Physical Hazard	1
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:

CAS 10043-52-4	Calcium Chloride,Anh,ACS,2.5KG	100 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed person to fresh air; if breathing is difficult, give oxygen. Loosen clothing and place exposed individual in a comfortable position. Seek immediate medical attention

After skin contact: Wash hands and exposed skin with soap and plenty of water. Rinse or flush skin/hair gently with water for at least 20 minutes. Seek medical attention if irritation persists or if concerned

After eye contact: Rinse or flush eye gently with water for at least 15-20 minutes, lifting upper and lower lids. Seek medical attention if irritation persists or if concerned. Protect unexposed eye

After swallowing: Rinse mouth with water (never give anything by mouth to an unconscious person). Do not induce vomiting. Seek medical attention if irritation persists or if concerned

Most important symptoms and effects, both acute and delayed:

Irritation- all routes of exposure. Shortness of breath. Headache. Nausea, vomiting, diarrhea;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Nonflammable. Use appropriate means to extinguish surrounding fire

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Hydrogen chloride gas, Calcium oxide. Not considered to be a fire or explosion hazard. Thermal decomposition can lead to release of irritating gases and vapors

Advice for firefighters:

Protective equipment: Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment

Additional information (precautions):

SECTION 6 : Accidental release measures

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Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.
Avoid dust formation

Environmental precautions:

Should not be released into the environment

Methods and material for containment and cleaning up:

Sweep up spill and containerize for disposal. Use adequate ventilation. Always obey local regulations.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with skin, eyes and clothes. Do not ingest or inhale. Use adequate ventilation

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, well-ventilated area. Protect from freezing and physical damage.
Keep product from moisture

SECTION 8 : Exposure controls/personal protection



Control Parameters:

10043-52-4, Nuisance dust, ACGIH TLV TWA:10mg/m3 (inhalable particles)

10043-52-4, Nuisance dust, OSHA PEL TWA: 15 mg/m3 (total dust)

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:

Not required under normal conditions of use with adequate ventilation. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment

Protection of skin:

Chemical resistant gloves. Wear protective clothing. Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves

Eye protection:

Safety glasses or goggles

General hygienic measures:

Perform routine housekeeping. Wash hands after handling. Avoid contact with skin, eyes and clothes. Do not ingest or inhale. Use adequate ventilation. Before rewearing, wash contaminated clothing

SECTION 9 : Physical and chemical properties

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Appearance (physical state,color):	Beige solid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Odorless	Vapor pressure:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	8-10 (100g/L aq.sol.)	Relative density:	Not determined
Melting/Freezing point:	782C	Solubilities:	Soluble
Boiling point/Boiling range:	>1600C @ 760 mmHg	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid,gaseous):	Not determined	Viscosity:	a. Kinematic:Not determined b. Dynamic: Not determined
Density: Not determined			
Additional property:: Hygroscopic (absorbs moisture from the air)			
Specific Gravity: :Approx 2.15			

SECTION 10 : Stability and reactivity

Reactivity:

Chemical stability:

Possible hazardous reactions:

Conditions to avoid:

Incompatible materials:Strong acids, Borane/boron oxides, Zinc, Calcium oxide, Methyl vinyl ether, Calcium chloride is attacked by bromine trifluoride. Strong oxidizers, metals.

Hazardous decomposition products:Chlorine, hydrogen chloride gas

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	10043-52-4	LD50 oral-rat: 1000 mg/kg
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Dermal:	Rabbit: No irritation	10043-52-4
Ocular:	Rabbit: Moderate irritation	10043-52-4
Ocular:	Section 2	Classified as eye irritant
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.

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Mutagenicity:	Mutagenic effects have occurred in experimental animals
Reproductive Toxicity:	No additional information.

SECTION 12 : Ecological information

Ecotoxicity

10043-52-4: Fish LC50 - Lepomis macrochirus - 10,650 mg/l - 96 h

10043-52-4: invertebrates EC50 - Daphnia magna (Water flea) - 2,400 mg/l - 48 h

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

SECTION 14 : Transport information

UN-Number

Not Regulated

UN proper shipping name

Not Regulated

Transport hazard class(es)

Packing group:Not Regulated

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

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None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

10043-52-4 Calcium Chloride,Anh,ACS,2.5KG

SECTION 16 : Other information

GHS Full Text Phrases:

Abbreviations and acronyms:

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Last updated : 03.19.2015