



SAFETY DATA SHEET

Product name Calcium Chloride Flake

Revision date 5-21-15

Section 1 Identification

Product ID: Calcium Chloride Flake

Chemical Name: Calcium Chloride
Synonyms: Calcium Chloride Flake
CAS Number: 10043-52-4

Product Use: Increases Calcium Hardness

Supplier: Oreq Corporation
42306 Remington Ave.
Temecula, CA 92590
951-296-5076

Emergency Phone# – CHEMTREC: 800-424-9300

Section 2 Hazards identification

GHS CLASSIFICATION: Acute Oral Toxicity Category 4
Serious Eye Damage/Eye Irritation Category 2

GHS SIGNAL WORD: WARNING

HAZARD PICTOGRAMS:



Appearance: White

Physical State: Flake

Odor: Odorless

Hazard Statement(s)

H302 Harmful if swallowed
H316 Causes mild skin irritation
H319 Causes serious eye irritation

Precautionary Statement(s):

P264: Wash ... thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
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.
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth
P280 - Wear protective gloves/protective clothing/eye protection/face protection



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Section 3 Composition / Information on ingredients

Chemical Name	CAS-No	Weight %
Calcium Chloride	10043-52-4	74-100
Water	7732-18-5	0-26
Sodium Chloride	7647-14-5	< 3
Potassium Chloride	7447-40-7	< 3
Magnesium Chloride	7786-30-3	< 0.5

Section 4 First - aid measures

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Obtain medical attention if irritation persists.

Skin Contact: Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

Inhalation: Move to fresh air. Get medical attention immediately if symptoms occur.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell Rinse mouth.

Notes to Physician: Treat symptomatically and supportively.

Section 5 Fire - fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None

Specific Hazards Arising from the Chemical

Avoid generating dust, under certain conditions may cause respiratory irritation. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion Data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 Accidental release measures

Personal Precautions:

Avoid contact with the skin and the eyes. Use personal protective equipment. Avoid dust formation.

Environmental Precautions:

Prevent large spills from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12,



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Section 6 Accidental release measures (Continued)

Ecological Information.

Methods and Materials for Containment and Cleaning Up:

Small and large spills: Contain spilled material if possible. Collect in suitable and properly labeled containers. Flush residue with plenty of water. See Section 13, Disposal considerations, for additional information.

Section 7 Handling and storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Wash clothing before reuse. Always use cool water when dissolving Calcium Chloride. Heat evolved is significant.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture. Store below melting point.

Incompatible Products: Zinc, Bromine tri-fluoride, Methyl vinyl ether

Section 8 Exposure controls / personal protection

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Chloride 10043-52-4	ACGIH - (TLV-TWA) Guideline for nuisance particulate (inhalable particulate): 10 mg/m3	OSHA (PEL-TWA) - Z-3 Mineral Dusts, Inert or Nuisance dusts, (respirable fraction): 5 mg/m3	-

Engineering Measures

Provide local exhaust ventilations system. When there is a potential for exposure, an emergency eyewash and safety shower should be provided within the immediate work area.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with non-flexible side shields or chemical goggles

Skin and Body Protection **Hands and Feet:**
Wear appropriate protective non-leather protective gloves and boots. Chemical protective gloves and boots such as PVC, Neoprene, or Heavy Nitrile are recommended. Leather products do not offer adequate protection and will dehydrate with resultant shrinkage and possible destruction.
Body: Wear appropriate protective, impervious clothing.

Respiratory Protection A respirator is not indicated under normal operating conditions. Use of a NIOSH - approved respirator (N95 or greater) should be based on the presence of nuisance dusts.

Hygiene Measures When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.



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Section 9 Physical and chemical properties

Physical State: Flake

Appearance: white

Odor: odorless

pH: 8-10 100 g/l aq.sol.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: > 1600 deg C @ 760.0

Freezing/Melting Point: 782 deg C

Decomposition Temperature: Not available.

Solubility: 740 g/l water (20°C)

Specific Gravity/Density: Not available.

Molecular Formula: CaCl₂

Molecular Weight: 110.99

Section 10 Stability and reactivity

Chemical Stability: Stable.

Conditions to Avoid: Dust generation, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Zinc, Bromine tri-fluoride, Methyl vinyl ether

Hazardous Decomposition Products: Hydrogen chloride, calcium oxide.

Hazardous Polymerization: Will not occur.

Section 11 Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract.

Eye Contact Irritating to eyes.

Skin Contact May cause irritation.

Ingestion Harmful if swallowed.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Calcium Chloride	= 1000 mg/kg (Rat)	= 2630 mg/kg (Rat)	-
Potassium Chloride	= 2600 mg/kg (Rat)	-	-
Sodium chloride	= 3 g/kg (Rat)	> 10 g/kg (Rabbit)	> 42 g/m ³ (Rat) 1 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause irritation to the respiratory system.

Delayed and immediate effects and also chronic effects from short and long term exposure

Eye damage/irritation

Irritating to eyes.

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenicity

Contains no ingredients above reportable quantities listed as a carcinogen.

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.



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Section 11 Toxicological information (Continued)

STOT - repeated exposure No information available.
Chronic Toxicity Avoid repeated exposure.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product

Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 979 mg/kg; Acute toxicity estimate
LD50 Dermal 2630 mg/kg; Acute toxicity estimate

Section 12 Ecological information

Ecotoxicity

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Calcium Chloride 10043-52-4		LC50 96 h: = 10650 mg/L static (Lepomis macrochirus)		LC50 48 h: = 2400 mg/L (Daphnia magna)
Potassium Chloride 7447-40-7	EC50 72 h: = 2500 mg/L (Desmodesmus subspicatus)	LC50 96 h: 750-1020 mg/L static (Pimephales promelas) LC50 96 h: = 1060 mg/L static (Lepomis macrochirus)		EC50 48 h: = 825 mg/L (Daphnia magna) EC50 48 h: = 83 mg/L Static (Daphnia magna)
Sodium chloride 7647-14-5		LC50 96 h: 5560 - 6080 mg/L flow-through (Lepomis macrochirus) LC50 96 h: = 12946 mg/L static (Lepomis macrochirus) LC50 96 h: 6020 - 7070 mg/L static (Pimephales promelas) LC50 96 h: = 7050 mg/L semi-static (Pimephales promelas) LC50 96 h: 6420 - 6700 mg/L static (Pimephales promelas) LC50 96 h: 4747 - 7824 mg/L flow-through (Oncorhynchus mykiss)		EC50 48 h: = 1000 mg/L (Daphnia magna) EC50 48 h: 340.7 - 469.2 mg/L Static (Daphnia magna)

Section 13 Disposal considerations

Waste Disposal Methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Do not re-use empty containers.

Section 14 Transport information

US DOT – Not Regulated
TDG – Not Regulated
MEX – Not Regulated



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Section 15 Regulatory information

International Inventories

TSCA	Complies
DSL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Section 16 Other information

HMIS Rating

Health hazard: 1
Flammability: 0
Physical Hazard 1

NFPA Rating

Health hazard: 1
Fire Hazard: 0
Reactivity Hazard: 1

DATE OF PREPARATION

5-21-15

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