

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

GHS product identifier	:	94-97% Calcium Chloride Mini-Pellets
Other means of identification	:	Not available.
Product code	:	CC-01
Product use	:	Concrete acceleration, Drilling fluid additive, Dust control
Manufacturer or supplier's details		
Company	:	MORR, Inc.
Address	:	6500 Flotilla Street Commerce, CA 90040 office@MORR.com 855-TRY-MORR www.MORR.com
Emergency telephone number	:	CHEMTREC 24 Hr. Emergency Phone: (800) 424-9300

### SECTION 2. HAZARDS IDENTIFICATION

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A
GHS label elements		
Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	Harmful if swallowed. Causes serious eye irritation. Causes skin irritation.
Precautionary statements		
Prevention	:	Wear protective gloves. Wear eye or face protection. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response	<p>: <b>IF SWALLOWED:</b> Call a POISON CENTER or physician if you feel unwell. Rinse mouth.</p> <p><b>IF ON SKIN:</b> Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention.</p> <p><b>IF IN EYES:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.</p>
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

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### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance/mixture	: <b>Mixture</b>
Other means of identification	: <b>Not available.</b>
Product code	: <b>CC-01</b>

Ingredient name	%	CAS number
calcium chloride	≥90	10043-52-4
<b>Impurity and Stabilizers:</b>		
potassium chloride	≤5	7447-40-7
sodium chloride	≤3	7647-14-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

**Occupational exposure limits, if available, are listed in Section 8.**

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### SECTION 4. FIRST AID MEASURES

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#### Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
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**Inhalation**

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**skin contact**

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed****Potential acute health effects****Eye contact**

: Causes serious eye irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes.

**Inhalation**

: No known significant effects or critical hazards.

**Skin Contact**

: Causes skin irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the skin.

**Ingestion**

: Harmful if swallowed.

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.

**skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : Repeated or prolonged exposure to the substance can produce mucous membranes damage.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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## SECTION 5. FIREFIGHTING MEASURES

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**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard. This material will not burn or burns with difficulty.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
halogenated compounds  
metal oxide/oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

#### Small spill

: Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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## SECTION 7. HANDLING AND STORAGE

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### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Handling and dilution of concentrates:  
water temperature <27°C/80°F

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
calcium chloride	None.
potassium chloride	None.
sodium chloride	None.

#### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### Individual protection measures

##### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

## **Skin protection**

### **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## **Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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### **Appearance**

: Solid. [Pellets.]

### **Physical state**

: White.

### **Color**

: Odorless.

### **Odor threshold**

: Not available.

### **pH**

: Not applicable.

### **Melting point**

: ~772°C (1421.6°F)

<b>Boiling point</b>	: Not applicable.
<b>Flash point</b>	: Not applicable.
<b>Evaporation rate</b>	: Not applicable.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Not available.
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not applicable.
<b>Relative density</b>	: Not available.
<b>Density</b>	: 0.96 to 1.09 g/cm <sup>3</sup>
<b>Solubility</b>	: Not available.
<b>Solubility in water</b>	: Soluble.
<b>Partition coefficient: – octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not applicable.
<b>Decomposition temperature</b>	: Not applicable.
<b>Viscosity</b>	: Not applicable.

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## **SECTION 10. STABILITY AND REACTIVITY**

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<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients. Chemical stability
<b>Chemical stability</b>	: Stable under recommended storage and handling conditions (see Section 7).
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.
<b>Conditions to avoid</b>	: Keep away from: moisture.
<b>Incompatible materials</b>	: May generate heat on contact with water. Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminum, tin, lead and zinc. Keep away from: sulfuric acid and bromide.
<b>Hazardous decomposition</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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## SECTION 11. TOXICOLOGICAL INFORMATION

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### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
calcium chloride	LD50 Dermal	Rabbit	5000 mg/kg	-
	LD50 Oral	Rat	1 g/kg	-
potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

**Conclusion/Summary** : Harmful if swallowed.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
calcium chloride	Eyes - Irritant	Rabbit	-	100 milligrams	21 days
potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

**Conclusion/Summary**

Skin : Causes skin irritation.

Eyes : Causes serious eye irritation.

#### Sensitization

Conclusion/Summary : Not available.

#### Mutagenicity

Conclusion/Summary : Not available.

#### Carcinogenicity

Conclusion/Summary : Not available.

#### Reproductive toxicity

Conclusion/Summary : Not available.

#### Teratogenicity

Conclusion/Summary : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

<b>Information on the likely routes of exposure</b>	:	Routes of entry anticipated: Oral, Dermal, Inhalation, Ocular.
<b>Potential acute health effects</b>		
<b>Eye contact</b>	:	Causes serious eye irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes.
<b>Inhalation</b>	:	No known significant effects or critical hazards.
<b>Skin contact</b>	:	Causes skin irritation. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the skin.
<b>Ingestion</b>	:	Harmful if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>		
<b>Eye contact</b>	:	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	:	Repeated inhalation of dust can produce varying degrees of respiratory irritation or lung damage.
<b>Skin contact</b>	:	Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	:	Repeated or prolonged exposure to the substance can produce mucous membranes damage.
<b>Delayed and immediate effects and also chronic effects from short and long term exposure</b>		
<b>Short term exposure</b>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
<b>Long term exposure</b>		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
<b>Potential chronic health effects</b>		
Not available.		
<b>Conclusion/Summary</b>	:	Not available.
<b>General</b>	:	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	:	No known significant effects or critical hazards.
<b>Mutagenicity</b>	:	No known significant effects or critical hazards.
<b>Teratogenicity</b>	:	No known significant effects or critical hazards.
<b>Developmental effects</b>	:	No known significant effects or critical hazards.

**Fertility effects**

: No known significant effects or critical hazards.

**Numerical measures of toxicity****Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
94-97% Calcium Chloride Mini-Pellets	1032.2	5257.7	N/A	N/A	N/A
calcium chloride	1000	5000	N/A	N/A	N/A
potassium chloride	2600	N/A	N/A	N/A	N/A
sodium chloride	3000	N/A	N/A	N/A	N/A

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

Product/ingredient name	Result	Species	Exposure
calcium chloride	LC50 8350 to 10650 mg/l Fresh water	Fish - <i>Lepomis macrochirus</i>	48 hours
	Acute EC50 3130000 µg/l Fresh water	Algae - <i>Navicula seminulum</i>	96 hours
	Acute EC50 52000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 270 mg/l Marine water	Crustaceans - <i>Americanamysis bahia</i>	48 hours
	Acute LC50 759000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 2110 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - <i>Navicula seminulum</i>	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - <i>Desmodesmus subspicatus</i>	72 hours
	Acute EC50 590 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	24 hours
	Acute EC50 83000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
potassium chloride	Acute LC50 3470 mg/l Fresh water	Crustaceans - <i>Ceriodaphnia dubia</i>	96 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - <i>Pseudosida ramosa</i> - Neonate	48 hours
	Acute LC50 4236 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Acute LC50 880 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours
	Acute EC50 4.74 g/L Fresh water	Algae - <i>Chlamydomonas reinhardtii</i>	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - <i>Cypris subglobosa</i>	48 hours
sodium chloride	Acute EC50 402600 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute EC50 1.7 g/L Fresh water	Fish - <i>Cynopoecilus melanotaenia</i> - Fry	96 hours

	Acute IC50 6.87 g/L Fresh water Chronic LC10 781 mg/l Fresh water  Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Aquatic plants - Lemna minor Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)  Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrookii - Adult	96 hours 3 weeks  96 hours 21 days 8 weeks
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**Conclusion/Summary** : Acute toxicity: Practically non-toxic to aquatic organisms.

#### **Persistence and degradability**

**Conclusion/Summary** : Not available.

#### **Bioaccumulative potential**

Not available.

#### **Mobility in soil**

**Soil/water partition coefficient (KOC)** : 0 to 50

**Mobility** : High mobility in soil, based on experimental data.

**Other adverse effects** : No known significant effects or critical hazards.

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### **SECTION 13. DISPOSAL CONSIDERATIONS**

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**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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## SECTION 14. TRANSPORT INFORMATION

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	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-	-	-
<b>Transport hazard class(es)</b>	-	-	-	-	-	-
<b>Label</b>						
<b>Packing group</b>	-	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	Marine Pollutant: No	No.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

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## SECTION 15. REGULATORY INFORMATION

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**U.S. Federal regulations** :

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**  
**Composition/information on ingredients**

No products were found.

<b>SARA 304 RQ</b>	: Not applicable.
<b>SARA 311/312</b>	
Classification	: ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

#### Composition/information on ingredients

Name	%	Classification
calcium chloride	≥90	ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A
potassium chloride	≤5	EYE IRRITATION - Category 2B
sodium chloride	≤3	EYE IRRITATION - Category 2A

#### State regulations

<b>Massachusetts</b>	: None of the components are listed.
<b>New York</b>	: None of the components are listed.
<b>New Jersey</b>	: None of the components are listed.
<b>Pennsylvania</b>	: None of the components are listed.
<b>California Prop. 65</b>	

**⚠** WARNING: This product can expose you to chemicals including calcium bromate, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Ingredient name	No significant risk level	Maximum acceptable dosage level
Calcium bromate	-	-

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

**Inventory list****Australia**

: All components are listed or exempted.

**Canada**

: All components are listed or exempted.

**China**

: All components are listed or exempted.

**Europe**

: All components are listed or exempted.

**Japan**: **Japan inventory (ENCS):**

All components are listed or exempted.

**New Zealand**

: All components are listed or exempted.

**Philippines**

: All components are listed or exempted.

**Republic of Korea**

: All components are listed or exempted.

**Taiwan**

: All components are listed or exempted.

**Turkey**

: All components are listed or exempted.

**United States**

: All components are listed or exempted.

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**SECTION 16. OTHER INFORMATION**

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**National Fire Protection Association (U.S.A.)**

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**Procedure used to derive the classification**

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2A	Calculation method

## History

Date of printing

: 09/16/2019

Date of issue/Date of revision

: 09/16/2019

Date of previous issue

: No previous validation

Version

: 1

Key to abbreviations

: ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

DOT = Department of Transportation

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

("Marpol" = marine pollution) N/A = Not available

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

SGG = Segregation Group

TDG = Transportation of Dangerous Goods

UN = United Nations

## References

Indicates information that has changed from previously issued version.

## Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.