

LIQUID CALCIUM CHLORIDE GOLD BLEND

Safety Data Sheet (SDS)

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Section 1: Identification

Product Name: Liquid Calcium Chloride Gold Blend

Synonyms: Calcium Chloride Brine, Liquid Calcium Chloride, LCC28, LCCW2426, LCC21

Manufacturer: U.S. Chlorides
distributed by Jet Stream,

Emergency Phone: 610-298-1122

Recommended Use: Dust suppressant, road stabilization, roadway ice control.
well completion, drilling, asphalt reclamation, de-icing.

Section 2: Hazards Identification

Hazard Classifications of Chemical: (GHS-US) Eye Irritant
(GHS-US) Skin Irritant

GHS Signal Word: WARNING

GHS Symbol: Exclamation Point



GHS Health Hazard Statements: Causes skin irritation
Causes serious eye irritation

GHS Precautionary Statements - Prevention: Wear eye protection
Wear protective gloves
Wash thoroughly after handling

GHS Precautionary Statements - Response:

IF IN EYES rinse thoroughly with water for several minutes. Remove contact lenses if present and continue rinsing. If irritation persists seek medical attention.

IF ON SKIN wash with water. If skin irritation persists seek medical attention.

Hazards Not Otherwise Classified:

None identified

Section 3: Composition / Information on Ingredients

Synonyms: Calcium Chloride, Liquid Calcium Chloride, Calcium Chloride Brine, LCC28, WLCC2426, LCC21

Component	% by weight	CAS Number
Water	69-76	7732-18-5
Calcium Chloride	19-21	10043-52-4
Potassium Chloride	< 2	7447-40-7
Sodium Chloride	2-4	7647-14-5
Magnesium Chloride	1-4	7786-30-3

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Section 4: First Aid Measures

First Aid Instructions for relative exposures:

Inhalation: If inhalation of vapor, mist or spray occurs move to a well ventilated area or open air.

Skin Contact: If skin contact causes irritation, wash thoroughly with water. Remove contaminated clothing and wash before reusing. If skin irritation persists, seek medical attention.

Eye Contact: If in eyes immediately rinse with water for several minutes. Remove contact lenses if applicable and continue rinsing. Seek medical attention if irritation persists.

Ingestion: If swallowed rinse mouth with water. Do not induce vomiting. Seek medical attention if discomfort persists.

Most Important Symptoms or Effects - Acute and Delayed

Inhalation: Cough, sore throat.

Skin: Contact with skin may cause redness, itching, swelling and irritation. Skin that is damp, scratched, cut, or covered by contaminated clothing, shoes or gloves may have a more severe reaction.

Eyes: Eye irritation, possibly including swelling, redness and pain.

Ingestion: Sore throat, burning sensation, nausea, vomiting, increased thirst.

Recommendations for medical care and special treatments when necessary:

Do not induce vomiting. Swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract.

Section 5: Fire-Fighting Measures

This material does not burn. Use extinguishing agent appropriate for surrounding fire.
No known unsuitable extinguishing agent.

This material is not combustible, explosive or flammable.

Firefighters: Use caution when fighting chemical fires.

Section 6: Accidental Release Measures

Personal Precautions and Protection for non-emergency personnel and emergency responders: Use appropriate protective gear to minimize exposure to skin, eyes and clothing.

Emergency Procedures: Isolate area. Keep non-necessary personnel away from area. Affected area may be slippery.

Methods and Materials for containment and cleanup: Contain spilled material if possible. Absorb spilled material with sand or other inert material and dispose of waste according to local, regional, state, federal and/or international regulations. Rinse residue with plenty of water.

Environmental Precautions: Prevent large spills from entering ditches, sewers, and waterways. See Section 12 for ecological information.

Section 7: Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Do not swallow. Wash exposed areas with soap and water immediately after exposure and before eating, drinking, or smoking.

Recommendations for safe storage: Keep containers closed when not in use. Do not store in metal containers for long periods of time.

Incompatible Products: Corrosive bases, corrosive acids. Contact with zinc forms flammable hydrogen gas which can be explosive.

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Section 8: Exposure Controls / Personal Protection

Regulatory Exposure Limit: No Occupational Exposure Limits (OELs) have been established for this material or it's components.

Engineering Controls: Use local exhaust ventilation or other controls to ensure exposure is below occupational limits, if limits are applicable. Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment: Control exposure with the following equipment

Eyes: Wear protective goggles or safety glasses

Hands and Skin: Wear chemical resistant gloves, such as neoprene, polyvinyl chloride (PVC or vinyl), Nitrile/butadiene (nitrile or NBR). Wear appropriate clothing to avoid skin contact.

Respiratory: If exposure limits are exceeded or irritation or discomfort is experienced use an approved particulate respirator.

Other Advice: Use good personal hygiene. Do not consume or store food in the work area. Wash hands and skin immediately after handling, before eating or smoking, and at the end of the workday.

Section 9: Physical and Chemical Properties

Physical State: Liquid

Color: Clear to light brown

Odor: None

Odor Threshold: Not applicable

Vapor Pressure: 17mmHg@25°C

Vapor Density: No Data Available

pH: 6

Relative Density: 1.22 - 1.29 (@21.1°C / 70°F)

Melting Point: Not applicable

Freezing Point: -42°C (-43.6°F)

Water Solubility: Fully miscible

Boiling Point/Range: 107°C - 122°C (224°F - 252°F)

Partition Coefficient (n-octanol/water): Not applicable

Flash Point: Not applicable

Auto-Ignition Temperature: Not applicable

Evaporation Rate: No data available

Decomposition Temperature: No data available

Flammability: Not applicable

Viscosity: No data available

Explosive limits: No data available

Upper/Lower flammability limits: No data available

Hygroscopic: Yes

Section 10: Stability and Reactivity

Reactivity: Hygroscopic product. Hazardous reactions will not occur under normal conditions.

Stability: Product is stable under normal ambient temperatures and conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: None known

Incompatibilities / Materials to avoid: Corrosive bases, corrosive acids, oxidizers. Bromine Trifluoride, Methyl Vinyl Ether, Boron Oxide, Calcium Oxide. Contact with zinc when water is present may form flammable hydrogen gas which can be explosive. Calcium chloride will corrode most metals when exposed to air and will attack aluminum and it's alloys.

Section 11: Toxicological Information

Routes of Exposure: Skin, eyes, ingestion

Effects from Short and Long Term Exposure: Immediate, Delayed and Chronic

Eyes: Serious eye irritation, redness, pain

Skin: Brief contact is usually non-irritating to skin. Prolonged contact may cause irritation to skin, possible burning sensation, redness, itching. Damp, abraded or areas covered by clothing may have a more severe response. Chronic exposure may cause dermatitis.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling are not likely to cause injury. Swallowing larger amounts may cause injury and/or nausea, vomiting, irritation of respiratory tract and mucus membranes.

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Signs and Symptoms of Exposure: Solutions may be visible on the skin and/or eyes. Localized redness, irritation and itching may occur.

Acute toxicity: Mineral Well Brine not classified.

Component numerical measures of toxicity:

Component	LD50 Oral	LD50 Dermal	LD50 Inhalation
Calcium Chloride CAS 10043-52-4	1000 mg/kg (rat)	2630 mg/kg (rat)	*****
Magnesium Chloride CAS 7786-30-3	2800 mg/kg (rat)	*****	*****
Sodium Chloride CAS 7647-14-5	3 mg/kg (rat)	10 mg/kg (rat)	42 g/m ³ (1 hr rat)
Potassium Chloride CAS 7447-40-7	2600 mg/kg (rat)	*****	*****

Carcinogenicity: This product is not classified as a carcinogen per GHS criteria. This product is not listed as a carcinogen by NTP, IARC, or OSHA.

Germ Cell Mutagenicity: Not classified as a mutagen.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (single exposure): Not classified

Specific Target Organ Toxicity (repeated exposure): Not classified

Aspiration Hazard: Not classified

Section 12: Ecological Information

Toxicity: Mineral Well Brine is not classified as hazardous for the environment. Mineral Well Brine components are normally occurring ions in the entire ecosystem and release to the environment is not thought to have any long term negative effects. However, dissolution of large quantities of chlorides in water may create an elevated level of salinity that may be harmful to fresh water aquatic species and to plants that are not salt-tolerant.

Component Toxicity Data:

Freshwater Fish: Calcium Chloride: LC50 Bluegill (*Lepomis macrochirus*) 8,350-10,650 mg/l
Sodium Chloride: LC50 Rainbow Trout (*Oncorhynchus mykiss*) 96 h: 4,236 mg/l
Magnesium Chloride: LC50 Mosquitofish (*Gambusia affinis*) 4,210 mg/l
Potassium Chloride: LC50 Fathead Minnow (*Pimephales promelas*) 10,610 mg/l

Invertebrate: Calcium Chloride: LC50 Water Flea (*Daphnia magna*) 759 - 3,005 mg/l
Magnesium Chloride: EC50 Water Flea (*Daphnia Magna*) 1400 mg/l
Sodium Chloride: LC50 Water Flea (*Daphnia magna*) 4,571 mg/l
Potassium Chloride: LC 50 Water Flea (*Ceriodaphnia dubia*) 96 h: 3,470 mg/l
EC50 Water Flea (*Daphnia magna*) 24hr, immobilization: 590 mg/l

Persistence and Biodegradation: Material is inorganic and not subject to biodegradation. Chloride salts are highly water soluble.

Bioaccumulative Potential: Mineral Well Brine - Not established
Mineral Well Brine components - No bioaccumulation

Mobility in Soil: No information available

Other Adverse Effects: None known

Section 13: Disposal Considerations

Contain and reuse material from spills when possible. Report spills in accordance with local and/or state regulations. Waste material and material containers should be disposed of in accordance with all local, regional, state, national, and international regulations.

Do not allow material to enter ditches, sewers or waterways.

Refer to Section 8 for more information on minimizing personal exposures.

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Section 14: Transport Information

Transport Hazardous Class: Not classified as hazardous material.

Land Transport: Not regulated

Sea Transport: Not regulated

Air Transport: Not regulated

Rail Transport: Not regulated

Section 15: Regulatory Information

U.S. Regulations: United States TSCA (Toxic Substances Control Act) inventory lists the following components:
Calcium Chloride CAS 10043-52-4, Magnesium Chloride CAS 7786-30-3, Sodium Chloride CAS 7647-14-5,
Potassium Chloride CAS 7447-40-7, Water CAS 7732-18-5

Michigan Regulations: MI-DEQ Water Resources Division (part 5 rules - spillage of oil/polluting materials)

Section 16: Other Information

This document has been revised to be compliant with OSHA Hazard Communication Standard (HCS) rules.

Prepared By: U.S. Chlorides, Inc.

SDS Revision Date: 10/2015

Disclaimer: Use product in a manner consistent with its intended use, see Section 1: Recommended Use. The information stated in this document is believed to be accurate based on our current knowledge and the best information available to us. We make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own determinations regarding the suitability of the product and/or information for their particular purposes. In no event shall U.S. Chlorides Corporation be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Wilkinson Chemical Corporation has been advised of the possibility of such damages.