

Desert Brine, Inc.

MATERIAL SAFETY DATA SHEET

(USA)

(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

Version: 1

Revision date: 21 January, 2013

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code: Mag-1
Product name: Dust Control
Company identification: Desert Brine, Inc.
8860 Roadrunner Path
Snyder, TX 79549, USA
325-573-6373
Emergency telephone number: 325-573-6373

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Main physical hazards: No classified physical hazards.
Main health hazards: May be mildly irritating to eyes,
Main environmental hazards: No information available,
Precautions: No special precautions required.
HMIS classification: Health: 1 Flammability: 0 Physical hazard: 0

Form: Liquid **Color:** Clear Colorless **Odor:** None

Principle routes of exposure:
Skin contact. Eye contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components classified as hazardous:

Component	CAS-No	Weight % - Range
Calcium chloride	10043-52-4	1 -5

4. FIRST AID MEASURES

Eye contact: Rinse with water. Seek medical attention if irritation occurs.
Skin contact: Rinse with water.
Ingestion: Rinse mouth. Never give anything by mouth to an unconscious person.
Inhalation: Move to fresh air.
Additional first aid remarks: Consult a physician if necessary.

5. FIRE-FIGHTING MEASURES

Fire hazard: Not combustible.
Flash point: Not applicable.

Autoignition temperature: Not applicable.

Flammability limits in air:

Lower: Not applicable

Upper: Not applicable

Oxidizing properties: None.

Suitable extinguishing media:

Use extinguishing media appropriate for surrounding material

Extinguishing media which must not be used for safety reasons:

None known

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:

None known.

Special protective equipment for firefighters:

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

NFPA rating:

Health:

1

Flammability: 0

Instability: 0

Special: None

6. ACCIDENTAL RELEASE MEASURES

Main physical hazards: No classified physical hazards.

Personal precautions: No special precautions required.

Methods for cleaning up: Dam up. Put into suitable containers for disposal.

Environmental precautions: No special environmental precautions required.

7. HANDLING AND STORAGE

Handling:

Precautions: No special precautions required.

Safe handling advice: No special precautions required

**Technical measures/
storage conditions:** No special storage conditions required.

Packaging requirements: High density polyethylene (HDPE) drum or can.

Incompatible products: None reasonably foreseeable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures
to reduce exposure:** No special technical protective measures required.

Hygiene measures: Avoid contact with eyes.

Respiratory protection: None normally needed

Eye protection: It is good practice to wear goggles when handling any chemical.

Hand protection: Impervious gloves.

Skin and body protection: No special precautions required.

Occupational Exposure Limits

ACGIH – TLVs

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OSHA - PEL

Nuisance dust:ACGIH: inhalable particulate TLV-TWA=10 mg/m³; respirable particulate TLV-TWA= 3 mg/m³**9. PHYSICAL AND CHEMICAL PROPERTIES**

Chemical characterization:	Aqueous solution of inorganic salts.
Fire hazard:	Not combustible.
Form:	Liquid
Color:	Clear Colorless
Odor:	None
Odor threshold:	Not applicable.
pH:	6.0
Boiling point/range:	~110°C / 230 °F
Flash point:	Not applicable.
Flammability limits in air:	
Lower:	Not applicable
Upper:	Not applicable
Bulk density:	Not applicable.
Melting point/range:	No data available.
Decomposition temperature:	Not applicable.
Solubility:	
Water solubility:	Soluble.
Fat solubility:	Insoluble.
Partition coefficient (n-octanol/water):	Not applicable.
Relative density:	1.25 (@25°C)
Vapor pressure:	> 9 hPa (@ 25°C)
Vapor density:	No data available.
Viscosity:	No data available.
Evaporation rate:	No data available.
% Volatile:	> 50

10. STABILITY AND REACTIVITY**Stability:**

Stable.

Conditions to avoid:

None reasonably foreseeable.

Incompatibility with other substances:

No information available.

Hazardous decomposition products:

Chlorine, chlorine oxides, hydrogen chloride.

Hazardous polymerization:

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**PRODUCT TOXICOLOGICAL INFORMATION**

Information given is based on data on the components and the toxicology of similar products.

Acute Health Hazard

Eye contact: Skin contact: May be mildly irritating.
No effect expected.

Ingestion: Swallowing large amounts may be harmful. Accidental ingestion of small amounts is not expected to cause adverse effects.

Inhalation: This is an unlikely route of exposure. Not hazardous by inhalation if the product does not dry out. (Respirable dust).

Sensitization - lung: Not known to cause allergic reaction.

Sensitization - skin: Not known to cause allergic reaction.

Chronic Health Hazard

Carcinogenic effects: None known.

Mutagenic effects: None known.

Teratogenic effects: None known.

Reproductive toxicity: None known.

Target organ effects: No information available.

COMPONENT TOXICOLOGICAL INFORMATION

Component	Target Organ Effects	LD50 / LC50
Calcium chloride		= 1000 mg/kg (Oral LD50; Rat) = 2630 mg/kg (Dermal LD50; Rat)

12. ECOLOGICAL INFORMATION**PRODUCT INFORMATION**

Main environmental hazards:
No information available.

COMPONENT INFORMATION

Calcium chloride

Bioaccumulation: Not applicable

Persistence / degradability: Not applicable.

Freshwater Fish Species Data = 10650 mg/L (LC50; Lepomis macrochirus)

Water Flea Data = 52 mg/L (EC50; Daphnia magna)

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:
Dispose of in accordance with local regulations.

Contaminated packaging:
Dispose of in accordance with local regulations.

EPA RCRA Hazardous Waste Code:
None

14. TRANSPORT INFORMATION**DOT:**

CERCLA RQ: None

Hazard class: Not regulated.

Proper shipping name: Not regulated

Label(s): None required.

IMDG/IMO

Shipping name: Not regulated.

UN number: None

ICAO/IATA

Shipping name: Not regulated.

UN number: None

TDG (Canada):

Shipping name: Not regulated.

PIN: None

Note 1:

For the applicable placard selection refer to the appropriate transport regulations; the selection may vary depending on the cargo size and categories of other hazardous materials in the cargo.

15. REGULATORY INFORMATION**International Chemical Inventories**

Inventory - United States TSCA - This product complies with TSCA requirements.

Canada DSL Inventory List - EC-No This product complies with DSL requirements.

China inventory of existing chemical substances list - Inventory - Japan - Existing and New Chemicals list - Australia (AICS): This product complies with EINECS/ELINCS requirements.

This product complies with China inventory requirements.

This product does not comply with JPENCS

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

U.S.A. Regulations

OSHA Hazard Communication Standard:
(Complies with USA OSHA 29 CFR 1910.1200 and ANSI Z 400.1)

EPA RCRA Hazardous Waste Code:
None

EPA, Sections 311 and 312 - Material Safety Data Sheet Requirements (40 CFR 370):

Immediate (Acute) Health Hazard:	None
Delayed (Chronic) Health Hazard:	None
Fire Hazard:	None
Sudden Release or Pressure Hazard:	None
Reactive Hazard:	None

EPA, Sections 313 - List of Toxic Chemicals (40 CFR 372):

This product contains the following substance(s), which appear(s) on the List of Toxic Chemicals:

Additional Regulatory Information

Calcium chloride

EPA, CERCLA Section 102a/103 Hazardous Substances (40 CFR 302.4): None

CERCLA/SARA - Hazardous Substances and their RQs: None

EPA, SARA TITLE III Section 304, Extremely Hazardous Substances (40 CFR 355.40): None

California Proposition 65: None

International Hazard Class**WHMIS Hazard Class:**

Non-controlled product.

16. OTHER INFORMATION**Current references:**

1. Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices. *American Conference of Governmental Industrial Hygienists, Cincinnati OH.*
2. IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man. *World Health Organization, International Agency for Research on Cancer. Geneva, Switzerland.*
3. Annual Report on Carcinogens. National Toxicology Program. U.S. *Department of Health and Human Services, Public Health Service.*
4. NIOSH Registry of Toxic Effects of Chemical Substances (RTECS). *National Institute for Occupational Safety and Health. Cincinnati, OH.*
5. LOLI Database.

Explanation of terms:

ACGIH:	American Conference of Governmental Industrial Hygienist
ACGIH-TL:	Threshold Limit Value
DSL:	Domestic Substance List
HMIRC:	Hazardous Materials Information Review Commission
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety & Health
NIOSH-REL:	Recommended Exposure Limit
OSHA:	Occupational Safety & Health Administration
OSHA-PEL:	Permissible Exposure Limit
TSCA:	Toxic Substance Control Act (Inventory)

Occupational Exposure Limits indicators: TWA - Time Weighted Average; STEL - Short Term Limit; C - Ceiling Limit; units: [mg/m³]

ACGIH Notations:

"Skin" refers to the potential significant contribution to the overall exposure by the cutaneous route, including mucous membranes and the eyes, either by contact with vapors or by direct skin contact with the substance.

"A" notation indicates carcinogenicity as follows:

ACGIH classification: A1 - Confirmed Human Carcinogen; A2 - Suspected Human Carcinogen; A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; A4 - Not Classifiable as a Human Carcinogen; A5 - Not suspected as a Human Carcinogen.

"SEN" refers to the potential for an agent to product sensitization as confirmed by human and animal data.

Section(s) revised: New

Additional advice: Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Typical Contents of Mag-1 Dust Control

Density: 10.18 to 10.2 lbs/gallon, typically 10.18 lbs/gallon

Mineral Content Percent by weight:

Chloride	22.68%
Bromide	0.04%
Magnesium	3.94%
Calcium	0.76%
Sodium	6.38%
Potassium	.30%
Manganese	<u>.02%</u>
TOTAL SALTS	34.12%

Prepared by: Desert Brine, Inc.

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End of the Material Safety Data Sheet