



# SILVER FERN CHEMICAL, INC.

## Safety Data Sheet

### Zinc Gluconate

Revision Date 02/09/2015

Version 2.0

#### SECTION 1. Identification

##### Product identifier

Product name                      Zinc Gluconate  
CAS-No.                              4468-02-4

##### Relevant identified uses of the substance or mixture and uses advised against

Identified uses                      Chemical for synthesis

##### Details of the supplier of the safety data sheet

Distributor                              Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North, Suite C  
Seattle WA 98109, USA  
Phone: 1-866-282-3384  
info@silverfernchemical.com

24 Hour Emergency Cotntact      Infotrac 1-800-535-5053 (USA & Canada)  
Outside USA & Canada 1-352-323-3500

#### SECTION 2. Hazards identification

##### GHS-Labeling

Not a dangerous substance according to GHS.

##### Other hazards

None known.

#### SECTION 3. Composition/information on ingredients

Formula                                      C<sub>12</sub>H<sub>22</sub>O<sub>14</sub>Zn (Hill)  
Molar mass                                  455.67 g/mol

Remarks                                      No hazardous ingredients according to the OSHA Hazard  
Communication Standard 29 CFR 1910.1200.

#### SECTION 4. First aid measures

##### Description of first-aid measures

###### *Inhalation*

After inhalation: fresh air.

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*Skin contact*

After skin contact: wash off with plenty of water. Remove contaminated clothing.

*Eye contact*

After eye contact: rinse out with plenty of water.

*Ingestion*

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed**

Diarrhea, Nausea, Vomiting

The following applies to zinc compounds in general: only slightly absorbable via the gastrointestinal tract. Astringent effect on mucous membranes. Metal-fume fever after inhalation of large quantities.

**Indication of any immediate medical attention and special treatment needed**

No information available.

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**SECTION 5. Fire-fighting measures**

**Extinguishing media**

*Suitable extinguishing media*

Water, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

*Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

**Special hazards arising from the substance or mixture**

Combustible material

Development of hazardous combustion gases or vapors possible in the event of fire.

**Advice for firefighters**

*Special protective equipment for fire-fighters*

In the event of fire, wear self-contained breathing apparatus.

*Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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**SECTION 6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

**Environmental precautions**

Do not empty into drains.

**Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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**SECTION 7. Handling and storage**

**Precautions for safe handling**

Observe label precautions.

**Conditions for safe storage, including any incompatibilities**

Tightly closed. Dry.

Store at +15°C to +25°C (+59°F to +77°F).

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**SECTION 8. Exposure controls/personal protection**

**Exposure limit(s)**

Contains no substances with occupational exposure limit values.

**Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

**Individual protection measures**

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

*Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

*Eye/face protection*

Safety glasses

*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.

*Respiratory protection*

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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**SECTION 9. Physical and chemical properties**

Physical state	powder
Color	white
Odor	odorless
Odor Threshold	Not applicable
pH	6.5 at 10 g/l 68 °F ( 20 °C)

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Melting point	No information available.
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	100 g/l at 68 °F ( 20 °C)
Partition coefficient: n- octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	ca. 311 °F ( 155 °C)
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Ignition temperature	> 311 °F ( > 155 °C)

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**SECTION 10. Stability and reactivity**

**Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**Possibility of hazardous reactions**

Violent reactions possible with:

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Oxidizing agents, acids

**Conditions to avoid**

Strong heating.

**Incompatible materials**

no information available

**Hazardous decomposition products**

no information available

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**SECTION 11. Toxicological information**

**Information on toxicological effects**

*Likely route of exposure*

Inhalation, Eye contact, Skin contact, Ingestion

*Acute oral toxicity*

LD50 Rat: > 5,000 mg/kg (External MSDS)

Symptoms: After uptake of large quantities:, Nausea, Vomiting, Diarrhea

*Specific target organ systemic toxicity - single exposure*

The substance or mixture is not classified as specific target organ toxicant, single exposure.

*Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

*Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

**Carcinogenicity**

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**Further information**

Other information

The following applies to zinc compounds in general: only slightly absorbable via the gastrointestinal tract. Adstringent effect on mucous membranes. Metal-fume fever after inhalation of large quantities.

Further data:

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Handle in accordance with good industrial hygiene and safety practice.

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**SECTION 12. Ecological information**

**Ecotoxicity**

No information available.

**Persistence and degradability**

No information available.

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

*Additional ecological information*

Biological effects:

Hazard for drinking water supplies.

Further information on ecology

Discharge into the environment must be avoided.

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**SECTION 13. Disposal considerations**

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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**SECTION 14. Transport information**

**Land transport (DOT)**

<b>UN number</b>	UN3077
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b>Class</b>	9
<b>Packing group</b>	III
<b>Environmentally hazardous</b>	--

**Air transport (IATA)**

<b>UN number</b>	UN3077
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ( ZINC GLUCONATE)
<b>Class</b>	9
<b>Packing group</b>	III
<b>Environmentally hazardous</b>	--
<b>Special precautions for user</b>	no

**Sea transport (IMDG)**

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<b>UN number</b>	UN3077
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ( ZINC GLUCONATE)
<b>Class</b>	9
<b>Packing group</b>	III
<b>Environmentally hazardous</b>	--
<b>Special precautions for user</b>	yes
<b>EmS</b>	F-A   S-F

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**SECTION 15. Regulatory information**

**United States of America**

**SARA 313**

The following components are subject to reporting levels established by SARA Title III, Section 313:

*Ingredients*

Bis(D-gluconato-O1,O2)zinc	4468-02-4	100 %
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**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

**DEA List I**

Not listed

**DEA List II**

Not listed

**US State Regulations**

**Massachusetts Right To Know**

Remarks

No components are subject to the Massachusetts Right to Know Act.

**New Jersey Right To Know**

*Ingredients*

Bis(D-gluconato-O1,O2)zinc

**California Prop 65 Components**

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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**Notification status**

TSCA:                              All components of the product are listed in the TSCA-inventory.  
DSL:                                All components of this product are on the Canadian DSL.  
KOREA:                            Not in compliance with the inventory

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**SECTION 16. Other information**

**Training advice**

Provide adequate information, instruction and training for operators.

**Labeling**

*Hazard pictograms*



*Signal Word*

Warning

*Hazard Statements*

H410 Very toxic to aquatic life with long lasting effects.

*Precautionary Statements*

Prevention

P273 Avoid release to the environment.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

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**DISCLAIMER OF RESPONSIBILITY**

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

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