

SAFETY DATA SHEET



GemStone Zn

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

GHS Product Information

Product Name: GemStone Zn
Business Unit: Phibro Animal Health Corporation
Other means of identification: Not available

Safety data sheet number: 5479-500 -US-E

Recommended use of the chemical and restrictions on use

Recommended use: Animal Feed Additive.

Uses advised against: No information available

Details of the supplier of the safety data sheet

Manufacturer:

Phibro Animal Health Corporation
229 Radio Road
Quincy, IL 62305
Tel: 217-222-8854
Fax: 217-222-5098
Toll Free: 800-677-4623

SDS Contact (email of responsible person): phibroehs@pahc.com

24 Hour Emergency Phone Number: Chemtrec 1-800-424-9300 (CCN17224)

International: International Number: +1 703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance powder or granules **Physical state** Solid **Odor** No information available

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Substance

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Inhalation: Remove to fresh air.

Skin Contact: Wash skin with soap and water.

Ingestion: Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

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

Unsuitable extinguishing media: Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical: No information available.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal precautions:** Ensure adequate ventilation, especially in confined areas.
- For emergency responders:** Use personal protection recommended in Section 8. Use personal protective equipment as required.
- Environmental Precautions:** See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

- Methods for containment:** Prevent further leakage or spillage if safe to do so.
- Methods for cleaning up:** Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

Personal precautions, protective equipment and emergency procedures

- Personal precautions:** Ensure adequate ventilation, especially in confined areas.
- For emergency responders:** Use personal protection recommended in Section 8. Use personal protective equipment as required.
- Environmental Precautions:** See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

- Methods for containment:** Prevent further leakage or spillage if safe to do so.
- Methods for cleaning up:** Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

- Advice on safe handling:** Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

- Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place.
- Incompatible materials:** None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

- Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

- Engineering Controls:** Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice.
Eye/face protection:	No special technical protective measures are necessary.
Skin and body protection:	No special technical protective measures are necessary.
Respiratory protection:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Solid	Odor	No information available
Appearance	powder, or, granules	Odor threshold	No information available
Color	Gray, white		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting Point / Freezing Point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	900-1200 g/l
Percent Volatile	No information available

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information:	No data available
Inhalation:	No data available.
Eye contact:	No data available.
Skin Contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Symptoms: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization: No information available.
Germ cell mutagenicity: No information available.
Carcinogenicity: No information available.

Reproductive toxicity: No information available.
STOT - single exposure: No information available.
STOT - repeated exposure: No information available.
Aspiration hazard: No information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Refer to all federal, state and local regulations prior to disposal of container and unused contents by reuse, recycle or disposal. Disposal should be in accordance with applicable regional, national and local laws and regulations. Avoid runoff to waterways and sewers. Recover or recycle if possible. Send to a licensed recycler, reclaimer or incinerator.

Disposal methods: Do not reuse container.

14. TRANSPORT INFORMATION

Note: Store in a closed container. Keep container upright.

DOT Not regulated ()

IATA Not regulated ()

IMDG Not regulated ()

TDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Not Determined
DSL/NDSL: Not Determined
EINECS/ELINCS: Complies
ENCS: Complies
IECSC: Complies
KECL: Not Determined
PICCS: Not Determined
AICS: Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	SARA 313 - Threshold Values %
bis(glycinato-N, O) zinc	14281-83-5	1.0

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No

Sudden release of pressure hazard
Reactive Hazard

No
No

CWA (Clean Water Act)

This product contains the following substances which are regulated 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

FIFRA

Not applicable

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

No information available

Chemical Name	CAS No.	New Jersey	Massachusetts	Pennsylvania
bis(glycinato-N, O) zinc	14281-83-5	X	-	X

Canada

No information available

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 1	Flammability 0	Instability 0	Physical & Chemical Properties 0
<u>HMIS</u>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection X

Document Review

Revision Number: 19

Revision Note: No information available

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

Bioconcentration factor (BCF)
International Air Transport Association (IATA)
Globally Harmonized System (GHS)
International Maritime Dangerous Goods (IMDG)

Disclaimer

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.

The information contained in this Safety Data Sheet ("SDS") is provided solely to comply with the requirements of federal, state and other applicable law. The information contained herein applies only to the actual product of Phibro Animal Health Corporation and its affiliates ("PAHC") identified and described herein. This information is not intended to address, nor does it address the use or application of the identified PAHC product either alone or in combination with any

material, product or process. All of the information set forth herein is based on technical data regarding the identified product that PAHC believes to be reliable as of the date hereof. Prior to each use of any PAHC product, the user must always read and follow the warnings and instructions on the product's current Technical Data Sheet product label and Safety Data Sheet for each PAHC product, which are available by telephone number listed in Section 1 of this SDS.

PAHC MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE OR APPLICATION. PAHC SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER WHICH INFRINGES ANY PATENT OR ANY OTHER INTELLECTUALPROPERTY RIGHTS HELD BY ANY PARTY.

All sales of PAHC products are subject to its current terms and conditions of sale.

End of Safety Data Sheet