Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. Date of issue: 08/12/2019 Revision date: 08/12/2019 Version: 1.0



SECTION 1: Identification

Identification

Product form : Mixture Product name : Zinc 15 Product code 13-0-0-15Zn

Recommended use and restrictions on use 1.2.

Use of the substance/mixture : Agricultural application

1.3. **Supplier**

CHS Inc 5500 Cenex Drive Inver Grove Heights, MN 55077 1-651-355-6000 www.chsinc.com

Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS US classification

Eye Irrit. 2A

GHS Label elements, including precautionary statements 2.2.

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : Causes serious eye irritation

Wash hands, forearms and face thoroughly after handling. Precautionary statements (GHS US)

Wear protective gloves/protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ammonium zinc salt	(CAS-No.) 68134-01-0	41-63
Water	(CAS-No.) 7732-18-5	15-22
Ammonium chloride	(CAS-No.) 12125-02-9	15-44

Page 1 08/12/2019 EN (English US)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.



Comments

: This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from the supplier.

All concentrations are in percent weight.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact

: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.

First-aid measures after eye contact

: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation

: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact Symptoms/effects after eye contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion

: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media

: None known.

5.2. Specific hazards arising from the chemical

Fire hazard

Products of combustion may include, and are not limited to: oxides of carbon. Ammonia.
 Oxides of nitrogen.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment

 Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

08/12/2019 EN (English US) 2/6

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.



SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool area. Keep

out of direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ammonium zinc salt (68134-01-0)				
Not applicable				
Ammonium chloride (12125	Ammonium chloride (12125-02-9)			
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (fume)		
ACGIH	ACGIH STEL (mg/m³)	20 mg/m³ (fume)		
NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (fume)		
NIOSH	NIOSH REL (STEL) (mg/m³)	20 mg/m³ (fume)		
Water (7732-18-5)				
Not applicable				

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. 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.

Other information:

Freezing point

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

: 0 °F

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear liquid.
Color : Clear

Odor : No odor or mild ammonia.

Odor threshold : No data available pH : 8.5 - 10.5 Melting point : 0 °F

Boiling point : No data available Flash point : Not Flammable

08/12/2019 EN (English US) 3/6

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.



Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not flammable. Vapor pressure No data available Relative vapor density at 20 °C : No data available Relative density : No data available Specific gravity / density : 9.6 - 10.2 lb/gal Solubility : Completely soluble. Partition coefficient n-octanol/water : No data available Auto-ignition temperature : Not Flammable Decomposition temperature : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : Not applicable : Not Flammable **Explosion limits** Explosive properties : No data available : No data available Oxidizing properties

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Ammonia. Oxides of nitrogen

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ammonium chloride (12125-02-9)		
LD50 oral rat	1650 mg/kg	
ATE US (oral)	1650 mg/kg body weight	
Water (7732-18-5)		
LD50 oral rat	> 90 ml/kg	
Skin corrosion/irritation	: Not classified	
	pH: 8.5 - 10.5	
Serious eye damage/irritation	: Causes serious eye irritation.	
	pH: 8.5 - 10.5	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity – single exposure	: Not classified	

08/12/2019 EN (English US) 4/6

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

CHS

Specific target organ toxicity - repeated

exposure

Aspiration hazard

: Not classified

Symptoms/effects after inhalation

: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact

: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact

: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and

tear production, with marked redness and swelling of the conjunctiva.

Symptoms/effects after ingestion

: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

: Not classified

Other information

: Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Ammonium chloride (12125-02-9)

LC50 fish 1 209 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])

12.2. Persistence and degradability

Zinc 15	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Zinc 15	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

1,2,3-Propanetricarboxylic acid, 2-hydroxy-, ammonium zinc salt (68134-01-0) Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ammonium chloride (12125-02-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ 5000 lb

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

The mixture is subject to reporting under SARA Section 313:

 For aqueous ammonia compounds due to the presence of ammonium compounds: 1.0 % de minimis concentration (10% of total aqueous ammonia is reportable under this listing)

15.2. International regulations

No additional information available

08/12/2019 EN (English US) 5/6

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.



15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Date of issue : 08/12/2019
Revision date : 08/12/2019
Other information : None.

Prepared by : Nexreg Compliance Inc.

www.Nexreg.com

: 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

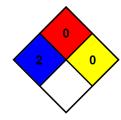
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions,

including intrinsically noncombustible materials such as concrete, stone, and sand.

controlete, storie, and sai

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



NEXREG

HMIS Rating

NFPA health hazard

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)_NEXREG_NEW_Section15

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

08/12/2019 EN (English US) 6/6