



# MICRO Z-15 (15% ZINC)

Safety Data Sheet

Revision Date: 9/19/2019

Version 1.0

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Name:** Micro Z-15 (15% Zinc)

**Product Form:** Mixture

**Synonyms:** 13-0-0-15

### 1.2. Intended Use of the Product

**Agricultural Industry:** Fertilizer

### 1.3. Name, Address, and Telephone of the Responsible Party

Marco NPK

201 East Benton Street

Clinton, IL 61727

(217) 935-2178

[www.marconpk.com](http://www.marconpk.com)

### 1.4. Emergency Telephone Number

For Transportation Emergencies call Hazmat Response at (800) 229-5252

For Other Emergencies call 911 and/or Appropriate Regulatory Agencies

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### GHS-US Classification

Ingestion H302

Eye Irritation H320

Specific Organ Toxicity H335

Full text of H-phrases: see section 16

### 2.2. Label Elements

#### GHS-US Labeling

#### Hazard Pictograms (GHS-US):



#### Signal Word (GHS-US):

Warning

#### Hazard Statements (GHS-US):

H302 - Harmful if swallowed.

H320 - Causes eye irritation.

H335 - May cause respiratory irritation.

#### Precautionary Statements (GHS-US):

P101 - If medical advice is needed, have product container or label on hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

P233 - Keep container tightly closed.

P260 - Avoid breathing mist.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink, or smoke when using product.

P271 - Use only outdoors or in well ventilated areas.

P302 - If on skin, wash with plenty of soap and water.

P304 - If inhaled, removed to fresh air and keep at rest in a position comfortable for breathing.

P305 - If in eyes, rinse cautiously with water for several minutes - remove contact lenses.

P310 - Immediately call a poison center or physician.

P332 - If skin irritation occurs, get medical advice.

P337 - If eye irritation persists, get medical advice.

P501 - Dispose of contents / container in accordance with national / regional / local regulations.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Micronutrient Fertilizer	NA	100%	Not classified

Full text of H-Phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** Move victim to fresh air. Seek medical attention if irritation persists.

**Skin Contact:** Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.

**Eye Contact:** Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.

**Ingestion:** If victim is alert and not convulsing, give one glass of water to dilute material, but DO NOT induce vomiting. Seek immediate medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** Irritation to eyes, skin and respiratory tract.

**Inhalation:** None expected under normal conditions of use.

**Skin Contact:** May cause mild skin irritation.

**Eye Contact:** May cause eye irritation.

**Ingestion:** None expected under normal conditions of use.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding materials.  
No special media required.

**Unsuitable Extinguishing Media:** None known.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Decomposition products may be toxic.

#### 5.3. Advice for Firefighters

**Firefighting Instructions:** Wear full protective clothing and positive-pressure self-contained breathing apparatus.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

##### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Wear suitable protective clothing, gloves and eye/face protection.

**Emergency Procedures:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ventilate area.

### 6.1.2. For Emergency Personnel

**Protective Equipment:** Wear suitable protective clothing, gloves and eye/face protection.

**Emergency Procedures:** If possible, stop flow of product. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Ventilate area.

### 6.2. Environmental Precautions

Prevent spilled material from entering storm drains or bodies of water.

### 6.3. Methods and Material for Containment and Cleaning Up

**Small Spills:** Absorb with sand or other inert material and dispose of in accordance with applicable regulations.

#### Large Spills:

**Containment:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Cleanup:** Contained materials may be salvaged for use.

**Regulatory Requirements:** Follow applicable O51-IA regulations for cleanup personnel and EPA requirements for disposal.

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, State, and local regulations if material is not salvageable for use.

**Disposal Regulatory Requirements:** Follow applicable Federal, State, and local regulations.

**Container Cleaning and Disposal:** Triple rinse and use rinseate in product tank. Dispose of container per applicable regulations.

### 6.4. Reference to Other Sections

No additional information available.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

Avoid inhalation and contact with skin and eyes. Do not get in eyes, on skin, on clothing. Do not breathe gas. Use only with adequate ventilation. Open valve slowly. Ensure that cylinders are not exposed to heat. When using, do not eat, drink or smoke. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. Observe good industrial hygiene practices.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Store in a cool, dry, well ventilated area. Do not store above 120°F

### 7.3. Specific End Use(s)

Agricultural Industry: Fertilizer

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Engineering Controls:

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs.

### 8.2. Administrative Controls:

**Respiratory Protection:** NIOSH approved particulate / mist respirator, if required.

**Protective Clothing Equipment:** Long sleeves, protective gloves recommended.

**Eye Protection:** Safety glasses with sideshields, goggles, or faceshield recommended.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

### 8.3. Exposure Limits:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<u>Hazardous Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Ammonia	35 mg/m <sup>3</sup>	18 mg/m <sup>3</sup> 27 mg/m <sup>3</sup> (STEL)
Sulfuric Acid	1 mg/m <sup>3</sup>	0.2 mg/m <sup>3</sup>
Zinc Oxide	5 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Colorless to blue liquid
Odor:	Slight Ammonia Odor
Odor Threshold:	Not available
pH:	10.4
Evaporation Rate:	Not available
Melting Point:	Not available
Freezing Point:	Not available
Boiling Point:	Not available
Vapor Pressure:	Not available
Vapor Density:	Not available
Specific Gravity:	Not available
Percent solids by Weight:	Not available
Percent Volatile:	Not available
Volatile Organic Compounds:	Not available
Molecular Weight:	Not available
Relative Density	Not available
Solubility:	Soluble
Partition Coefficient: N-Octanol/Water:	Not available
Viscosity:	Not available
Explosion Properties:	None known

## SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:	Stable under normal storage and handling conditions.
10.2. Chemical Stability:	Stable at standard temperature and pressure.
10.3. Conditions to Avoid:	Avoid excessive heat.
10.4. Incompatible Materials:	Oxidizers, hypochlorites, strong bases and strong acids.
10.5. Hazardous Decomposition Products:	SO <sub>x</sub> , NH <sub>3</sub> , ZnO, HCl, NO <sub>x</sub> , CO <sub>x</sub>

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

May be irritating to the eyes, skin, nose, throat, and respiratory tract, and may cause sore throat, coughing, shortness of breath, and increased pulse rate and blood pressure. Ingestion may cause methemoglobinemia, cyanosis, headache, weakness, dizziness, and stupor. Significant overexposure may result in severe skin burns / blisters, corneal ulcers, blindness, nausea, vomiting, and death.

**Carcinogenicity:** None of the ingredients are known / listed carcinogens. However, product may contain trace amounts of cadmium, which is listed by IARC as a human carcinogen.

#### Ingredient Toxicity Ranges:

Oral:	1,410 mg/kg (ammonium chloride) - 2,217 mg/kg (ammonium nitrate)
Dermal:	> 2,000 mg/kg (ammonium chloride)
Inhalation:	> 88.8 mg/l (4 hr) (ammonium nitrate)

## SECTION 12: ECOLOGICAL INFORMATION

This product is not known to be persistent or have the potential to bioaccumulate.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Method:** Disposal of N-P-K fertilizer may be subject to federal, state and local regulations. Users of this product should review their operations in terms of applicable federal, state, and local laws and regulations, then consult with the appropriate regulatory agent before discharging or disposing.

**RCRA Hazard Class:** NA

## SECTION 14: TRANSPORT INFORMATION

- 14.1. In Accordance with DOT Not regulated for transport  
14.2. In Accordance with IMDG Not regulated for transport  
14.3. In Accordance with IATA Not regulated for transport  
14.4. In Accordance with TDG Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

**SARA Section 311/312 Hazard Category:** Immediate Hazard

### 15.2. US State Regulations

If you are located in a state that has an OSH program approved by OSHA, you may be under state jurisdiction rather than federal jurisdiction and your state may have more stringent requirements than OSHA. You should consult your state regulations to ensure compliance.

### 15.3. Canadian Regulations

This product is not offered for sale in Canada.

## SECTION 16: OTHER INFORMATION

### GHS Full Text Phrases:

H302	Harmful if swallowed
H320	Causes eye irritation
H335	May cause respiratory irritation

**NFPA Health Hazard:** 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

**NFPA Fire Hazard:** 0 - Materials that will not burn.

**NFPA Reactivity:** 0- Normally stable, even under fire exposure conditions, and area not reactive with water.



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