



## MATERIAL SAFETY DATA SHEET

**Hacco, Inc.**  
**110 Hopkins Drive**  
**Randolph, WI 53956**  
**(920) 326-2461**  
**(Regulatory Office)**  
**(920) 326-5141**  
**(Manufacturing Location)**

**In Case of Emergency, Call:**  
**1-800-498-5743 (U.S. Medical Emergency)**  
**1-651-523-0318 (International, Medical Emergency)**  
**1-800-424-9300 (U.S. CHEMTREC)**  
**1-703-527-3887 (International, CHEMTREC)**  
**(collect calls will be accepted on all lines)**

### 1. PRODUCT IDENTIFICATION

Product Name: **Prozap<sup>®</sup> Zinc Phosphide Oat Bait (RESTRICTED USE PESTICIDE)**  
EPA Signal Word: **CAUTION**  
Active Ingredient (%): Zinc Phosphide (2.00%) CAS No.: 1314-84-7  
Chemical Name: trizinc diphosphide  
Chemical Class: An inorganic compound.  
EPA Registration Number: 61282-14 **Section(s) Revised: Regulatory Review**

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Zinc Phosphide (2.00%)	Not Established	Not Established	Not Established	No
Grain	Not Established	Not Established	Not Established	No

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

### 3. HAZARDS IDENTIFICATION

#### Symptoms of Acute Exposure

Local irritation, eye irritation (burning, stinging eyes), nausea, garlic breath odor, restlessness, diarrhea, low blood pressure, fever, shock, tremors, fatigue, excessive perspiration, abdominal cramps, breathing difficulty, change in skin color.

#### Hazardous Decomposition Products

May react with acids or water to release toxic and spontaneous flammable phosphide gas. Oxides of phosphorus and zinc.

#### Physical Properties

Appearance: Grey/black, mottled  
Odor: Mild garlic odor

#### Unusual Fire, Explosion, and Reactivity Hazards

Toxic fumes.

### 4. FIRST AID MEASURES

Have the product container, label, or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-498-5743 (U.S. Medical Emergencies) or 1-651-523-0318 (International Medical Emergencies, Collect Calls will be accepted).** Any persons applying zinc phosphide products and experiencing signs and symptoms such as nausea, abdominal pain, tightness of the chest, or weakness, should be seen by a physician immediately.

- Ingestion: Call a physician or poison control center immediately, or transport the patient to the nearest hospital. **DO NOT DRINK WATER!** Do not administer anything by mouth or make the patient vomit unless advised to do so by a physician.
- Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice
- Skin Contact: Take off contaminated clothing. Wash skin with soap and water.
- Inhalation: Move person to fresh air. If person is not breathing call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

**NOTE TO PHYSICIAN: There is no specific antidote. Very thorough gastric lavage is usually indicated. 3% - 5% sodium bicarbonate gavage has been suggested. Treat supportively and symptomatically.**

Medical Condition Likely to be Aggravated by Exposure

None Known.

## 5. FIRE FIGHTING MEASURES

Fire and Explosion

- Flash Point (Test Method): Not Available
- Flammable Limits (% in Air): Lower: % Not Available Upper: % Not Available
- Autoignition Temperature: Not Available
- Flammability: Not Flammable
- Extinguishing Media: Dry chemical: soda ash, lime, or sand. Avoid water and foam as they may form phosphine gas upon contact with zinc phosphide. For large fires, withdraw from area and let burn (DOT ERG 2000, Guide 139)

Hazardous Decomposition Products:

May react with acids or water to release toxic and spontaneous flammable phosphide gas. Oxides of phosphorus and zinc.

Unusual Fire, Explosion, and Reactivity Hazards

Toxic fumes.

In Case of Fire

Potentially hazardous in fire. Wear self-contained breathing apparatus. Fight fire from upwind and evacuate to downwind area as appropriate. Move container from area if you can do so without risk.

## 6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Avoid bodily contact. Wear protective equipment. Keep water and ignition sources away. Carefully shovel, sweep up and package material in clean, dry, labeled containers. Move containers away and flush surfaces with plenty of water. Regard washings as waste. Keep out of bodies of water and sewer.

## 7. HANDLING AND STORAGE

May be fatal if swallowed. Do not breathe dust or fumes. Avoid contact with skin and eyes.

Store the material in a cool, dry, and well-ventilated, secure area out of reach of children and domestic animals. Wash thoroughly after handling and before eating or smoking. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING, AND USE OF THIS PRODUCT.**

**FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.**

- Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact: Safety Goggles or Safety Glasses with side-shields. Maintain emergency eyewash station.
- Skin Contact: Cotton gloves which are changed and washed or discarded regularly. Long sleeved shirt and trousers which are changed and washed regularly.
- Inhalation: Cartridge or canister type respirator for toxic dusts if industrial hygiene evaluation indicates need. Use clean, well-maintained MSHA/NIOSH approved equipment fitted to user.
- Ventilation: Local and/or mechanical exhaust are required in areas of manufacture, storage, and use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: Grey/black, mottled
- Odor: Mild garlic odor
- Melting Point: > 420° C (Zinc Phosphide)
- Boiling Point: Not Available
- Specific Gravity/Density: Bulk Density 41-44 lbs. /ft<sup>3</sup>
- pH: Not Available
- Solubility: Negligible (product), slowly decomposes in water (active ingredient)
- Vapor Pressure (mmg Hg): Not Available
- Vapor Density: Not Available

## 10. STABILITY AND REACTIVITY

- Stability: Stable under normal use and storage conditions.
- Hazardous Polymerization: Will not occur.
- Conditions to Avoid: Avoid heat and incompatible materials.
- Materials to Avoid: Acids, including dilutes. Water. May react with oxidizers.
- Hazardous Decomposition Products: May react with acids or water to release spontaneously flammable phosphine gas. Oxides of zinc and phosphide.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

- Ingestion: Ingestion Hazard  
Oral (LD<sub>50</sub> Rat) : 910 mg/kg body weight (2.00% pelleted bait)
- Dermal: Toxic  
Dermal (LD<sub>50</sub> Rabbit) : > 2,000 mg/kg body weight (2.00% pelleted bait)
- Inhalation: Not Available
- Eye Contact: Not Available
- Skin Contact: Not Available
- Skin Sensitization: Not Available

### Other Toxicity Information

**CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY! FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-498.5743**

### Toxicity of Other Components

- Grains : Not Available

Target Organs

Active Ingredients

Zinc Phosphide Technical : Zinc Phosphide is a systemically toxic poison.

Inactive Ingredients

Grains : Not Available

**12. ECOLOGICAL INFORMATION**

Do not discharge effluent containing this product directly to water. Do not contaminate water when disposing of equipment wash water.

**13. DISPOSAL CONSIDERATIONS**

Container Disposal

*Plastic Containers:* Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

*For containers 1 gallon or less:* Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**14. TRANSPORT INFORMATION**

DOT Classification

Proper Shipping Name: Exterminator, Vermin, O/T Poison  
Hazard Class: Not Applicable  
UN Number: Not Applicable  
Packing Group: Not Applicable  
Label: Not Applicable  
Special Instructions: Not Applicable

IMDG Classification

Proper Shipping Name: Exterminator, Vermin, O/T Poison  
Hazard Class: Not Applicable  
UN Number: Not Applicable  
Packing Group: Not Applicable  
Label: Not Applicable  
Special Instructions: Not Applicable

IATA Classification

Proper Shipping Name: Exterminator, Vermin, O/T Poison  
Hazard Class: Not Applicable  
UN Number: Not Applicable  
Packing Group: Not Applicable  
Label: Not Applicable  
Special Instructions: Not Applicable

Canadian Classification

Proper Shipping Name: Exterminator, Vermin, O/T Poison  
Hazard Class: Not Applicable  
UN Number: Not Applicable  
Packing Group: Not Applicable  
Label: Not Applicable

**15. REGULATORY INFORMATION**

EPA SARA Title III Hazard Classification (For Reporting Under Sections 311 & 312)

Immediate Y Fire N Sudden Release of Pressure N  
 Delayed N Reactive Y

Section 313 Toxic Chemicals

Zinc Phosphide (CAS No. 1314-84-7) 2%

California Proposition 65

Not Applicable

CERLA/SARA 302 Reportable Quantity (RQ)

Zinc Phosphide (CAS No. 1314-84-7) 2% Reportable Quantity: 100 lbs.

RCRA Hazardous Waste Classification (40 CFR 261)

U249 (For concentrations of 10% or less)

TSCA Status

Exempt from TSCA, subject to FIFRA

**16. OTHER INFORMATION**

NFPA Hazard Ratings

Health: 1  
 Flammability: 1  
 Instability: 2

HMIS Hazard Ratings

Health: 1  
 Flammability: 1  
 Reactivity: 2

0 - Minimal  
 1 - Slight  
 2 - Moderate  
 3 - Serious  
 4 - Extreme

For Non-Emergency Questions About This Product Call:  
 1-800-621-8829  
 Neogen Corporation  
 Lexington, KY

Original Issue Date: October 2003  
 Revision Date: March 1<sup>st</sup>, 2010  
 Replaces: June 3<sup>rd</sup>, 2008  
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