

**Material  
Safety  
Data  
Sheet**
**Hi-Yield® Mole and Gopher Bait**
**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Name: Voluntary Purchasing Groups, Inc.	Box 460, Bonham, TX 75418
Emergency Telephone: (903) 583-5501 or (800) 424-9300 (Chemtrec)	
For Additional Information Contact: Product Manager or Chemtrec	Date Prepared: January 6, 2004
Common Name (Used on Label): Hi-Yield® Mole and Gopher Bait	Chemical Family: Mixture
Chemical Name: Mixture	Formula: Zinc Phosphide mixture
Trade Name & Synonyms: Hi-Yield® Mole and Gopher Bait EPA # 12455-30-7401	

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENT	CAS NUMBER	% (TYPICAL)	TLV (UNITS)	PEL (UNITS)
Zinc Phosphide [1]	1314-84-7	2.0	Not established	Not established

[1]NOTE: This is a toxic chemical and is subject to the reporting requirements of section 313 of Title II of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration.

TLV: Threshold Limit Value recommended by the American Conference of Governmental Industrial Hygienists.

**SECTION 3 - PHYSICAL DATA**

BOILING POINT (°F) 1100 degrees C	SPECIFIC GRAVITY (H <sub>2</sub> O=1) Not determined	VAPOR PRESSURE (mm Hg) Not determined
PERCENT VOLATILE BY VOLUME (%) Not determined	VAPOR DENSITY (AIR=1) Not determined	EVAPORATION RATE (ethyl ether=1) Does not apply
SOLUBILITY IN WATER Insoluble	REACTIVITY IN WATER Will react with water to produce highly toxic phosphine	
APPEARANCE AND ODOR Gray crystalline powder; garlic odor		

**SECTION 4 - FIRE AND EXPLOSION DATA**

FLASH POINT (°F) Does not apply	FLAMMABLE LIMITS IN AIR (% by volume) Lower: <u>Not determined</u> Upper: <u>Not determined</u>	
EXTINGUISHING MEDIA Dry chemical, soda ash, lime, or sand.	AUTO IGNITION TEMPERATURE Not determined	
UNUSUAL FIRE AND EXPLOSION HAZARDS Will react slowly with water, and more rapidly with dilute acids to release highly toxic and spontaneously flammable phosphine.		
SPECIAL FIRE FIGHTING PROCEDURES		

Move container from fire area if possible. Do not use water or foam. Avoid breathing toxic vapors. Keep upwind. Utilize self-contained breathing apparatus with full-face piece operated in pressure demand or other positive pressure mode.

### SECTION 5 - HEALTH INFORMATION

#### PRIMARY ROUTES OF EXPOSURE AND TARGET ORGANS

Inhalation, ingestion, eye or skin contact.

#### SIGNS AND SYMPTOMS OF EXPOSURE

##### (1) ACUTE OVEREXPOSURE

Zinc phosphide is a highly toxic hepatotoxin. Poisoning affects the liver, kidneys, nervous system, and lungs. Inhalation or ingestion may result in symptoms of headache, dizziness, nausea, vomiting, fatigue, coughing, jaundice, paresthesias, ataxia, tremor, hypertension, dyspnea, pulmonary edema, cyanosis, shock, cardiac arrhythmias, convulsions, and coma. Contact with moist skin or the eyes may result in burns.

##### (2) CHRONIC OVEREXPOSURE

Prolonged inhalation or ingestion may cause toothache, followed by swelling of the jaw, and later necrosis of the jaw, anemia, and bone fractures.

#### MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Disorders of the kidneys, nervous system, and lungs.

#### CHEMICAL/COMPONENT LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

None

#### NTP

YES  NO

#### IARC

YES  NO

#### OSHA

YES  NO

#### OTHER EXPOSURE LIMITS

ACGIH TLV for nuisance dusts=10mg/m<sup>3</sup>; OSHA PEL for nuisance dusts=15mg/m<sup>3</sup>

#### EMERGENCY AND FIRST AID PROCEDURES

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician. **INGESTION:** Induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician. **EYE OR SKIN CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician. Flush skin with water. Wash clothing before reuse.

### SECTION 6 - REACTIVITY DATA

#### STABILITY

Unstable  Stable

#### CONDITIONS TO AVOID

Keep dry and away from acids.

#### INCOMPATIBILITY (Materials to Avoid)

Water, acids, oxidizers

#### HAZARDOUS DECOMPOSITION PRODUCTS

Reaction will produce phosphine. Thermal decomposition releases irritating oxides of phosphorous and toxic fumes of zinc oxide.

#### HAZARDOUS POLYMERIZATION

May Occur  Will Not occur

#### CONDITIONS TO AVOID

Does not apply

### SECTION 7 - SPILL OR LEAK PROCEDURES

#### STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED

Eliminate ignition sources. Do not touch spilled material. Do not get water on spilled material or inside container. Using a shovel place material into clean, dry, labeled container and seal. Neutralize spill residue with agricultural lime, slaked lime, crushed limestone, or sodium bicarbonate. Comply with all applicable governmental regulations concerning spill reporting, handling, and disposal of waste. Run-off to sewer may create fire or explosion hazard.

#### WASTE DISPOSAL METHOD

Dispose of in accordance with Federal, State, and local regulations.

**SECTION 8 - PERSONAL PROTECTION INFORMATION****RESPIRATORY PROTECTION**

NIOSH/MSHA approved respiratory devices to protect against particulate matter.

**VENTILATION**

General or local exhaust to maintain employee exposure below the TLV/PEL.

**PROTECTIVE GLOVES**

Impervious material to prevent skin contact.

**EYE PROTECTION**

Splash proof or dust resistant safety goggles to prevent eye contact with this substance. Contact lenses should not be worn.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

When necessary utilize impervious clothing and other equipment to prevent contact with this substance.

**SECTION 9 - SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING & STORING**

Store in a cool, dry, well ventilated area, away from acids and water. Contact with water produces toxic and flammable gas.

**OTHER PRECAUTIONS**

Eye wash fountain and quick drench shower should be available.

**SECTION 10 - OTHER INFORMATION**

The information contained within was obtained from authoritative sources and is believed to be accurate for the manner in which the product is intended to be used. Other uses could result in ramifications, which are not included within this document.