

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the s	substance/mixture and of the company/undertaking
1.1. Product identifier	substance/mixture and of the company/undertaking
Product name	: Revenge Moletox Mole & Gopher Killer
Product code	: 4285(3)
1.2. Relevant identified uses of the s	substance or mixture and uses advised against
Use of the substance/mixture	: Rodenticide
1.3. Details of the supplier of the safe Bonide Products. Inc.	ety data sneet
6301 Sutliff Road	
Oriskany, NY 13424 T (315) 736-8231	
www.bonide.com	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887
SECTION 2: Hazards identificatio	
2.1. Classification of the substance of	or mixture
Classification (GHS-US)	
Water-react. 1 H260 Acute Tox. 4 (Oral) H302	
2.2. Label elements	
GHS-US labeling Hazard pictograms (GHS-US)	
	GHS02 GHS07
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H302 - Harmful if swallowed
Precautionary statements (GHS-US)	: P264 - Wash hands thoroughly after handling
	P270 - Do not eat, drink or smoke when using this product P280 - Wear gloves
	P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
	P330 - If swallowed, rinse mouth P335+P334 - Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages
	P370+P378 - In case of fire: Use dry chemical, carbon dioxide for extinction
	P402+P404 - Store in a dry place. Store in a closed container
	P501 - Dispose of contents/container to in accordance with local/national regulations
2.3. Other hazards	
No additional information available	
2.4. Unknown acute toxicity (GHS-US	S)
2 percent of the mixture consists of ingredier	nt(s) of unknown acute toxicity (Inhalation (Dust/Mist))
SECTION 3: Composition/informa	ation on ingredients
Mixture	

Name	Product identifier	%	Classification (GHS-US)
Zinc Phosphide	(CAS No) 1314-84-7	2	Water-react. 1, H260 Acute Tox. 2 (Oral), H300 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First aid measures		
4.1. Description of first aid measures		
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).	
First-aid measures after inhalation	: Assure fresh air for breathing. Allow the person to rest.	
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Brush off loose particles from skin.	
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.	
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.	
4.2. Most important symptoms and effe	cts, both acute and delayed	
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.	
4.3. Indication of any immediate medical attention and special treatment needed		
No additional information available		
SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.	
Unsuitable extinguishing media	: Do not use a heavy water stream.	
5.2. Special hazards arising from the su	ibstance or mixture	
No additional information available		
5.3. Advice for firefighters		
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.	
SECTION 6: Accidental release mea	Isures	
	quipment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Drotostivo oguipment	. Equip cleanup arow with proper protection	
Protective equipment	: Equip cleanup crew with proper protection.	
Emergency procedures	<ul><li>Equip cleanup crew with proper protection.</li><li>Ventilate area.</li></ul>	
Emergency procedures       6.2.       Environmental precautions	: Ventilate area.	
Emergency procedures6.2.Environmental precautionsPrevent entry to sewers and public waters. Noti	: Ventilate area. fy authorities if liquid enters sewers or public waters.	
Emergency procedures6.2.Environmental precautionsPrevent entry to sewers and public waters. Noti6.3.Methods and material for containmental precautions	: Ventilate area. fy authorities if liquid enters sewers or public waters. ent and cleaning up	
Emergency procedures6.2.Environmental precautionsPrevent entry to sewers and public waters. Noti	: Ventilate area. fy authorities if liquid enters sewers or public waters.	
Emergency procedures6.2.Environmental precautionsPrevent entry to sewers and public waters. Noti6.3.Methods and material for containing	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up         <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from</li> </ul> </li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containment Methods for cleaning up	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containment Methods for cleaning up 6.4. Reference to other sections	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> </ul>	
Emergency procedures  6.2. Environmental precautions  Prevent entry to sewers and public waters. Noti  6.3. Methods and material for containm  Methods for cleaning up  6.4. Reference to other sections See Heading 8. Exposure controls and personal	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containing Methods for cleaning up 6.4. Reference to other sections See Heading 8. Exposure controls and personal SECTION 7: Handling and storage	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containing Methods for cleaning up 6.4. Reference to other sections See Heading 8. Exposure controls and personal SECTION 7: Handling and storage 7.1. Precautions for safe handling	<ul> <li>: Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containing Methods for cleaning up 6.4. Reference to other sections See Heading 8. Exposure controls and personal SECTION 7: Handling and storage 7.1. Precautions for safe handling Additional hazards when processed	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> <li>keep away from ignition sources.</li> <li>Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and</li> </ul>	
Emergency procedures         6.2.       Environmental precautions         Prevent entry to sewers and public waters. Noti         6.3.       Methods and material for containing         Methods for cleaning up         6.4.       Reference to other sections         See Heading 8.       Exposure controls and personal         SECTION 7: Handling and storage         7.1.       Precautions for safe handling         Additional hazards when processed         Precautions for safe handling	<ul> <li>Yentilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> <li>keep away from ignition sources.</li> <li>Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Work under local exhaust/ventilation. Protect from moisture.</li> <li>Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.</li> </ul>	
Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters. Noti 6.3. Methods and material for containing Methods for cleaning up 6.4. Reference to other sections See Heading 8. Exposure controls and personal SECTION 7: Handling and storage 7.1. Precautions for safe handling Additional hazards when processed Precautions for safe handling Hygiene measures	<ul> <li>Yentilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> <li>keep away from ignition sources.</li> <li>Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Work under local exhaust/ventilation. Protect from moisture.</li> <li>Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.</li> </ul>	
Emergency procedures         6.2.       Environmental precautions         Prevent entry to sewers and public waters. Notif         6.3.       Methods and material for containing         Methods for cleaning up         6.4.       Reference to other sections         See Heading 8.       Exposure controls and personal         SECTION 7: Handling and storage         7.1.       Precautions for safe handling         Additional hazards when processed         Precautions for safe handling         Hygiene measures         7.2.       Conditions for safe storage, include	<ul> <li>Yentilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> </ul> <li>keep away from ignition sources. <ul> <li>keep away from ignition sources.</li> <li>Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Work under local exhaust/ventilation. Protect from moisture.</li> <li>Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.</li> </ul> </li> <li>ing any incompatibilities <ul> <li>Store in original container. Keep container closed when not in use. Store in a dry place. Protect</li> </ul></li>	
Emergency procedures         6.2.       Environmental precautions         Prevent entry to sewers and public waters. Noti         6.3.       Methods and material for containing         Methods for cleaning up         6.4.       Reference to other sections         See Heading 8.       Exposure controls and personal         SECTION 7: Handling and storage         7.1.       Precautions for safe handling         Additional hazards when processed         Precautions for safe storage, include         Storage conditions	<ul> <li>Ventilate area.</li> <li>fy authorities if liquid enters sewers or public waters.</li> <li>ent and cleaning up <ul> <li>On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.</li> </ul> </li> <li>I protection.</li> </ul> <li>keep away from ignition sources. <ul> <li>keep away from ignition sources.</li> <li>Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Work under local exhaust/ventilation. Protect from moisture.</li> <li>Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.</li> </ul> </li> <li>ing any incompatibilities <ul> <li>Store in original container. Keep container closed when not in use. Store in a dry place. Protect from moisture.</li> </ul> </li>	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

: Avoid all unnecessary exposure.
: Wear protective gloves.
: Chemical goggles or safety glasses.
: Wear approved mask.
: When using, do not eat, drink or smoke.

# **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and	I chemical properties
Physical state	: Solid
Appearance	: Grey-black coated corn kernels; phosphine gas odor.
Color	: Grey-Black.
Odor	: Phosphine gas odor.
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Decomposes in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

## 9.2. Other information

No additional information available

SECT	ION 10: Stability and reactivity
10.1.	Reactivity
No addi	tional information available
10.2.	Chemical stability
Stable u	under normal conditions.
10.3.	Possibility of hazardous reactions
In conta	act with water releases flammable gases which may ignite spontaneously.
10.4.	Conditions to avoid
Extreme	ely high or low temperatures.

# Revenge Moletox Mole & Gopher Killer Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations		
10.5. Incompatible materials		
Strong acids. Strong bases.		
10.6. Hazardous decomposition products		
Zinc oxides, oxide of phosphorous, phosgene gas.		
SECTION 11: Toxicological information	on	
11.1. Information on toxicological effects		
Acute toxicity	: Harmful if swallowed.	
Zinc Phosphide (1314-84-7)		
LD50 oral rat	12 - 40 mg/kg (Rat)	
LD50 dermal rabbit	2000 mg/kg (Rabbit)	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
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	
Specific target organ toxicity (repeated exposure)	: Not classified	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.	
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.	

# **SECTION 12: Ecological information**

12.1. Toxicity

Zinc Phosphide (1314-84-7)	
LC50 fish 1	0.5 mg/l Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	6 - 12 mg/l (24 h; Daphnia magna)
LC50 fish 2	0.8 mg/l (Lepomis macrochirus)
EC50 Daphnia 2	1 - 10 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability		
Revenge Moletox Mole & Gopher Killer		
Persistence and degradability	Not established.	
Zinc Phosphide (1314-84-7)		
Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
12.3. Bioaccumulative potential		
Revenge Moletox Mole & Gopher Killer Bioaccumulative potential	Not established.	
Zinc Phosphide (1314-84-7)		
BCF fish 1	59 (Pisces: QSAR)	

### BCF fish 1 59 (Pisces; QSAR) Low potential for bioaccumulation (BCF < 500). Bioaccumulative potential

#### 12.4. Mobility in soil

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects	A sub-large part of the second second
Other information	: Avoid release to the environment.
SECTION 13: Disposal conside	rations
13.1. Waste treatment methods	
Waste treatment methods	: Class B poison. Dispose according to local, state, or federal regulations.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

In accordance with DOT

No dangerous good in sense of transport regulations

**Additional information** 

Other information

: No supplementary information available.

## **SECTION 15: Regulatory information**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**CAUTION:** Harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin or clothing. Wear long-sleeved shirt and long pants, shoes plus socks, and waterproof gloves. Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. Any person who retrieves carcasses or unused bait following application of this product must wear waterproof gloves.

15.1. US Federal regulations	
No additional information available	
15.2. International regulations	
No additional information available	
15.3. US State regulations	
No additional information available	

## **SECTION 16: Other information**

Other information

: None.

Full text of H-phrases: see section 16:

Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Water-react. 1	Substances and mixtures which in contact with water emit flammable gases Category 1
H260	In contact with water releases flammable gases which may ignite spontaneously
H300	Fatal if swallowed
H302	Harmful if swallowed
H312	Harmful in contact with skin
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012) - Pesticides

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.