

**MATERIAL SAFETY DATA SHEET
RAT BAIT (Zinc Phosphide 2% RB)****1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND SUPPLIER**

PRODUCT NAME : RAT BAIT
CHEMICAL NAME : Zinc Phosphide 2% RB
CHEMICAL FORMULA : Zn₃P₂
RECOMMENDED USE : Rodenticide for Rodent control at outdoor use only.
FORMULATION : Rodent Bait (RB)
CORPORATE ADDRESS : Arbuda Agrochemicals Pvt. Ltd. 1104, Ruby Crescent
Business Boulevard, Ashok Chakravarti Road,
Kandivali-East, Mumbai- 400101, Maharashtra, India
Customer Care No- +91 9076907642
Email - info@arbudaagrochemicals.com
MANUFACTURER ADDRESS : Arbuda Agrochemicals Pvt Ltd
Plot No-281-283, GIDC, Taluka -Talod
District- Sabarkantha, Gujarat - 383215

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS NO.	Percent or content (w/w)
Zinc Phosphide	1314-84-7	2%
Other ingredients	-----	98%

3. HAZARDS IDENTIFICATION**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Substances/mixtures which, in contact with water, emit flammable gases Category 1

Acute oral toxicity Category 1

Label Elements

Signal Word - Danger

Hazard Statements

In contact with water releases flammable gases which may ignite spontaneously
Fatal if swallowed.



PRECAUTORY STATEMENTS: PREVENTION

Prevention

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

Handle under inert gas. Protect from moisture.

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

Skin

Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction.

Storage

Store locked up

Store in a dry place. Store in a closed container.

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

Contact with water liberates toxic gas

Contact with acids liberates very toxic gas

4. FIRST AID MEASURES

General Advice	:	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Skin Contact	:	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Eye Contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Inhalation	:	Remove the victim to fresh air. If breathing stops, apply / provide artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Ingestion	:	Do NOT induce vomiting. Call a physician or poison control center immediately
Note to Medical Doctor	:	There is no specific antidote if this product is ingested. Treat symptomatically. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Treat symptomatically. Contains petroleum distillate - vomiting may cause aspiration pneumonia

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	:	Carbon dioxide (CO ₂). Dry chemical. Dry sand
Unsuitable Extinguishing Media	:	No information available
Flash Point	:	No information available
Method -	:	No information available
Auto ignition Temperature	:	No information available
Explosion Limits		
Upper	:	No data available
Lower	:	No data available
Sensitivity to Mechanical Impact	:	No information available
Sensitivity to Static Discharge	:	No information available

Specific Hazards Arising from the Chemical

Contact with water liberates toxic gas. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Phosphorus trihydride (phosphine). Zinc oxide. Oxides of phosphorus.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
4	3	2	W

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions : Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safeareas.

Environmental Precautions : Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean : Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Do not expose spill to water.

Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13 “Disposal Considerations”.

7. HANDLING AND STORAGE

- Handling** : Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. Do not allow contact with water.
- Storage** : Keep away from water or moist air.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Exposure Guidelines** : This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

- Engineering Measures** : Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

- Eye/face Protection** : Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

- Skin and body protection** : Wear appropriate protective gloves and clothing to prevent skin exposure.

- Respiratory Protection** : Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

- Hygiene Measures** : Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	:	Solid Pieces
Appearance	:	Dark grey – Black
Odor	:	Characteristic
Odor Threshold	:	No information available
pH	:	No information available
Melting Point/Range	:	420 °C / 788 °F
Boiling Point/Range	:	1100 °C / 2012 °F
Flash Point	:	No information available

EVAPORATION RATE

Flammability (Solid, Gas)	:	No information available
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**FLAMMABILITY OR
EXPLOSIVE LIMITS**

Upper Limits	:	No data available
Lower Limits	:	No data available
Vapor Pressure	:	No information available
Vapor Density	:	Not applicable
Specific Gravity	:	4.55 g/cm ³
Solubility	:	No information available
Partition coefficient n-octanol /water	:	No data available
Auto ignition Temperature	:	No information available
Decomposition Temperature	:	No information available
Viscosity	:	Not applicable
Molecular Formula	:	P ₂ Zn ₃
Molecular Weight	:	258.10

10. STABILITY AND REACTIVITY

Reactive Hazard	:	Yes
Stability	:	Stable under normal conditions.
Conditions to Avoid	:	Exposure to moist air or water. Exposure to moisture.
Incompatible Materials	:	Strong oxidizing agents
Hazardous Decomposition Products	:	Phosphorus trihydride (phosphine), Zinc oxide, Oxides of phosphorus
Hazardous Polymerization	:	Hazardous polymerization does not occur.
Hazardous Reactions	:	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity :-

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc phosphide	LD50 = 42.6 mg/kg (Rat)	LD50 = 1123 mg/kg (Rat)	Not listed

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	:	No information available
Sensitization	:	No information available
Toxicologically Synergistic Products	:	No information available
Mutagenic Effects	:	No information available
Reproductive Effects	:	No information available
Developmental Effects	:	No information available
Teratogenicity	:	No information available
STOT - single exposure	:	None known
STOT - repeated exposure	:	None known
Aspiration hazard	:	No information available
Symptoms / effects, both acute and delayed	:	No information available
Endocrine Disruptor Information	:	No information available
Other Adverse Effects	:	The toxicological properties have not been fully investigated.
Carcinogenicity	:	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Zinc phosphide	1314-84-7	Not listed	Not listed	Not listed	Not listed	Not listed

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Persistence and Degradability	:	No information available
Bioaccumulation/ Accumulation	:	No information available
Mobility	:	No information available

13. DISPOSAL CONSIDERATION

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Zinc phosphide - 1314-84-7	U249	reactive waste; toxic waste when present at concentrations >10%

14. TRANSPORT INFORMATION

DOT

UN No.	:	UN1714
Packing Group	:	I
Hazard Class	:	4.3
Proper Shipping Name	:	ZINC PHOSPHIDE
Subsidiary Hazard Class	:	6.1

IMDG / IMO Classification

UN No.	:	UN1714
Packing Group	:	I
Hazard Class	:	4.3
Proper Shipping Name	:	ZINC PHOSPHIDE
Subsidiary Hazard Class	:	6.1

IATA/ICAO Classification

UN No. : UN1714
Packing Group : I
Hazard Class : 4.3
Proper Shipping Name : ZINC PHOSPHIDE
Subsidiary Hazard Class : 6.1

TDG

UN No. : UN1714
Packing Group : I
Hazard Class : 4.3
Proper Shipping Name : ZINC PHOSPHIDE
Subsidiary Hazard Class : 6.1

15. REGULATORY INFORMATION**H-Phrase**

H301 : Toxic if swallowed

H312 : harmful in contact with

skinH330: fatal if inhaled

H400: very toxic to aquatic life

H410: very toxic to aquatic life with long lasting effects

Signal word

DANGER

Phrase

S1/2: Keep locked up and out of the reach of children.

S13: Keep away from food, drink and animal feeding stuffs. S20/21: When using, do not eat, drink or smoke.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28: After contact with skin, wash immediately with plenty of water and soap.

S36/37/39: wear suitable protective clothing, gloves and eye/ faceprotection.

S45: In case of accident or if you feel unwell, seek medical advice (show the label where possible)

16. OTHER INFORMATION

MSDS PREPARATION DATE	01/03/2024
REVISION DATE	28/02/2026

The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to Date information. The information given in this data sheet does not constitute or Replace the user's own assessment or work risk as required by other health and Safety legislation.