RESTRICTED USE AGRICULTURAL REMEDY

THIS REMEDY IS RESTRICTED DUE TO ACUTE TOXICITY. THIS REMEDY MAY ONLY BE SOLD TO AND USED BY A REGISTERED PEST CONTROL OPERATOR. OR BY SOMEONE UNDER THE SUPERVISION OF A REGISTERED PEST CONTROL OPERATOR, AND ONLY FOR THOSE USES COVERED BY THE PEST CONTROL OPERATOR'S SCOPE OF REGISTRATION, AND ONLY AS DIRECTED ON THIS LABEL.

Insecticide



WEEVILPHOS 560 TABLETS

Reg. No. L 10202 Act No. 36 of 1947 N-AR 1223

3: 15/01/2025 - Jan2025

A fumigant for agricultural use for control of commonly occurring insect pests in stored cereals and other products and also in packed commodities and processed foods. Can also be used for control of rodent pests as indicated.

ACTIVE INGREDIENT

aluminium phosphide

560 g/kg

GROUP

INSECTICIDE



Hazard Statements:

In contact with water releases flammable gases, which may ignite spontaneously. Fatal if swallowed or inhaled Toxic in contact with skin. Causes serious eye damage. Very toxic to aquatic life.

Precautionary Statements:

Do not allow contact with water. Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles. Avoid release into the environment

DANGER



Registration holder: VILLA CROP PROTECTION (PTY) LTD. Co. Reg. No.: 1992/002474/07 65 Botes Road, Glen Marais, Kempton Park, 1619 Tel. (011) 396 2233 Website: www.villacrop.co.za

IN CASE OF POISONING / 24 HR EMERGENCY NUMBERS: Griffon Poison Information Centre (National): +27 82 446 8946 Poison Information Helpline (National): +27 861 555 777 24 Hr Transport / Spill emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

WEEVILPHOS 560 TABLETS

Reg. No. L 10202 Act No. 36 of 1947 N-AR 1223

IRAC INSECTICIDE GROUP CODE: 24A

ACTIVE INGREDIENT:

Registration holder:

VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07 65 Botes Road, KEMPTON PARK, 1619 Tel. (011) 396 2233

WARNINGS

Hazard statements:

In contact with water releases flammable gases, which may ignite spontaneously.

Fatal if swallowed or inhaled.

Toxic in contact with skin.

Causes serious eye damage.

Very toxic to aquatic life.

- **WEEVILPHOS 560 TABLETS** should only be handled by adult personnel, who have been well instructed in its use and are familiar with all the precautionary measures.
- Handle with extreme care. Phosphine gas released by these tablets is highly toxic to all forms of animal and human life upon inhalation.
- Never bring tablets in direct contact with water or any other liquid.
- Highly toxic to birds and wildlife.
- Phosphine reacts with metals such as copper, copper compounds, gold and silver.
- Store under lock and key in a cool dry, well-ventilated place, away from food and feedstuffs.
- Keep out of reach of children, uninformed persons and animals.
- In case of poisoning, immediately call a doctor and make this label available to him/her or transfer the patient to a hospital.

Although this remedy has been extensively tested under a large variety of conditions, the registration holder does not warrant that it will be efficacious under all conditions, because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label and the occurrence of resistance of the pests to the remedy concerned, as well as by the method, time and accuracy of application. The registration holder further does not accept responsibility for damage to crops, vegetation, the environment or harm to man or animal or for lack of performance of the remedy concerned, due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of the registration. Consult the supplier in the event of any uncertainty.

PRECAUTIONS

Precautionary statements:

Do not allow contact with water.

Protect from moisture.

Do not breathe dusts, vapours, fumes or gases.

Wash hands thoroughly after handling. Do not touch eyes.

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

Use only outdoors or in a well-ventilated area.

Avoid release into the environment.

Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.

In case of inadequate ventilation, wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER.

IF ON SKIN: Brush off loose particles from skin and immerse in cool water. Get emergency medical help immediately.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get emergency medical help immediately.

IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help.

Rinse mouth.

Take off immediately all contaminated clothing and wash before reuse.

Collect spillage.

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

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of content/container to suitable landfill in accordance with local regulations.

- Remove the top of the container in the open air and do not smoke or eat when handling.
- · Avoid eye and skin contact.
- WEEVILPHOS 560 TABLETS fumigations may be carried out without the use of a gas mask and operators will not be exposed to any dangerous concentrations of Phosphine, if instructions are followed. Nevertheless, gas masks should always be readily available and should be equipped with a special canister for Phosphine. If a strong smell of Phosphine is noticed before the charging operation is completed, a gas mask must be used.
- Inhabited buildings should never be fumigated. If a warehouse is to be fumigated and it is directly connected to an inhabited building, the latter **must** also be evacuated.
- Use a gas mask when handling recently treated grain. The presence of gas can be determined with a gas detector.
- As **Phosphine** reacts with copper, copper compounds, gold and silver, attention should be paid to electrical equipment. It is therefore advisable to protect electric boxes, switches by covering them with plastic or a coating of melted paraffin wax.
- Use total contents of immediate container in one operation if possible. When contents are not fully used, reseal the container and store in a cool dry place.
- CLEAN THE EMPTY CONTAINER: Once all the pesticide formulation is decanted from the container, leave the cap off and place in a secure spot for at least 24 hours to aerate. Thereafter, the container should be submerged in a large bucket of cold water and left standing for one hour. Remove the container, shake out all the water and allow it to dry in the sun. Puncture or flatten the container and dispose of via an approved recycler. Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages.

SYMPTOMS OF HUMAN POISONING

Depending on the amount of phosphine inhaled, symptoms may occur immediately, or late in a lag phase of hours.

A few uncharacteristic symptoms of poisoning by a small quantity would be: Fatigue, buzzing in the ears, pressure in the chest and uneasiness, which might pass in fresh air.

Greater quantities will quickly lead to general fatigue, nausea, stomach-intestine symptoms, with vomiting, stomach ache, diarrhoea ('food poisoning'), further to disturbance of the equilibrium, strong pains in the chest, and dyspnoea.

Very high concentrations rapidly result in strong dyspnoea, cyanosis, agitation, ataxia, anoxemia, unconsciousness, and death.

FIRST AID TREATMENT

- Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the
 event of any complaints or symptoms, avoid further exposure. THE PATIENT IMMEDIATELY TO THE
 NEAREST PHYSICIAN.
- <u>Inhalation:</u> If product has been inhaled, move victim to fresh air and remove source of contamination if safe to do so. If patient is unconscious, place in semi-prone recovery position or otherwise maintain the airway. If the patient is conscious, but have difficulty breathing, treat in a seated position and give oxygen if available. Otherwise, allow the patient to recline with the legs slightly elevated. Apply artificial respiration and/or closed heart massage if needed. Do not give anything by mouth to an unconscious person. The patient should be kept under observation. **Obtain medical attention immediately.**
- <u>Skin contact:</u> Brush or shake material off clothes and shoes in a well-ventilated area. Allow clothes to aerate in a ventilated area prior to washing them. Wash skin gently and thoroughly with cold water and non-abrasive soap. **Obtain medical attention immediately.**
- Eye contact: Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Obtain medical attention.**

<u>Swallowed:</u> Obtain medical attention immediately or call a poison control centre for treatment advice.
Do not give anything by mouth to an unconscious person. Do not apply mouth-to-mouth resuscitation if patient swallowed tablets. Do not give milk, fats, or saline emetics by mouth. If the patient is conscious induce vomiting by touching back of throat with finger. After 20 minutes (or after vomiting), administer activated charcoal (50g in water by mouth) if available. Keep under medical supervision.

NOTES TO PHYSICIAN

- Treat symptomatically. In case of swallowing, perform gastric lavage.
- Should hypotension develop, consider cardiac tonic, Dopamine 5 to 10 μg/kg/min.
- Complications include:
 - Incipient pulmonary oedema consider glucocorticoids e.g. 500 to 1000 mg Prednisolone on first day.
 - Progressive lung oedema give oxygen and by intubation, continuous fluid removal. Counter enzyme-blockage oxygen deficiency by exchange blood transfusion.
 - Renal failure consider haemodialysis.
 - Watch for hepatic failure, electrocardiac and electrolyte disturbances.
 - Twenty (20) mℓ of 20 % Calcium gluconate plus 1 to 2 g of 10 % Sodium thiosulphate I.V. in an adult may also be considered in severe cases.

Relevant hazardous components		
Aluminium Phosphide	56 %	
Ammonium carbamate	<30 %	

NOTE: The ingredients listed above contribute to the overall GHS classification, the remaining ingredients do not have to be listed according to the South African Regulations for Hazardous Chemical Agents 2021, Regulation 14(b).

In case of poisoning, call the following number: +27 82 446 8946 (Griffon Poison Information Centre) or +27 861 555 777 (Poison Information Helpline).

In case of a chemical spill call the following 24 Hr Transport / Spill emergency number: +27 86 044 4411 (Hazcall24 / Client: Villa Crop Protection).

RESISTANCE WARNING

WEEVILPHOS 560 TABLETS is a group code 24A insecticide. Any insect population may contain individuals naturally resistant to **WEEVILPHOS 560 TABLETS** and other group code 24A insecticides. The resistant individuals can eventually dominate the insect population if these insecticides are used repeatedly. These resistant insects may not be controlled by **WEEVILPHOS 560 TABLETS** or any other group code 24A insecticide.

To delay insecticide resistance:

- avoid exclusive repeated use of insecticides from the same insecticide group code. Alternate or tank mix with products from different insecticide group codes,
- integrate other control methods (chemical, cultural, biological) into insect control programmes.

For specific information on resistance management, contact the registration holder of this product.

Mode of action:

- An insecticide and rodenticide that acts as a spatial fumigant.
- Causes respiratory, metabolic and nerve poison.

RISTRICTED USES: (Use only as directed)

This product is restricted due to acute toxicity. This remedy may only be sold to and used by a registered pest control operator, or by someone under the supervision of a registered pest control operator, and only for those uses covered by the pest control operator's scope of registration, and only as directed on this label.

NOTICE TO USER:

Read the entire label before application. This agricultural remedy is to be used only in accordance with the instructions on the label. It is an offence under the Act to use this agricultural remedy for any purpose in a manner contrary with the directions on the label.

DIRECTIONS FOR USE: Use only as directed.

- Contact a local representative for specialized assistance.
- WEEVILPHOS 560 TABLETS is effective in killing insects in all four life cycles: adult, egg, pupae and larvae.
- **WEEVILPHOS 560 TABLETS** develop into the highly effective phosphine gas (PH₃) when coming into contact with humidity. **Phosphine** is a gas with a high penetrating power. Phosphine kills all kinds of stored-product pests, which are normally found, for example, Grain Weevil, Rice Weevil, Saw-toothed Grain Beetle. Lesser Grain Borer, Khapra Beetle, Cadelle, Indian Meal Moth, Mediterranean Flour Moth and Angoumois Grain Moth.
- The effectiveness of fumigation with WEEVILPHOS 560 TABLETS depends on temperature, humidity, dose and exposure time and gas tightness of fumigated area.
- Temperature:

Fumigation of grain at temperatures below 5 °C is **NOT** recommended.

• Humidity and Grain Moisture:

If the humidity around the commodity or the moisture level inside the commodity is low, it is recommended to extend the exposure period.

- Gas tightness and Sealing:
 - Phosphine gas must be present for a certain time in the fumigated space in order to be efficient. Therefore, gastight sealing is of absolute importance.
 - Tarpaulin covers must be sealed off properly to the floor with sand snakes.
 - In the case of structural space fumigation, all doors, windows, ventilation shafts and any other opening must be sealed off properly, prior to fumigation.
- Exposure time:
 - The prescribed minimum exposure period should not be reduced. Longer exposure periods will have no detrimental effect.
 - On the contrary, it can only be advantageous to the result of the fumigation.
- Aeration:
 - Remove all material used for sealing after fumigation period has expired. Open all doors, windows and or related structures to aerate the structure under fumigation.
 - Phosphine disperses rapidly; therefore the gas will disperse in a relative short period of time. Aeration must commence for at least 3 hours before people are allowed within the structure.

<u>APPLICATION INSTRUCTIONS</u>

- WEEVILPHOS 560 TABLETS can be added mechanically or by hand to grain as it tumbles into silos or bins.
- For flat storage, tablets are inserted by means of a special probe to push them into the grain.
- For all fumigations it is necessary to seal all possible leaks or cover the commodity with gastight polyethylene tarpaulins.
- Gas masks are not normally required but should be on hand, fitted with a canister against Phosphine gas
 in case of an emergency.
- Never enter a fumigated area when the gas concentration exceeds one (1) ppm without gas mask (use an appropriate effective gas detector).
- After the required period of fumigation air thoroughly for 2 to 3 hours by removing all coverings and opening of hatches, windows, etc.

PRODUCTS TO BE FUMIGATED WITH WEEVILPHOS 560 TABLETS

All stored grain commodities, all oilseeds including canola, dried fruit, dried vegetables, dry beans, peas
and lentils, dried legumes, seeds, cacao beans, tapioca, cake flour, wheat meal, maize meal, maize grits,
rice, pastas, dried animal feed, candy and chocolates, chicory, herbs and spices, macaroni, semolina and
other farinaceous products granulated or powdered, all types of seeds for planting and animal feeds,
skins and hides.

RECOMMENDED DOSAGE RATES AND EXPOSURE TIMES Important: Refer to "DIRECTIONS FOR USE" above.

ONLY FOR USE BY REGISTERED AND QUALIFIED CIRCULATION FUMIGATION OPERATORS					
METHOD OF STORAGE AND DIRECTIONS FOR APPLICATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS			
GRAIN AND OILSEED IN BULK STORAGE	See applicable	Maize, wheat, sorghum, rice, shelled ground nuts and other cereal grains	Barley, oats, rye, buck- wheat	Sunflower seed	<u>Unshelled</u> groundnuts
	<u>below</u>	Bulk storage mass: 700 to 800 kg per m³	Bulk storage mass: 600 to 700 kg per m ³	Bulk storage mass: 400 kg per m ³	Bulk storage mass: 300 kg per m ³
Grain in absolutely gas tight silo-bins* Administer on the conveyor during intake. Apply by hand or with an automatic tablet dispenser. Bins should be filled to capacity in as short a time as possible	14 days	2.2 tablets per ton	2.7 tablets per ton	4.3 tablets per ton	5.7 tablets per ton
GRAIN IN reasonably gastight silo-bins** Application as for absolute gastight silo-bins	5 days	6 tablets per ton	7 tablets per ton	11 tablets per ton	15 tablets per ton
Circulation fumigation of grain in silo-bins Apply full dosage tablets on top of the grain. Switch the fan motor on and let it run for 24 to 40 hours. Contact the local representative for full information	14 days	2.2 tablets per ton	2.7 tablets per ton	4.3 tablets per ton	5.7 tablets per ton

^{* -} Absolute gastight silo-bins can retain a pressure of 50 mm paraffin in an open-arm manometer of 22 seconds.

^{** -} Reasonably gastight silo-bins can retain a pressure of 50 mm paraffin in an open-arm manometer for 10 to 22 seconds.

METHOD OF STORAGE AND DIRECTIONS FOR APPLICATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS			
Grain in horizontal bulk storage Apply tablets to the grain bulk by means of steel probes. Uniform distribution of tablets throughout the grain bulk should be attempted. Seal the bulk gastight with fumigation tarpaulins within two (2) hours after application of tablets has begun	5 days	6 tablets per ton or 4 tablets per m ³	7 tablets per ton or 4 tablets per m³	11 tablets per ton or 4 tablets per m³	15 tablets per ton or 4 tablets per m ³
Empty silo-bin fumigation Only silo-bins in which a pressure of at least 1 kPa which will not decrease to half this pressure in less than 30 seconds. Seal inand outlet valves as well as inspection holes	Minimum 30 days	1 tablet per 110 m³ Spread tables evenly over bin floors.			
Grain in transit in FGD and FZ railway trucks Doors and hatches must be sealed with tape or plastic prior to loading. Apply tablets uniformly during loading or distribute them over the floor of the truck	5 days	IMPORTANT 210 tablets per truck Truck fumigations must be carried out in conjunction with the relevant control board and Transnet in accordance with the Code of Practice laid down by them.		ntrol board and the Code of	

ONLY FOR USE BY REGISTERED AND QUALIFIED CIRCULATION FUMIGATION OPERATORS				
METHOD OF STORAGE AND DIRECTIONS FOR APPLICATION	MINIMUM EXPOSURE PERIOD	DOSAGE & REMARKS		
Grain, oilseeds, other foods, feeds, and seeds packed in gas permeable bags or boxes and stacked	5 days	4 tablets per m³	IMPORTANT Accurately determine the stack volume. Calculate the number of tablets required. Evenly spread tablets over the stack. Seal gastight with tarpaulins.	
Tobacco Raw and processed tobacco in stacks, bales, cases and hogsheads	5 days preferably 8 to 10 days	1 tablet per m³	IMPORTANT Accurately determine the stack volume. Calculate the number of tablets required. (Do NOT exceed the prescribed dosage rate). Evenly spread tablets over the stack. Seal gastight with tarpaulins.	
Space fumigation in flour mills, warehouses and sheds	5 days preferably 8 to 10 days	1 tablet per m³	IMPORTANT Seal all doors, windows and other openings gastight. Protect electrical equipment against the gas. Accurately determine the volume to be fumigated. Calculate the number of tablets required. Evenly spread tablets throughout the building. Contact the local representatives for full information.	

VERY IMPORTANT – POST TREATMENT SAFETY

- After fumigation, all commodities intended for immediate handling, especially packed processed food commodities, should be aerated thoroughly for a minimum period of two to three hours.
- **Never** enter a fumigated area without a gasmask where a concentration of more than one (1) ppm gas is present. Gas concentration can be measured with an **AUER** or **DRAËGER** gas detector.

PEST	DOSAGE	REMARKS
<u>Gerbils</u>	1 tablet per tunnel	Shallow disc the area to block all holes. Treat only "active holes" by placing 1 tablet as deep as possible into each burrow (about 1 m) and repeat the next day if new holes are detected. It is recommended to apply tablets in the afternoon before Gerbils become active in the evening.
Field rats & mice	1 or more tablets per tunnel depending on burrow size	Application method to be adapted to suit the conditions in each case, but in general place tablets as deep into the rodent burrow as possible. Repeat after a week if more activity is detected.
Moles	1 tablet as far into the tunnel as possible	Apply in the morning when Moles are generally less active. Avoid unnecessary noise and movement as Moles are easily alerted and the smell of gas causes them to block the tunnels and escape death. All burrows in an area must be treated simultaneously. Treat new mounds by carefully removing soil to expose burrow entrance. Ensure tunnels are not blocked with soil.