Insecticide



WEEVILPHOS 560 PELLETS

Reg. No. L 10194 Act No. 36 of 1947 N-AR 1226 3: 3/8/2022 - Oct2022

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 in grain mills, warehouses and other storage premises.

ACTIVE INGREDIENT

aluminium phosphide

560 g/kg

GROUP 24A INSECTICIDE



Hazard Statements:

Very toxic to aquatic life.

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.

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.



Registration holder: VILLA CROP PROTECTION (PTY) LTD.

Co. Reg. No. 1992/002474/07
PO Box 10413, Aston Manor, 1630
Tel. (011) 396 2233
Website: www.villacrop.co.za

24 HR EMERGENCY NUMBERS: Griffon Poison Centre: +27 82 446 8946 24 HR Transport / Spill Emergency no: (Hazcall24) +27 86 044 4411 (Client: Villa Crop Protection)

WEEVILPHOS 560 PELLETS

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N-AR 1226

IRAC INSECTICIDE GROUP CODE: 24A

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ASTON MANOR, 1630 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 PELLETS** 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 pellets is toxic to all forms of animal and human life upon inhalation.
- Never bring pellets 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 top of the container in the open air.
- Avoid eye and skin contact.
- WEEVILPHOS 560 PELLETS 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 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.

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

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 dyspnea.

Very high concentrations rapidly result in strong dyspnea, 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.**

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- <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.**
- <u>Eye contact:</u> Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after five (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 pellets. 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.

NOTE TO PHYSICIAN

- Treat symptomatically. In case of swallowing, perform gastric lavage.
- Should hypotension develop, consider the cardiac tonic, Dopamine at 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 hemodialysis.
 - 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.

RESISTANCE WARNING

WEEVILPHOS 560 PELLETS is a group code 24A insecticide. Any insect population may contain individuals naturally resistant to **WEEVILPHOS 560 PELLETS** 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 PELLETS** 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.

DIRECTIONS FOR USE: Use only as directed.

- Contact a local representative for specialized assistance.
- WEEVILPHOS 560 PELLETS is effective in killing insects in all four life cycles: adult, egg, pupae and larvae
- **WEEVILPHOS 560 PELLETS** 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 PELLETS** 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 three (3) hours before people are allowed within the structure.

APPLICATION INSTRUCTIONS

- WEEVILPHOS 560 PELLETS can be added mechanically or by hand to grain as it tumbles into silos or bins.
- 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 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 hatches, windows, etc.

PRODUCTS TO BE FUMIGATED WITH WEEVILPHOS 560 PELLETS

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.

RECOMMENDATION FOR THE USE OF WEEVILPHOS 560 PELLETS FOR THE CONTROL OF INSECT PESTS IN STORED PRODUCTS

TYPE OF STORAGE AND METHOD OF FUMIGATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS			
GRAIN AND OILSEEDS IN BULK STORAGE	See applicable	Maize, wheat, sorghum, rice, shelled ground nuts and other grain	Barley, oats, rye, buckwheat	Sunflower seed	Unshelled groundnuts
	below	Bulk storage mass: 700 to 800 kg per m ³	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
ABSOLUTE GASTIGHT SILOBINS* Apply uniformly to the conveyor during intake. Application can be done by hand or through an automatic pellet dispenser. Bins should be filled to capacity in as short a time as possible	14 days	11 pellets per ton	13 pellets per ton	21 pellets per ton	27 pellets per ton

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TYPE OF STORAGE AND METHOD OF FUMIGATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS			
REASONABLY GASTIGHT SILOBINS** Application the same as with "Absolute Silobins"	5 days	30 pellets per ton	35 pellets per ton	56 pellets per ton	75 pellets per ton

- * Absolute gastight silobins can retain a pressure of 50 mm paraffin in an open arm manometer of 22 seconds.
- ** Reasonably gastight silobins can retain a pressure of 50 mm paraffin in an open-arm manometer for 10 to 22 seconds.

TYPE OF STORAGE AND METHOD OF FUMIGATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS		
EMPTY SILOBIN FUMIGATION Only silobins in which a pressure of not less than 1 kPa will decrease to half that pressure in not less than 30 seconds. Seal the in- and outlet valves as well as inspection holes	Minimum 30 days	1 pellet per 2 m³	Apply pellets evenly on the bottom of the bin.	
FCD and FZ RAILWAY TRUCKS Doors and hatches must be sealed with tape or plastic prior to loading. Apply pellets uniformly during loading or distribute them over the floor of the truck	5 days	1050 pellets per truck for all commodities	IMPORTANT Truck fumigations must be carried out in conjunction with the relevant control board and Transnet in accordance with the Code of Practice lay down by them. Aspects to keep in mind during stack fumigation: a) Determination of the volume of the stack, b) The correct number of pellets for the volume, c) Gas permeability of packing material, d) Gas tightness of stack covering. Consult the local representative for full information.	
GRAIN, OILSEEDS AND OTHER FOOD COMMODITIES IN BAGS AND OTHER PACKINGS Apply pellets uniformly over and around the stack and cover the stack with gas-tight tarpaulins. The tarpaulins must be sealed properly	5 days	20 pellets per m ³	Ensure that the bagged commodity is sealed in gas-tight fumigation sheets.	

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TYPE OF STORAGE AND METHOD OF FUMIGATION	MINIMUM EXPOSURE PERIOD	DOSAGES OF DIFFERENT PRODUCTS		
TOBACCO-RAW AND PROCESSED Raw and processed tobacco in stacks, bales, cases and hogshead. Cover with gastight tarpaulins and seal down	5 days (preferably 8 to 10)	5 pellets per m ³	IMPORTANT NEVER exceed the prescribed dosage. Aspects to keep in mind with space fumigation: a) Determination of volume. b) The correct number of pellets for the volume.	
SPACE FUMIGATIONS FLOOR MILLS, WAREHOUSES AND SHEDS Seal the building or room prior to fumigation	5 days (preferably 8 to 10)	5 pellets per m³	c) Gastight sealing is of utmost importance. Consult the local representative 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 ppm gas is present. Gas concentration can be measured with an **AUER** or **DRAËGER** gas detector.

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