



Fumitoxin PELLETS



FOR CONTROL OF PESTS IN STORED GRAIN, PROCESSED FOODS, FEEDS AND NON-FOOD COMMODITIES, INCLUDING TOBACCO

READ THE ENTIRE LABEL, APPLICATOR'S MANUAL AND GUIDANCE FOR PREPARATION OF A FUMIGATION MANAGEMENT PLAN BEFORE USING.

THIS PRODUCT CAN ONLY BE USED IN CONJUNCTION WITH A DETAILED FUMIGATION MANAGEMENT PLAN

A FUMIGATION MANAGEMENT PLAN MUST BE WRITTEN FOR ALL FUMIGATIONS PRIOR TO ACTUAL TREATMENT

RESTRICTED



KEEP OUT OF REACH OF CHILDREN AND PREVENT ACCESS BY UNAUTHORIZED PERSONNEL

GUARANTEE: Aluminum Phosphide 55%
REGISTRATION NO. 19226 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 2490 PELLETS
NET WEIGHT: 1.5kg

Manufactured for:
SUNZON INTERNATIONAL, INC.
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Wilson, NC 27893 USA
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Fax: 252-237-3259

Canadian Agent:
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Canada N0P 2K0
Telephone: 519-692-4232
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NOTICE TO USER: This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

NATURE OF RESTRICTIONS:
The use of this product is RESTRICTED due to the high acute inhalation toxicity of hydrogen phosphide (phosphine, PH₃) gas which is formed when this product is exposed to moisture in the air.

This product is for retail sale to and use only by individuals holding an appropriate pesticide applicator certificate or license recognized by the provincial/territorial pesticide regulatory agency where the pesticide application occurs or by persons trained in accordance with the Applicator's Manual working under the direct supervision and in the physical presence of an applicator holding an appropriate pesticide applicator certificate or license. Consult local pesticide regulatory authorities about use permits which may be required.

This product is accompanied by an approved label, an Applicator's Manual and Guidance for Preparation of a Fumigation Management Plan. READ AND UNDERSTAND THE ENTIRE LABEL AND THE APPLICATOR'S MANUAL. All parts of the label and manual are equally important for safe and effective use of this product. Call the manufacturer if you have any questions or do not understand any part of this label and the Applicator's Manual.

A minimum buffer zone of 30 metres must be established for all fumigated sites (with the exception of ships and railcars that are in motion), refer to the Applicator's Manual – BUFFER ZONE REQUIREMENTS. Note that the term "fumigated site/application site" refers to the site under fumigation treatment. Placarding is required for both the fumigated site and the buffer zone perimeter.

Appropriate respiratory protection, as outlined in the Applicator's Manual – RESPIRATORY PROTECTION, must be worn during delivery/dispensing of product, while attending to spills and leaks, during deactivation of unreacted granules and while monitoring hydrogen phosphide levels during the fumigation and aeration periods (i.e. worn at all times when levels of hydrogen phosphide are above 0.1 ppm or are unknown). Entry by unprotected workers is only permitted after the fumigated site has been aerated and the hydrogen phosphide level is at or below 0.1 ppm in the fumigated site and the buffer zone.

Note that transport of non-aerated commodities is permitted by rail or ship only. Other transport vehicles, such as trucks, vans, and trailers are prohibited from travel over public roads or highways until completely aerated to a hydrogen phosphide level at or below 0.1 ppm.

This product must be stored away from lodging for humans, animal quarters and normal work areas to avoid inadvertent exposure. Refer to the Applicator's Manual for detailed storage instructions.

RESTRICTED USES: For the treatment of space, grain pests in stored barley, cocoa beans, coffee beans, corn, cotton seeds, dates, dried peas, lentils, millet, nuts in shells, peanuts, popcorn, rice, rye, sorghum, soybeans, sunflower seeds, triticale, wheat, all processed foods and feeds. Fumitoxin® may also be used to fumigate bagged, packaged or treated cereal, grass, sorghum or small legume seeds destined for planting use only.

Non-food items may also be fumigated with Fumitoxin®: dried plants and flowers; leathers, human hair, vulcanized hair, mohair, leather products, animal hides and fur; paper and paper products; processed or unprocessed cotton, wool and other natural fibers or cloth, clothing; seeds (grass seed, ornamental herbaceous plant seed and vegetable seed); straw and hay; tobacco; wood and wood products.

Even distribution throughout the commodity is essential for good results. Refer to the Applicator's Manual for detailed Precautions, Safety Recommendations and Directions for Use.

The time of required fumigant exposure is as follows:	
Below 5°C	Do not fumigate*
at 5-12°C	10 days are required
at 13-15°C	5 days are required
at 16-20°C	4 days are required
above 20°C	not less than 3 days

*If the temperature drops below 5°C during a fumigation, deactivate the FUMITOXIN® at the end of the fumigation period, as detailed in the SPILL AND LEAK PROCEDURES (Section 15).

To guarantee compliance with maximum residue limits for hydrogen phosphide residues, fumigated commodities must be aerated for 48 hours prior to offering them to the end consumer. For tobacco, aeration in hogsheads should be not less than three days; on any other type of storage, two days. It is the user's responsibility to ensure that there is no residue on such commodities in excess of these amounts.

This product is highly toxic to birds and mammals. Carefully inspect the outside and inside of the structure prior to application of the fumigant to ensure the absence of nesting or roosting birds. Avoid application if birds are present.

This product is not to be used for vacuum fumigations.

Hydrogen phosphide will corrode certain metals, especially at high concentrations and humidities. Protection or removal of wiring, sensitive equipment or precious metals is recommended under these conditions.

PRECAUTIONS:
Forms Extremely Hazardous Gas.
KEEP OUT OF REACH OF CHILDREN AND PREVENT ACCESS BY UNAUTHORIZED PERSONNEL.
Fatal if Inhaled, swallowed or absorbed through eyes or skin.
DO NOT inhale gas or dust.
Do not ingest pellets or dust.
DO NOT get in eyes or on skin or clothing.
DO NOT eat, drink or smoke while handling Fumitoxin®.

Exposure to moisture in the air or liquids releases flammable and toxic hydrogen phosphide (phosphine, PH₃) gas. Piling of tablets, pellets or bags or the addition of liquid to the product is prohibited. Spontaneous ignition may result if contacted by liquids such as water, acids, or chemicals.
Wear a loose fitting long sleeve shirt, long pants, socks and shoes, and wear dry gloves of cotton or other breathable material when handling Fumitoxin®.
Entry by unprotected workers is only permitted after the fumigated site has been aerated and the hydrogen phosphide level is at or below 0.1 ppm in the fumigated site and the buffer zone.
Appropriate respiratory protection, as outlined in the Applicator's Manual – RESPIRATORY PROTECTION, must be worn during delivery/dispensing of product, while attending to spills and leaks, during deactivation of unreacted pellets, and while monitoring hydrogen phosphide levels during the fumigation and aeration periods (i.e. worn at all times when levels of hydrogen phosphide gas are above 0.1 ppm or are unknown). If a beard or long sideburns interfere with the fit of respiratory protection, they must be shaven.

For hydrogen phosphide levels between 0.1-5 ppm, the minimum protection required is a NIOSH-approved air-purifying full-face piece respirator (gas mask) with a chin style, front- or back-mounted canister approved for hydrogen phosphide OR a NIOSH-approved supplied-air respirator (i.e. airline respirator or self-contained breathing apparatus) with a full face piece.

For hydrogen phosphide levels above 5 ppm or at unknown concentrations, a NIOSH-approved self-contained breathing apparatus with a full face piece operated in a pressure-demand or other positive-pressure mode OR a NIOSH-approved airline respirator with a full face piece operated in a pressure-demand or other positive-pressure mode combined with an auxiliary self-contained positive-pressure breathing apparatus must be worn.

For emergency use and/or to escape from conditions which are Immediately Dangerous to Life or Health (IDLH), keep available for use an adequate number of NIOSH-approved self-contained breathing apparatus (SCBA) with a full face piece operated in a pressure-demand or other positive-pressure mode.

When opening the product canister, point the canister away from the face and body and slowly loosen the cap. Although the chances for a flash are very remote, never open these containers in a flammable atmosphere. When using an automatic dispenser to add Fumitoxin® to the commodity, know how to calibrate the dispenser to deliver the appropriate dosage. To prevent accidental poisoning, ensure that the Fumitoxin® remains in the hopper of the automatic dispenser once the commodity has been transferred.

Theft of products: Immediately report to the local police department thefts of metal phosphide fumigants. Registrant must be informed of any incident involving the use of this product.

ENVIRONMENTAL HAZARDS:
Toxic to birds and mammals. Carefully inspect the outside and inside of the structure prior to application of the fumigant to ensure the absence of nesting or roosting birds. Avoid application if birds are present.
DO NOT contaminate irrigation or drinking water supplies or aquatic habitats such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands by cleaning of equipment or disposal of wastes.

DISPOSAL:
Refer to the Disposal instructions of the Applicator's Manual for proper disposal of used Fumitoxin® after fumigation is completed. Open dumping is prohibited. Do not contaminate water, food or feed by disposal. Proper disposal of aluminum phosphide is required to ensure minimal impact on the environment. See the Applicator's Manual for additional disposal instructions.

TOXICOLOGICAL INFORMATION:
FUMITOXIN® PELLETS containing aluminum phosphide reacts with moisture from the air, acids and many other liquids to release hydrogen phosphide (phosphine, PH₃) gas. Mild exposure by inhalation causes malaise (indefinite feeling of sickness), ringing in the ears, fatigue, nausea and pressure in the chest which is relieved by removal to fresh air. Moderate poisoning causes weakness, vomiting, pain just above the stomach, chest pain, dizziness and dyspnea (difficulty in breathing). Symptoms of severe poisoning may occur within a few hours to several days. Severe poisoning may result in pulmonary edema (fluid in lungs) and may lead to dizziness, cyanosis (blue or purple skin colour), unconsciousness, and death. In sufficient quantity, hydrogen phosphide affects the liver, kidneys, lungs, nervous system and circulatory system, and may result in (1) pulmonary edema, (2) liver elevated serum AST, ALT and ALP, reduced prothrombin, hemorrhage and jaundice (yellow skin colour) and (3) kidney haematuria (blood in urine) and anuria (abnormal or lack of urination). Fatality is characteristic of hypoxia (oxygen deficiency in body tissue). Frequent exposure to concentrations above permissible levels over a period of days or weeks may cause poisoning. Inhalation can cause lung edema (fluid in lungs) and hyperaemia (excess of blood in a body part), small perivascular brain hemorrhages and brain edema (fluid in brain). Poisonous if swallowed. Ingestion can cause lung and brain symptoms but damage to the viscera (body cavity organs) is more common.

Treatment is symptomatic. The following measures are suggested for use by the physician in accordance with the physician's own judgment:

In its milder to moderate forms, symptoms of poisoning may take up to 24 hours to appear. Monitoring should continue for at least this long. Manifestations of severe poisoning appear early. Hypoxia and hypotension should be treated with usual supportive measures of oxygenation, intubation, ventilation and positive pressure as needed, and intravenous fluids, pressors andotropes as required, respectively. In the event of the ingestion of a large quantity of aluminum phosphide, once the patient is stabilized, aspiration of gastric contents by inserting a 16 french naso-gastric tube to suction the stomach contents might be considered. There is no specific antidote. Hemodialysis may be indicated if renal failure develops but does not remove the toxin.

FIRST AID:
Symptoms of exposure to hydrogen phosphide gas-releasing products can include headache, dizziness, nausea, difficult breathing, vomiting, and diarrhea. In all cases of exposure, protect yourself, remove the person from exposure and get them to an Emergency department. If possible, bring this Applicator's Manual, the container, label or product name and Pest Control Registration Number with you when seeking medical advice.

FIRST AID RESPONDER PROTECTION: Hydrogen phosphide gas is a highly toxic systemic poison and a severe respiratory tract irritant. Persons exposed to solid phosphides, which react with moisture to produce hydrogen phosphide gas, can pose risks to others if phosphides are on clothes, skin, or hair. First Aid responders should protect themselves through the use of appropriate personal protective equipment before attempting to rescue or care for a person who has been exposed to a hydrogen phosphide gas-releasing product, and/or if entering a zone with potentially unsafe hydrogen phosphide levels. A NIOSH-approved self-contained breathing apparatus (SCBA) with a full face piece operated in a pressure-demand or other positive-pressure mode OR a NIOSH-approved airline respirator with a full face piece operated in a pressure-demand or other positive-pressure mode combined with an auxiliary self-contained positive-pressure breathing apparatus is recommended in response situations that involve exposure to potentially unsafe or unknown levels of hydrogen phosphide (see the PRECAUTIONS and SAFETY RECOMMENDATIONS sections of product label or Applicator's Manual for further guidance regarding personal protective equipment).

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration using a bag-valve-mask device to prevent possible secondary exposure to hydrogen phosphide gas to the first aid responder. Do not perform mouth-to-mouth resuscitation. Do not give anything by mouth to an unconscious person. Call a poison control centre or doctor immediately for further treatment advice.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. DO NOT DRINK WATER. Do not administer anything by mouth or make the person vomit. It is likely that this exposure will lead to spontaneous vomiting.

IF ON SKIN OR CLOTHING: Brush or shake material off clothes and shoes in a well-ventilated area. Allow clothes to aerate in a ventilated area prior to laundering. Do not leave contaminated clothing in occupied and/or confined areas such as automobiles, vans, motel rooms, etc. Wash contaminated skin thoroughly with soap and water for 15-20 minutes. Call a poison control centre or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

HOT LINE NUMBER
Have the product container label or Applicator's Manual with you when calling a poison control centre, doctor, or when going for treatment. You may also contact SUNZON INTERNATIONAL, INC. 252-237-7923 or SELLEN GRAIN SERVICES, LTD. 519-692-4232. For all other chemical emergencies, please contact CHEMTREC – 1-800-424-9300 or Canadian Transport Emergency Centre (CANUTEC) 613-996-6666.

PEST MANAGEMENT PRACTICES
An operational pest management plan must be put in place in food processing facilities and/or other relevant sites where insects/rodents forage or seek refuge in order that the facility, its equipment and its exterior surroundings do not promote pest populations, and are amenable to control and treatment methods. The plan should include the following:

- Practices to reduce or eliminate infestations in incoming food and ingredients through strict purchase specifications, audits of supplies, and inspection of incoming material.
- Good sanitation practices involving thorough and regular cleaning, prevention of dust generation and accumulation, and removal of food sources and harboursages for pests.
- Building maintenance to eliminate holes and cracks in floors, walls, ceilings, roofs, doors and windows that allow access for pests.
- Regular inspections and monitoring to guide schedules and locations of treatments and to evaluate the effectiveness of the overall management strategy.
- Pest identification and understanding of each pest's lifecycle to select the most appropriate control methods.
- Other practices including physical and mechanical treatments, controlled atmospheres, and applications of registered pesticides. Each treatment should be used as one component of an overall pest management plan. All pesticides must be stored, handled, and used according to label instructions.

RESIDUE STATEMENT:
If the pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca