## SAFETY INFORMATION

**Operator protection:**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

- **Engineering control of operator exposure:**
  - Wherever feasible, engineering controls such as local exhaust ventilation should be used to minimize exposure to the fumigant gas.
- **Personal protective equipment:**
  - Respirators: Use at least half-mask or full face-piece respirators to at least EN140 and EN14387B2P3, or equivalent.
  - Eye protection: Wear protective goggles/protective eyewear/face protection.
  - Gloves: Wear protective gloves/protective clothing/eye protection/face protection.
  - Protective clothing: Wear suitable protective clothing (coveralls), suitable protective gloves, and suitable respiratory protective equipment when applying the product and re-entering treated areas before the phosphine gas air concentration is below 0.01ppm.

**Risk mitigation measures:**

- **ToObject**:
  - Do not contaminate water with the product or its container.
  - Avoid release to the environment. Keep only in the original container.
  - In case of fire: Use CO2, sand, extinguishing powder for extinction.

**Inhalation:**

- **General:**
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Environmental protection:**

- **Toxic to aquatic life.**
  - Very toxic to aquatic life. In contact with water liberates flammable gases which may ignite spontaneously.
  - Contact with water liberates toxic gas.
  - Contact with acids liberates very toxic gas. Keep away from possible contact with water, because of violent reaction and possible flash fire.
  - Protect from moisture. Keep in an original container.
  - Keep away from the environment.
  - Keep protective gloves/protective clothing/eye protection/face protection.

## Crop/Situation

<table>
<thead>
<tr>
<th>Crop/Situation</th>
<th>Max. single dose:</th>
<th>Max. no. of applications</th>
<th>Withholding period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stored cereal grain, pulses, tea, oilseeds, coffee, cocoa, carob, dried spices &amp; tobacco</td>
<td>1 bag/1.11 m³</td>
<td>1 per season</td>
<td>7 days</td>
</tr>
<tr>
<td>Tree nuts</td>
<td>1 bag/1.11 m³</td>
<td>1 per season</td>
<td>21 days</td>
</tr>
<tr>
<td>Pistachio nuts</td>
<td>1 bag/1.11 m³</td>
<td>1 per season</td>
<td>35 days</td>
</tr>
<tr>
<td>Crop handling and storage structure</td>
<td>1 bag/1.11 m³</td>
<td>1 per season</td>
<td>-</td>
</tr>
</tbody>
</table>
Consumer protection:
KEEP ALL PERSONS AND ANIMALS OUT of the fumigation area and adjacent areas into which gas might penetrate.
Unprotected persons must be kept out of treated areas until the phosphine concentration in the atmosphere has fallen below the TLV of 0.01 ppm.
TREATED COMMODITIES MUST BE SCREENED to ensure removal of spent envelopes following fumigation and before removal of commodities from store.
DO NOT ALLOW BAGS/ENVELOPES TO COME INTO CONTACT WITH FOOD OR FEED other than the commodity being treated. DO NOT ALLOW CONTENTS OF THE BAG TO COME INTO CONTACT WITH FOOD OR FEED.

Storage and disposal:
Keep away from any possible contact with water because of violent reaction and possible flash fire.
Protect from moisture.
KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP OUT OF THE REACH OF CHILDREN.
Dispose of empty containers safely in accordance with guidelines given in ‘Pesticides: Code of Practice using Plant Protection Products’.
Keep only in original container, tightly closed, in a safe place.
DO NOT ALLOW EVEN SPENT ENVELOPES TO COME INTO CONTACT WITH FOOD OR FEED other than raw commodity.
DO NOT BULK spent residues / used bags. Spontaneous ignition could result.
DO NOT RE-USE CONTAINER FOR ANY PURPOSE.
* Where treated commodities are not removed immediately after airing, those persons applying the fumigant must ensure that their owners are aware of the ultimate need to recover envelopes and dispose of them safely.

This product is a pesticide in ready-for-use bags releasing the highly effective hydrogen phosphide (phosphine) when it is exposed to the atmospheric humidity. It is effective for the control of stored product pests without leaving dust residues in the fumigated goods.

FIRST AID
If any of the above mentioned symptoms occurs or if poisoning is suspected: STOP WORK
IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL seek medical advice immediately.
Symptoms of phosphine poisoning include faintness and a feeling of constriction in the chest.
Remove patient into fresh air. Prevent all exertion. Keep patient warm. Call doctor on site and show him this label. If breathing stops or shows signs of failing administer artificial respiration using oxygen and a suitable mechanical device such as a bag and mask. Do not use mouth-to-mouth resuscitation.
Guide to doctor
No specific antidote is known. Treatment for suspected poisoning should be symptomatic and supportive care.

DIRECTIONS FOR USE: IMPORTANT: This information is part of the approved Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Application Methods: The effectiveness of any fumigation depends on good sealing. Never resell opened aluminium sachets or store aluminium sachets in other containers. PROTECT THE PREPARATION AGAINST WATER AND OTHER LIQUIDS and avoid accumulation of bags, otherwise selfignition of the phosphine may occur. After application close the warehouse hermetically and put up warning notices.
The bags can be used for the control of pests in cereal products, cereals, dried fruit, dried vegetables, pulses, oilseeds, and tobacco. These commodities may be fumigated under gas-proof sheets or in other sealed enclosures. The bags can also be used for fumigation of cereals on ships in transit and for empty space fumigation.
The product has been found effective against the following stored product insects and their pre-adult stages. These include Grain, Rice, Bean, Pea and Maize weevils, Saw-toothed grain beetle, Confused flour beetle, Lesser grain borer, Rusty grain beetle, Khapra beetle, Angoumois grain moth, Indian meal moth, Mediterranean flour moth, Cigarette beetle, Tobacco Moth, Red flour beetle, Glabrous cabinet beetle, Mealworm beetle, Flour mite, Drugstore beetle and Moth mite.
USE ALL CONTENTS OF THE ALUMINIUM FOIL POUCH. DO NOT RESEAL. WARNING: Phosphine gas can corrode electrical systems.

Dosage and Application:
Recommended Dosages: The applicable dosage of the fumigation bags depends on several factors, such as: kind of pests, temperature and nature of storage.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Minimum Individual Dose</th>
<th>Maximum Individual Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals, cereal products</td>
<td>0.45 bags/m³, 5 g PH₃/m³</td>
<td>0.9 bags/m³, 10 g PH₃/m³</td>
</tr>
<tr>
<td>Cereals, exotic pulses, tea, coffee, herbal infusions, cocoa, spices, Dried vegetables, fruits and mushrooms</td>
<td>7 days</td>
<td></td>
</tr>
<tr>
<td>Processed cereal products</td>
<td>14 days</td>
<td></td>
</tr>
<tr>
<td>Tree nuts</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td>Pistachios</td>
<td>35 days</td>
<td></td>
</tr>
</tbody>
</table>

Minimum dosages are applied if storage goods are loosely packed and fumigation can be performed under optimal conditions of 20°C - 30°C and 50% - 75% relative humidity.
Maximum dosages should only be applied if storage goods are densely packed and fumigation can only be performed under worst case conditions of e.g. temperatures close to 10°C, or low relative humidity values or, if the insect population to be controlled is known to react with reduced sensitivity to phosphine fumigations. If possible the exposure period should always be lengthened.

AIRING: Following fumigation there should be an airing-off period of at least four hours or until gas levels drop below the TLV of 0.01 ppm. See Safety Precautions section for further details. The fumigated rooms and all adjacent rooms should not be entered without gasmask unless harmful gas concentrations are no longer present.

Exposure times:
For space fumigation, cereals, cereal products, dried fruit, dried vegetables, oil seeds:
Minimum of 5 days at optimal conditions of 20°C - 30°C and 50% - 75% relative humidity
Maximum exposures of up to 14 days should only be applied together with maximum dosages under worst case conditions, e.g. if temperatures are close to 10°C, or if low relative humidity values are present, or if the insect population to be controlled is known to react with reduced sensitivity to phosphine fumigations. For fumigation of cereals on ships in transit: 21 days.
Taint: May cause taint of oily material. Operators should warn their clients of the possibility of taint caused by this product.

Safety Zone
Place warning notices at the fumigation area and all points of access to the risk area. A 5m risk area must be established around treated areas/buildings.

Withholding Period:
After airing, the following withholding periods must be observed for edible commodities:
Cereals, oilseeds, pulses, tea, coffee, herbal infusions, cocoa, spices, Dried vegetables, fruits and mushrooms: 7 days
Processed cereal products: 14 days
Tree nuts: 21 days
Pistachios: 35 days

Electrical Wiring: This product is corrosive to copper-based materials. Sensitive equipment containing copper components must be protected or removed during treatment.
Other advice: Fumigation must not be carried out when temperatures are below 10°C. No fumigations to be carried out in conditions of low humidity. Generally, it should be made a rule to leave the commodity under gas as long as possible.
Allow grain to air until the TLV drops below 0.01 ppm. Tobacco in cases or bales will require 2 days ventilation or until a TLV of 0.01 ppm or lower. Ventilate hogsheads for not less than 8 days or until the TLV is below 0.01 ppm.
Silo Bins: Only use fumigation bags in such bins where recovery is possible. Bags are added at regular intervals through the upper entrance hatch or feeding tube, while covering the grain or other product.

Goods in bulk: Distribute the bags evenly. Push single bags by hand into the goods down to an approx. depth of 30 cm (1 ft.). If necessary (when the area is not gastight) cover the goods with tarpaulins of plastic sheets.

Stacked Goods: Attach the series of bags to the piles by inserting the top bag between two sacks or bales or put them on top thereof. Then cover with tarpaulins if not fumigating the store-room as a whole.
Empty store-rooms and empty silos: Distribute the bag-series equally in the store-room.

WARNING: Phosphine gas can corrode electrical systems.

This product is approved under Regulation (EC) No 1107/2009.

Batch No.: See print on Aluminium pouch