Company Name: UPL AUSTRALIA LIMITED
Product Name: QUICKPHOS FUMIGATION TABLETS
APVMA Approval No: 46948/106465

RLP APPROVED

DISPLAYED BY INFOPEST

Label Name:	QUICKPHOS FUMIGATION TABLETS

Signal Headings:	DANGEROUS POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Constituent Statements:	334 g/kg PHOSPHINE (PH3) present as ALUMINIUM PHOSPHIDE Each 3 g tablet liberates 1 g PHOSPHINE (PH3).

Mode of Action:	**GROUP** **24A** **INSECTICIDE**

Statement of Claims:	For the control of insect pests of stored products in certain situations and rabbits as per the Directions for Use Table

Net Contents:	300 g 1.5 kg (100, 500 tablets)

Restraints:	DO NOT fumigate inhabited buildings. DO NOT fumigate in work situations where there is a risk that phosphine gas could leak from fumigation enclosures into working areas. DO NOT use on commodities, or in empty containers, railcars or vessels that are in transit or likely to be in transit during the Exposure and/or Ventilation periods. DO NOT use in road transport vehicles (including a truck or road hauled container). DO NOT heap tablets. Heaped tablets limit gas release. DO NOT add water to the tablets. DO NOT use when commodity temperature is less than 15°C or the relative humidity within the structure is less than 25% or with raw cereal grains when the moisture content is less than 9%. DO NOT apply in structures that are not well sealed*. DO NOT apply as a surface-only treatment in a structure whose height exceeds twice its width, unless the structure/enclosure has a gas recirculation device fitted.

Directions for Use:	This section contains file attachment. **File Name:** Quickphos tabs 0416 DfU.doc **File Size:** 60928 bytes

Other Limitations:	TREATED COMMODITIES MAY BE SHIPPED AFTER COMPLETION OF THE MINIMUM EXPOSURE PERIOD PLUS VENTILATION PERIOD.

Withholding Periods:	DO NOT USE TREATED PRODUCE FOR HUMAN CONSUMPTION OR FOR STOCK FOOD FOR 2 DAYS AFTER COMPLETION OF FUMIGATION (MINIMUM EXPOSURE PERIOD PLUS VENTILATION PERIOD). TOBACCO: NOT REQUIRED WHEN USED AS DIRECTED.

Trade Advice:	

General Instructions:	QuickPhos Fumigation Tablets release phosphine gas when exposed to air. Phosphine penetrates through the commodity to kill eggs, larvae, pupae and adult stages of storage pests in sealed enclosures, but some eggs, pupae and adults will survive in unsealed enclosures (see Note 1 above). Protect by sealing or otherwise, sensitive electrical and electronic equipment (computers, meters, switches, fire alarm system etc.) containing copper/copper alloy components, photographic film or copy paper. Phosphine corrodes copper based materials. Application Fumigation of Commodities in Silos and Bulk Storages: Place the tablets in a single layer and separated from the commodity e.g.:- on non-flammable trays/sheets which are evenly spread on the commodity surface inside the storage. Fumigation of Commodities under Gas Proof Sheeting: Place tablets spaced from each other on non-flammable sheets/trays evenly distributed between and/or alongside stacked commodities in a manner that allows free circulation of gas. Ensure that the sheeting is sealed in a gas-tight manner after application. Fumigation of empty storages/enclosures: Place tablets spaced from each other on non-flammable sheets/trays evenly spread in the enclosure; with application starting at the furthest point from the exit door. Ensure the enclosure is made gas-tight. Lock and seal exit door after application.

Resistance Warning:	GROUP 24A INSECTICIDE For insecticide resistance management, QuickPhos Fumigation Tablets are a group 24A insecticide. Some naturally occurring insect biotypes resistant to QuickPhos Fumigation Tablets and other Group 24A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if QuickPhos Fumigation Tablets or other Group 24A insecticides are used repeatedly. The effectiveness of QuickPhos Fumigation Tablets on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, UPL Australia Limited accepts no liability for any losses that may result from the failure of QuickPhos Fumigation Tablets to control resistant insects.

	Application of QuickPhos Fumigation Tablets in unsealed storages/enclosures and use of low dose rates and shortened exposure periods is contrary to label instruction and will contribute to development of resistance.

Precautions:	FLAMMABLE: Keep away from naked flame. PRECAUTIONS Show the following warning sign prominently at all approaches to every fumigation site. “DANGER – POISON GAS – KEEP AWAY” Keep animals, children and unauthorised persons away from the area under treatment until the area is shown to be free from phosphine as indicated by a gas measuring device. WARNING: Containers must be opened in the open air. Whilst opening containers take care and point containers away from the face and body, as under certain conditions possible build-up of gas may result in flash flame upon exposure to air. DO NOT confine the product in small gas-proof enclosures such as a plastic bag. Such confinement could cause the gas concentration to reach the lower flammability level and may result in fire or explosion. Application rates higher than label directions and contrary to label instruction could cause gas concentrations to reach the lower flammability level which is 1.79% by volume (17,900 parts per million). When used according to the label directions, the amount of gas produced remains far below the lower flammability level. RE-ENTRY PERIODS: After application, wait until the Exposure Period has passed, then thoroughly ventilate for the required Ventilation Period and to the required Standard. Re-entry to fumigation areas is not recommended until measuring device(s) indicate that they are free of phosphine. The use of gas detection tubes or other measuring devices is recommended for monitoring gas levels in fumigation areas as phosphine gas may still be present even after the treated commodities have been removed and fumigation areas ventilated. DO NOT re-enter a storage after application has commenced or once treated grain/ commodity has been emptied without wearing a full face respirator with particulate (P1) and phosphine gas filter cartridge (canister) or self-contained breathing apparatus, until a measuring device indicates that it is free of phosphine or the Total fumigation period (minimum exposure period plus ventilation period) has elapsed.

Protections:	PROTECTION OF LIVESTOCK: Disturbance of unreacted phosphide powder residue results in release of more phosphine gas. Residues of phosphine gas or unreacted phosphide powder in treated grain/ commodity will be harmful if fed to animals, including poultry. Ensure feed is well mixed and that such residues are not present before feeding. DO NOT feed treated grain/commodity to animals, including poultry, until the Total Fumigation Period (Exposure plus Ventilation) plus the Withholding Period has expired. PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT: This product is highly toxic to wildlife. Dangerous to fish. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

Storage and Disposal:	Store in the closed, original container in a cool, dry, well ventilated locked area, out of the reach of children and unauthorised persons and away from all dwelling, animals, food, feedstuffs, seed and fertilisers.

	DO NOT store or carry container in vehicle cabins (this includes glove compartments, luggage compartments or other common air-spaces). Keep away from water and liquids. Water and many liquids cause immediate release of phosphine from product. Uncontrolled release of phosphine may result in fire and explosion and release of gas will pose a serious risk of injury to workers and bystanders. After fumigation with the product on trays/sheets remove the spent tablets and ensure residual phosphide is destroyed before disposal, e.g. by swamping with dilute acid or soapy water in open air until bubbling ceases. Dispose of deactivated residues below 500 mm in an approved disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. Triple rinse containers with soapy water to ensure residual phosphide is destroyed. Dispose of rinsings in an approved disposal pit. Destroy containers by breaking, crushing or puncturing them. Dispose of the containers at a local authority landfill. If no local authority landfill is available, bury the containers below 500 mm in an approved disposal pit. DO NOT burn empty containers or product.

Safety Directions:	Very Dangerous. Product releases dangerous phosphine gas slowly in moist air and immediately if wet. Can kill if inhaled or swallowed. DO NOT inhale dust or vapour. Avoid contact with eyes and skin. Open container in the open air. Keep away from water and liquids. Keep away from naked flames. Forms toxic gas. Use entire contents in one operation; if not possible, seal container thoroughly with waterproof adhesive tape or air-tight closure. Wash hands after use. When opening the container and using the product wear elbow-length PVC gloves and full face piece respirator with combined dust and gas cartridge (canister) or supplied air respirator. After each days use wash gloves and respirator (if rubber wash with detergent and warm water).

First Aid Instructions:	If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. Do not give direct mouth-to-mouth resuscitation if swallowed. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well ventilated area.

First Aid Warnings:	

BEFORE using QuickPhos Fumigation Tablets you should consider the following:
Timing of treatment – If it will be necessary to move grain/commodity before the Total Fumigation Period has expired, then fumigation should NOT be commenced. Movement of treated commodities or empty containers during application, fumigation exposure or ventilation risks exposure of transport and handling workers and the public to harmful levels of phosphine and is contrary to label instruction.

The Total Fumigation Period is the sum of the time required for Exposure to phosphine and the time needed to ventilate the grain. A shortened Exposure Period will not be effective for storage pest control and a reduced Ventilation Period poses a serious risk of phosphine gas poisoning to workers and bystanders. In addition a Withholding Period of two days is required after completion of ventilation before the grain is allowed to be used for human consumption or for animal feed. See Notes 4 & 5 for a detailed description of the Minimum Exposure Period and the Ventilation Period.

Safety and handling of Phosphine Products – Phosphine is a highly dangerous fumigant and fumigation should only be undertaken in situations where the safety of workers and the public can be ensured. Observe all RESTRAINTS, PRECAUTIONS and instructions on the label.

1. FUMIGATION OF STORAGE PESTS

PESTS/ COMMODITY/ SITUATION See Note 1 for description of well sealed* and Note 2 for storage pests controlled	**APPLICATION (see note 3)**		**FUMIGATION PERIOD#** #[TOTAL OF THE MINIMUM EXPOSURE PERIOD PLUS VENTILATION PERIOD]		**WITH-HOLDING PERIOD**	**TOTAL OF (Exposure+ Ventilation+ Withholding)**
	BASIC RATE (g phosphine per m^3)	**DOSAGE** (number of tablets per m^3)	**MINIMUM EXPOSURE PERIOD** See Note 4	**VENTILATION PERIOD** See Note 5		
Storage pests in: **Well-sealed* structures such as:- Fumigation enclosures, grain storage sheds, silos, and structures which are suitable for fumigation;** **Raw cereal grains (such as barley, maize, millets, oats, rice, rye, sorghum, triticale, wheat); Other food commodities (such as flour and other milled cereal products, breakfast cereals, dried fruits, dried vegetables, dried pulses, other dried foods, peanuts, oilseeds, cocoa and coffee beans); Seeds for propagation; Bulk stockfeeds**	1.5	3 tablets per 2 m^3	7 days when commodity temperature is above 25°C 10 days when commodity temperature is 15°C to 25°C 20 days for surface only application to bulk commodities in well sealed* structures greater than 375 m^3 capacity (e.g. greater than 300 tonnes wheat)	1-5 days	2 days	10-14 days 13-17 days 23-27 days
Tobacco in bales, cases, hogsheads in well sealed* fumigation enclosures			7 days	2-3 days	NIL	9-10 days
Well-sealed* empty warehouses, elevators, stores, structures and enclosures.			7 days when temperature is above 25°C 10 days when temperature is 15°C to 25°C	1-5 days		8-12 days 11-15 days

NOTES

1) FUMIGATION WILL CONTROL ALL STAGES OF INSECTS ONLY IN STRUCTURES/ENCLOSURES THAT ARE **WELL SEALED***. Well sealed structures/enclosures are fumigation chambers, well sealed silos, sheds and buildings, and other fumigation enclosures made gas-tight with gas-proof sheeting. Well sealed means permanent sealing of porous surfaces, seams and cracks and temporary sealing of intake and/or outlet valves, doors, fan housings, windows and hatches. For further information see appropriate industry advisory documents such as Grains Research and Development Corporation 'Advice' sheet '$ealed $ilos $ave', available from State Departments of Agriculture or Primary Industries. Increasing the application rate will not compensate for gas loss from an unsealed enclosure. NOTE: STRUCTURES MUST BE WELL SEALED. IF THEY ARE NOT, FUMIGATION WILL NOT GIVE ADEQUATE CONTROL, AND WOULD BE CONTRARY TO LABEL DIRECTIONS.

2) STORAGE PESTS include: lesser grain borer, cadelle, cigarette beetle, confused flour beetle, dried fruit beetle, flat grain beetle, merchant grain beetle, red-legged ham beetle, rust-red flour beetle, sawtoothed grain beetle, skin and hide beetle, spider beetles, warehouse beetle, Angoumois grain moth, Indian meal moth, Mediterranean flour moth, mottled grain moth, raisin moth, tobacco moth, tropical warehouse moth, psocids, stored products mites, bean weevil, coffee bean weevil, granary weevil, maize weevil, pea weevil and rice weevil. Such treatment doses will also kill any cockroaches, rats and mice present.

3) PHOSPHINE APPLICATION RATES are based on the internal volume of the structures to be fumigated; they apply equally to full or partly filled or empty structures and they apply to all commodities. The commodity equivalent rates (g/tonne) should only be used when the commodity stowage factor is known; they apply only when the storage structures are full or nearly full or when part-filled structures are dosed on the tonnage equivalents of their internal volumes. The calculated commodity equivalent dosage must be based on the rate per volume. The application rate of 1.5 g phosphine per 1 metre^3 is equivalent to:

Capacity of fumigation enclosure			Number tablets
Tonnes wheat	Bushels	Cubic metres	
20	730	27	40
50	1830	65	100
100	3660	130	200
300	11000	375	600

4) MINIMUM EXPOSURE PERIODS are needed to allow products to react to completion and to expose insects for long enough to kill all stages. A SHORTENED EXPOSURE PERIOD CANNOT BE COMPENSATED FOR BY INCREASED DOSAGE. Insect death and reaction of the tablets are both slower at lower temperatures. Temperatures specified are those within the commodity to be fumigated. The minimum exposure period should start from time of completion of application of product.

5) VENTILATION PERIOD – ON COMPLETION OF EXPOSURE PERIOD:
Ventilation of structures is complete only when phosphine concentrations measured at appropriate locations in the enclosure and work area are below the Threshold Limit Value - Time Weighted Average (TLV - TWA) exposure standard of 0.3 ppm. The following are minimum ventilation periods required and may need to be increased to ensure the exposure standard is not exceeded.

Minimum Ventilation Periods:

Structures, including bunker storages, containing treated commodities:

a) Without throughflow (i.e. access only through the headspace): not less than 5 days
b) With throughflow and natural draught (wind): For structures of 300 tonnes or greater capacity: 2 to 5 days depending on size. For structures of less than 300 tonnes capacity: 2 days.
c) With throughflow and forced draught (flash-proof fan) operated 2 hours on and 2 hours off: not less than 1 day.

Tobacco: In bales: not less than two days. In cases and hogsheads: not less than 3 days.

Empty Buildings and Enclosures:

a) Without throughflow: 5 days
b) With throughflow and natural draught (wind): For structures of 300 tonnes or greater capacity: not less than 2 days, depending on structure size, openings and prevailing wind speed. For structures of less than 300 tonnes capacity: 2 days.
c) With throughflow and forced draught (flash-proof fan) operated 2 hours on and 2 hours off: 1 to 2 days depending on size of structure.

2. FUMIGATION OF RABBIT BURROWS

(NSW, VIC, QLD, SA, WA, ACT only)

SITUATION	RATE	CRITICAL COMMENTS
Burrow	**1 or 2 tablets per lead** (1 or 2 g phosphine per lead)	Cut back around hole to expose other leads or tunnels for treatment and to provide adequate depth for the soil plug to close the opening after treatment. Place tablets well down the tunnel to avoid accidental covering by the soil plug. Fill the opening with ample soil and firm down well. Leave the surface as level as possible to discourage attention from outside rabbits. Effectiveness will be increased in any soil condition if tablets are wrapped in moistened paper prior to insertion in the hole. Best results from fumigation will be achieved if the area to be treated is 'dogged' thoroughly before the operation starts, to ensure that all rabbits are in their warrens.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.