NATIONAL FUMIGANTS PTY LTD

1. Identification

Product identifier:
Active Ingredient: ALUMINUM PHOSPHIDE (Metal Phosphide)
Trade name: **FUMAPHOS FUMIGATION TABLETS**
FUMAPHOS FUMIGATION BLANKET

Other means of identification:
UN Shipping name: ALUMINIUM PHOSPHIDE
UN number: 1397
CAS number: 20859-73-8
Company product codes: FUMT1500 / FUMT0300 / FUMB3400

Recommended use of chemical and restrictions on use:
For the control of insect pests in stored products (raw agricultural commodities, processed foods, non-food commodities) and for the control of rabbits in burrows – use as per product label. (NOT for domestic use)

Details of manufacturer or importer:
NATIONAL FUMIGANTS PTY LTD
Level 28, AMP Tower
140 St Georges Terrace
Perth, WA 6000
Telephone: **+61 (0)488 950 158**
E-mail: **info@natfum.com.au**

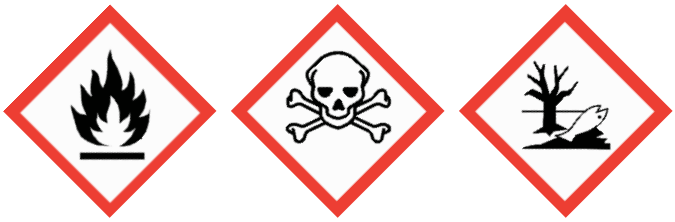
Emergency Phone Number: 13 11 26 (Poisons Information Centre, Australia)

2. Hazards Identification

Hazardous Nature:
This product is classified according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Revision 07; the criteria of Safe Work Australia and the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG) Edition 7.7.

Classification of substance or mixture:
Substances and mixtures, which in contact with water, emit flammable gas – Category 1
Acute toxicity – Category 1 (inhalation)
Acute toxicity – Category 2 (oral)
Acute toxicity – Category 3 (dermal)
Eye irritation – Category 2A
Hazardous to aquatic environment (acute) – Category 1

Pictograms:



GHS label elements including precautionary statements:

Signal Word:
DANGER

Hazard Statements:

H260	In contact with water releases flammable gases, which may ignite spontaneously
H300	Fatal if swallowed
H330	Fatal if inhaled
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

Human Health Hazard Statements:

AUH029	Contact with water liberates toxic gas
AUH031	Contact with acid liberates toxic gas

Precautionary Statements:
General:

P101:	If medical advice is needed, have product container or label at hand
P102:	Keep out of reach of children
P103	Read container label carefully and follow all instructions

Prevention:

P223	Do not allow contact with water
P232	Protect from moisture.
P260	Do not breathe dust/fumes/vapours.
P271	Use only outdoors or in a well-ventilated area
P284	Wear respiratory protection
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment

Response:

P370 + P378	In case of fire, use DRY AGENT to extinguish. DO NOT use water.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor
P330	Rinse mouth

P304 + P340	IF INHALED:	Remove person to fresh air and keep comfortable for breathing
P310		Immediately call a POISON CENTER or doctor
P302 + P335	IF ON SKIN:	Brush off loose particles from skin.
+ P352		Wash with plenty of water.
+ P312		Call a POISON CENTER if you feel unwell
P361 + P364		Take off immediately all contaminated clothing and wash it before reuse
P305 + P351	IF IN EYES:	Rinse cautiously with water for several minutes.
+ P338		Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313		If eye irritation persists: Get medical attention
P320 + P321	Specific treatment is urgent. (See on this label.)	

Storage:

P405	Store locked up
P402	Store in a dry place.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P235	Keep cool.
P420	Store separately from oxidising products

Disposal:

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other information:
SUSMP classification: S7 – Schedule 7 "Not to be available except to authorised or licensed persons"
Exposure Routes:
The main routes of exposure are through ingestion or inhalation.
Aluminium Phosphide is not absorbed through the skin, however, the product will react with body moisture (including skin and eye moisture) to liberate phosphine gas, which is toxic if inhaled.

3. Composition and information on ingredients

Chemical Characterisation: Mixture
Description: Mixture of substances below, with non-hazardous additions.

Substance	CAS number	Conc. (%)
Aluminium Phosphide (AlP)	20859-73-8	56%
Ammonium Carbamate	1111-78-0	10-<30%

Additional Information:
Fumaphos Tablets and Blankets react with water to produce Phosphine gas.
AlP + 3H2O ---> Al(OH)3 + PH3

Substance	CAS number	Conc. (%)
Phosphine gas (PH_3) (Synonym: Hydrogen Phosphide)	7803-51-2	-%

Ammonium Carbamate decomposes to liberate ammonia and carbon dioxide.
NH2COONH4 ---> 2NH3 + CO2

Significant ingredients in this formulation are to be found in the public AICS database.

4. First Aid Measures

Description of necessary first aid measures:
General Information:

Contact the POISONS INFORMATION CENTRE phone Australia 13 11 26 (24hrs) if there is suspicion of poisoning, burning or irritation from this product. This SDS should be at hand when calling. (In New Zealand, phone Poisons Centre Info 0800 764 766.)

Protection of first aiders:
If a patient has swallowed Aluminium Phosphide, he/she may be emitting toxic phosphine gas. First aid and medical staff should take precautions against exposure to phosphine emitted by the patient.
Wear protective clothing and respiratory equipment when administering first aid. (See Section 8)
DO NOT administer mouth-to-mouth resuscitation. Move victim out of danger zone. Remove contaminated clothing and dispose of safely.

Routes of exposure:

***After Inhalation*:**
Immediately call the POISONS INFORMATION CENTER. Urgent hospital treatment will be required. Remove patient to a well-ventilated area. DO NOT administer mouth-to-mouth resuscitation – use other forms of resuscitation. DO NOT allow the victim to move about unnecessarily.
Symptoms of pulmonary oedema can be delayed up to 48hrs after exposure.
Frequent exposure to concentrations above permissible levels over a period of days or weeks can cause poisoning.

***After Ingestion*:**
Immediately call the POISONS INFORMATION CENTER. Urgent hospital treatment is required. First aid and medical staff should take precautions against exposure to phosphine emitted by a patient. Remove patient to a well-ventilated area. If breathing has stopped, give artificial respiration but DO NOT give mouth-to-mouth resuscitation as the person may be emitting toxic phosphine gas. Do not induce vomiting unless told to by POISONS INFORMATION CENTER.
Rinse mouth with water.

***After Skin contact*:**
First remove product with dry cloth. Remove contaminated clothing. In a well-ventilated area, wash skin gently and thoroughly with water (use non-abrasive soap if necessary) for 10 minutes or until the chemical is removed. Call the POISONS INFORMATION CENTER or a physician for medical advice. Aerate clothing prior to laundering. Do not leave contaminated clothing in occupied or confined spaces, such as automobiles, rooms, etc.

***After Eye contact*:**
Immediately remove any product with a dry cloth. Flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes while holding the eyelid(s) open. Take special care if the exposed person is wearing contact lenses. Get medical attention immediately.

Most important symptoms caused by exposure, acute and delayed:
Vomiting, abdominal pain, headaches, dizziness, difficulty breathing, nausea, convulsions, shock, unconsciousness.
Mild exposure by inhalation causes malaise, headache, ringing in the ears, fatigue, nausea and pressure in the chest, which is relieved by removal to fresh air. Recovery can be within several hours to several days in cases of mild poisoning.
Moderate poisoning causes weakness, vomiting, pain just above the stomach, chest pain, diarrhoea and difficulty breathing.

Severe poisoning symptoms may appear within a few hours to several days resulting in pulmonary oedema, and may lead to dizziness, cyanosis, unconsciousness, and death.

Medical attention and special treatment needed, if necessary:
Notes to an attending physician:
The main routes of exposure are through ingestion or inhalation. Very toxic if swallowed or inhaled. Aluminium Phosphide is not absorbed through the skin.
Lethal phosphine gas is liberated when the product is in contact with atmospheric moisture or acid in the stomach.
There is no specific antidote known for PHOSPHINE, therefore treat symptomatically. Watch for the development of pulmonary oedema.
The toxicity particularly affects the cardiac and vascular tissues which manifest as profound and refractory hypotension, congestive heart failure and electrocardiographic abnormalities. Gastric lavage is important in the initial stage. (Gurjar, M. (2010). Managing Aluminium Phosphide Poisonings, NCBI.)

Reference to other sections:
See section 8 for information on personal protection equipment

5. Fire Fighting Measures

***Suitable extinguishing equipment*:**
Carbon dioxide or dry chemical

Unsuitable extinguishing equipment:
DO NOT USE WATER as water in contact with this product is likely to result in a dangerous reaction.
DO NOT use foam.

Specific Hazards arising from the chemical:
Combustible. Risk of self-ignition. Vapours may form explosive mixtures with air.
There is little risk of an explosion from this product if commercial quantities are involved in a fire. However, if water is used as an extinguishing agent, an explosion will be likely.
Product gives off toxic fumes (or gases) in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Special protective equipment and precautions for fire-fighters:
When fighting fires involving significant quantities of the product, wear full protective suit.
Use self-contained breathing apparatus.
Evacuate the area.
DO NOT contaminate personnel or equipment or handle broken packages or containers without protective equipment.
Decontaminate emergency personnel with soap and water before leaving the fire area.
HAZCHEM Code: 4WE

Additional Information:
Do not allow run-off from firefighting to enter drains or water courses.
Inform local authorities.
Flammability: Phosphine gas concentrations, in air, above the LEL of 1.8% v/v may auto-ignite.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Use respiratory protection. (Self-contained breathing apparatus or full-face gas mask cannister combinations, depending on Phosphine concentrations. See Section 8.)
Wear chemical protective clothing.
Evacuate the spill area and deny entry to unnecessary and unprotected personnel.
Ensure adequate ventilation.
Remove all sources of ignition.
DO NOT flush with water or aqueous cleaning agents.
Avoid contact with skin and eyes. Do not breathe spray or fumes.

Environmental precautions:
Prevent spillage from entering drains or water courses. If any material enters drains, evacuate the area and advise emergency services immediately. Cover drains.

Methods and materials for containment and cleaning up:
Small Spills:
In the event of a minor spill, the above precautions should still be implemented, but respiratory protection may be reduced to a full-face respirator fitted with a type "B" gas cartridge (usually this is designated by a grey band).
If the spill is only a few minutes old, collect material and return to sealed labelled container. These containers may flash on opening at some later stage, so care should be taken.
Small spills (less than 5kg of Aluminium Phosphide) can be spread out on the ground in a suitable open and remote area, away from inhabited areas and suitably cordoned off and signposted, to be deactivated by atmospheric moisture.
If flasks are punctured or leaking, temporarily repair with aluminium tape.
Large Spills:
Immediately call the Fire Brigade and follow any instructions given.
Recommendations to Fire Brigade:
Wear a full self-contained breathing apparatus and chemical protective clothing.
Use suitable clean, dry containers for disposal.
Carefully, sweep up and shovel or collect recoverable product, when dry, into clean, dry, suitable containers. (Label these containers.) Do not collect more than one flask of material to the bucket.
Do not heap product. Avoid dust formation.
Under no circumstances should any container, which contains Aluminium Phosphide, be sealed since flammable concentrations of Phosphine are likely to develop, which could lead to a spontaneous ignition and subsequent explosion.
Dispose of promptly as waste. (See section 13 below.)
If large quantities need to be disposed of, consider wet deactivation as outlined in Section 13 below.

Reference to other sections:
See section 8 for information on personal protection equipment
See section 13 for information on disposal

7. Handling and Storage

Precautions for safe handling:
Keep exposure to this product to a minimum, and minimize the quantities kept in work areas.
Ensure that measures outlined in Section 8 of this SDS, relating to protective measures, are followed. This includes wearing respiratory protection.
Avoid dust formation. Do not breathe dust/fumes/vapour.
If handled uncovered, arrangements for local exhaust ventilation should be used.
Observe all relevant regulations as per work health and safety. These include general hygiene measures such as – Do not smoke, drink or eat in working areas; wash thoroughly after handling. (See section 2)
Keep away from water, acid and humid environments.
Read label before using product.

Conditions for safe storage, including incompatibilities:
This product is a Schedule 7 Poison (SUSMP). Observe all relevant regulations regarding sale, transport and storage of this class of poison.
Store the product in a locked and secure, cool, dry, well–ventilated separate room, building or covered area.
Do not store in buildings where humans or domestic animals reside.
Store only in original, labelled containers. Check containers periodically for leaks. Containers should be kept closed to minimize contamination.
DO NOT STORE WITH: water, acids, bases, oxidising agents or reducing agents. (See section 10)
Do not store with food or feeds.
Keep away from sources of ignition and protect from exposure to fire and heat.
Check label for further storage instructions.
Safe Work Australia should be referred to regarding storage obligations.

Reference to other sections:
See section 2 for information on hazard precautions
See section 8 for information on personal protection equipment
See section 10 for information on stability and reactivity

8. Exposure Controls and Personal Protection

Control parameters:

Exposure Limits (ACGIH / HCIS)	**CAS No**	**TLV-TWA**	**TLV-STEL**
Phosphine Gas	7803-51-2	0.42 mg/m3 (0.3ppm)	1.4 mg/m3 (1ppm)

Warning: The odour threshold of phosphine is higher than these exposure limits.
Every g of formulated product, Aluminium Phosphide, yields a third of a gm of phosphine gas.
TWA (Time Weighted Average) - Average airborne concentration of a particular substance when calculated over a normal 8-hour working day for a 5-day working week.
STEL (Short Term Exposure Limit) - Exposure value that should not be exceeded for more than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL

Engineering controls:
It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used. Ventilate by mechanical means with local exhaust. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Individual Protection Measures such as Personal protective equipment (PPE):

Respiratory protection:

Handle product in an open space or preferably in a well-ventilated area. Ensure compliance with applicable exposure limits.

Under all normal usage conditions, use respiratory equipment suited to phosphine gas.

For Phosphine gas concentrations less than 15 ppm:

A full-face mask fitted with a combined dust and gas filter, type "B2P3" cartridge (usually denoted by a grey band) is recommended. A half-face mask, similarly, fitted, may be used in situations not conflicting label instructions.

For Phosphine gas concentrations unknown or above 15 ppm:

Use an approved self-contained breathing apparatus. (Such as in event of an accident or a spill if large quantities of the product (or phosphine gas) are involved.)

See standards AS/NZS1715 and AS/NZS 1716 (and DIN EN141 or SANS 50141:2003)

Hand protection:

When opening the container or using the product, wear suitable protective gloves (elbow length PVC).

See standards AS2161 (and EN374-2 and EN374-3 or SANS416:2012 or ISO18889:2019)

Eye and face protection:

If the respiratory equipment recommended above is used, no further eye protection is required.

Eyewash facilities should be provided near to where the product is used.

See standards AS/NZS1336 and AS/NZS1337 (and EN166:2001 or SANS50166:2018)

Skin and body protection:

Wear a long sleeve shirt; full-length pants or overall; socks and boots. Shower at the end of the workday and change clothing. Thoroughly launder clothing before storage or re-use. Advise any laundry services of the nature of contamination when sending contaminated clothing to be laundered.

Safety deluge showers (or running water at a minimum) should be provided near to where the product is used.

See standards AS/NZS4501 and AS/NZS2210

9. Physical and Chemical Properties

Appearance:

Physical state:	Solid. Develops into gaseous phosphine with humidity
Form:	Granular powder presented in the form of powder or a tablet
Colour:	Grey-green
Odour:	Garlic-like, carbide
Odour threshold:	Odour threshold for hydrogen phosphide: 0.02 – 3ppm
Melting Point:	> 1000 degrees C
Initial boiling point & boiling range:	Not applicable
Flammability:	Product (AlP) is not flammable, but contact with water liberates extremely flammable gasses (PH3).
Lower explosion limit:	1.8 %vol. (PH3)
Upper explosion limit:	Not available %vol (PH3)
Flashpoint:	Not applicable
Evaporation rate:	Not applicable
Auto-ignition temperature:	38 degrees C (PH3)
Decomposition temperature:	Product (AlP) reacts in ambient conditions when moisture is present
pH value:	Not applicable
Viscosity:	Not applicable
Specific heat value:	Not available

Saturated vapour concentration: Not applicable
Release of invisible flammable Vapours and gasses: Phosphine gas (PH3)
Solubility: Product (AlP) reacts with water yielding phosphine gas (PH3 – slightly soluble)
Vapour pressure: AlP = 0hPa
PH3 = 34.6hPa @ STP
Vapour density: Not applicable
Density: AlP = 2.85 g/cm^3
Biodurability or biopersistence: Phosphine gas (PH3) dissipates and decomposes in air
Surface coating or chemistry: Not available

Other information:
Molecular weight: 57.95 g/mol
Oxidizing properties: Strong reducing agent

10. Stability and Reactivity

Reactivity:
Product (AlP), in contact with water (incl. atmospheric water vapour) causes a toxic and extremely flammable gas to be liberated. In contact with acids, a very toxic gas is liberated.

Chemical stability:
Product (AlP) is stable at ambient temperature and under normal conditions of use.

Possibility of hazardous reactions:
Aluminium Phosphide reacts with water/moisture to form Phosphine gas.

Conditions to avoid:
Protect against moisture.
Keep away from naked flame.
Do not heap product during fumigation or disposal.
See label for detailed instructions.

Incompatible materials:
Keep away from water
Keep away from water-based fluids
Keep away from oxidizing agents
Keep away from acids
Phosphine gas may react with certain metals causing corrosion, especially at elevated temperature and humidity.

Hazardous decomposition products:
Phosphine gas (hydrogen phosphide PH3)
Small quantities of carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke.
Oxides of phosphorous and other phosphorous compounds.
Ammonia and Nitrogen compounds such as ammonia and nitrogen oxides.

Additional information:
This product will not undergo polymerisation processes.

11. Toxicological information

Numerical measures of toxicity:
Very toxic
Acute toxicity: oral, inhalant, dermal

CAS No	Chemical name	Exposure Route	Dose
20859-73-8	Aluminium Phosphide:	Oral	LD50 11.5 mg/kg (rat)
		Dermal	LD50 500-1000 mg/kg (rat)
7803-51-2	Phosphine	Inhalation	LC50 15.3 mg/m3 or 11ppm (rat) (4h)
111-78-0	Ammonium Carbamate	Oral	LD50 1470 mg/kg (rat)

Information on likely routes of exposure:
The main routes of exposure are through ingestion of Aluminium Phosphide or inhalation of Phosphine gas.
Ingestion (oral):
Aluminium Phosphide ingested orally reacts with water and stomach acids to produce phosphine gas, which may account in a large part for the observed toxicity. Phosphine generated in the gastrointestinal tract is readily absorbed into the bloodstream. It is also readily absorbed through the lung epithelium.
Inhalation:
Aluminium Phosphide reacts with moisture in the atmosphere to form Phosphine gas.
Dermal:
Aluminium Phosphide / Phosphine gas is not absorbed through the skin.
Skin corrosion/irritation: Not classifiable.
Serious eye damage / irritation: Irritating to eyes

Delayed and immediate effects and also chronic effects from short and long-term exposure:
For immediate and delayed symptoms of exposure see section 2 and section 4.
Respiratory or skin Sensitisation: Not classifiable.
Germ cell Mutagenicity: Not classifiable.
Carcinogenicity: No evidence available that Aluminium Phosphide or phosphine have any carcinogenic effects.
Reproductive toxicity: No indications of human reproductive toxicity
Specific organ toxicity (STOT) – Single exposure: Acute toxicity resulting from Aluminium Phosphide exposure is apparent almost immediately in the heart and lungs. It may also affect the central nervous system, liver and kidneys.
Specific organ toxicity (STOT) – Repeated exposure: Product does not contain any components known to have any effects of repeated-dose exposure,
Chronic health effects: No evidence available that shows cumulative or chronic toxicity symptoms.

Other information:
Use product according to label instructions. Misuse of the product can be fatal. There is no effective treatment for phosphine poisoning. Less than one sixth of a 3g tablet can be a fatal dose for a human.

Reference to other sections:
See section 2 on hazards identification.
See section 4 on first aid.

12. Ecological Information

Toxicity:
Very toxic to aquatic life.

Effects on aquatic species: The reported acute LC50 is 4.1 µg/L in rainbow trout, indicating very high toxicity. No data were available regarding the specific toxicity of Aluminum Phosphide or of phosphine to other fish or aquatic species (e.g. LC50 or EC50 values), but due to the mechanism of action it is likely that it will be very highly toxic to them as well. Such exposure is unlikely; Aluminum Phosphide will rapidly react to form phosphine gas, which is only slightly soluble in water, but will mainly bubble up into the air.

Persistence and degradability:
Decomposes in contact with water.

Bio-accumulative potential:
No indication of bio-accumulative potential.

Mobility in soil:
Aluminum Phosphide will breakdown spontaneously in the presence of water to form a gaseous product, and so it is non-persistent and non-mobile in the soil environment. The Phosphine gas will also break down to form phosphates. Ecological information therefore only describes the effects of the decomposition products.

Other adverse effects: Not available

Additional information:
Do not allow to enter into surface water or drains.
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.
Poses no unreasonable risk to the environment based on Tier I assessment under the NICNAS IMAP assessment framework.
Effects on birds: Exposure is not very likely, as phosphine is rapidly dissipated in open air.

13. Disposal Considerations

Disposal methods:
Please refer to label.
Dispose of waste according to national and local regulations for hazardous materials.

Recommended disposal of waste from residues/ unused product:
Spilled or partially reacted Aluminium Phosphide is considered hazardous waste.
Confinement of partially spent residual materials or collection and storage of large quantities of dust may result in a fire or explosion hazard.

Wet deactivation advice:
(Consult National Fumigants Pty Ltd.)
This should be done in the open air at a **suitable site** for wet deactivation and respiratory protection should be worn.
Prepare a 2% solution of low-foam detergent solution with water (as this will better wet the hydrophobic surface of the Aluminium Phosphide particles). A large drum container should be filled with this solution

to within a few centimetres of the top rim of the container. The Aluminium Phosphide should then be added slowly and carefully to the solution and stirred to thoroughly wet the Aluminium Phosphide. No more than one-part Aluminium Phosphide should be added to 3 parts of solution. Allow the mixture to stand, with occasional stirring, for about 48 hours. At no time should the deactivation drum be covered. Ensure the product stays submerged. The resultant slurry will then be safe for disposal. Dispose of the deactivated material, according to national or local regulations regarding waste management.

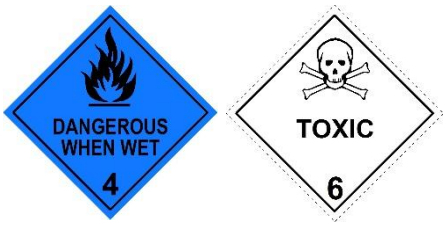
Recommended disposal of contaminated container and packaging:
Empty containers with some product residues, should NOT BE REUSED. Triple rinse empty containers with soapy water to ensure residual phosphide is destroyed and render unusable by crushing and or puncturing and dispose in a safe and approved manner. Dispose of rinsing in an approved manner.

Additional information:
The product label will give general advice regarding disposal of small quantities, as well as on disposal of empty containers. Alternatively contact ChemClear (http://www.chemclear.com.au) for help with the collection of rural chemicals.

Reference to other sections:
See section 7 for information on safe handling.
See section 8 for information on personal protection equipment

14. Transport Information

Land Transport (ADG Code):

UN Number:	**UN 1397,**
UN Proper Shipping Name:	ALUMINIUM PHOSPHIDE
UN Classification:	WT2
Transport hazard class:	4.3 Substance, which in contact with water, emit flammable Gasses
Subsidiary-risk:	6.1 Toxic substances
Hazard label:	
Packing group:	**1**
Special precautions for user:	Limited quantity (0); Exempted quantity (E0); Packing instruction (P403)
Additional information:	Mailing not allowed.
Hazchem Code:	4WE

Marine Transport (IMDG Code):

UN Number:	UN 1397,
UN Proper Shipping Name:	ALUMINIUM PHOSPHIDE
IMDG Code:	ALUMINIUM PHOSPHIDE, MARINE POLLUTANT
UN Classification:	WT2
Transport hazard class:	4.3 Substance, which in contact with water, emit flammable Gasses
Subsidiary-risk:	6.1 Toxic substances
Hazard label:	
Packing group:	**1**
Environmental Hazards:	MARINE POLLUTANT
Special precautions for user:	Special provisions (none specified); Limited quantity (0); Exempt quantity (E0); EmS (F-G, S-N); Segregation group (SG26; SG35); Stowage and handling (Category E, SW2, SW5)
Hazchem Code:	4WE

Air Transport (ICAO):
Forbidden

Environmentally hazardous: Yes

Special precautions: Avoid contact with water. Keep away from food, drink and animal feeding stuffs.

Transport in bulk according to MARPOL 73/78 and the IBC Code: not applicable

15. Regulatory Information

National Registrations:

APVMA Approval No.:	52020/108324 Fumaphos Fumigation Tablets 52019/113451 Fumaphos Fumigation Blanket

16. Other Information

Date of preparation or review of SDS document:
Date of preparation/issue of this SDS document: 13 September 2021
Revision: SDS_AU_FUM_V04_2021
Prepared by: National Fumigants Pty Ltd.
Last Revision superseded by this revision: 15 November 2016

Key Abbreviations or acronyms used:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
AlP	Aluminium Phosphide
CAS	Number Chemical Abstracts Number
EmS	Emergency response procedures for ships carrying dangerous goods
GHS	Globally Harmonised System of classification and labelling of chemicals
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighter
ICAO	International Civil Aviation Organisation
IMDG Code	International Maritime Dangerous Goods Code
NICNAS IMAP	National Industrial Chemicals Notification and Assessment Scheme
PH3	Phosphine gas
REACH	Regulation, Evaluation, Authorisation and Restriction of Chemicals (European Union)
STP	Standard temperature and pressure
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
TLV-TWA	Threshold Limit Value – Time Weighted Average
TLV-STEL	Threshold Limit Value – Short Term Exposure Limit
UN Number	United Nations Number

Please read all labels carefully before using this product.

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals -July 2020." This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. It is believed to be accurate at date of issuance. National Fumigants Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in the safety data sheet. The user should read the SDS before use and consider the suitability of the information in the context of how the product will be handled and used in the workplace, including using the product in conjunction with other products.

END OF SDS