

MATERIAL SAFETY DATA SHEET

Company Details

Rentokil Initial Pty Ltd

150 Mowbray Rd

Willoughby NSW 2068 ACN 000 034 597

Emergency Telephone

(02)9370 9300

Hazardous according to criteria of NOHSC Australia.

I IDENTIFICATION

Product Name: Rentokil Gastion Phosphine Fumigation Products

Other Names: This data sheet covers a range of products; Tablets, Pellets, and Fumigation Belt.

Other Names: None. Proper Shipping Name is ALUMINIUM PHOSPHIDE PESTICIDE

Product Code: 32071, 32072, 46212

UN No: 3048

Hazchem Code: 4WE

Dangerous Goods Class: 6.1 Toxic Substances.

Sub Risk Class: None allocated.

Packaging Group: I

Most EPGs may now be substituted by the Initial Emergency Response Guide, available from Standards Australia.

Poison Schedule: S7

Chemical Family: Metal phosphide plus flame retardants.

Uses: Fumigation of various pests such as rabbits and insects as instructed on label.

Physical Appearance & Properties

Appearance & Odour: White tablets. Produces colourless phosphine gas with carbide-like odour.

Melting/softening point: No specific data. Known to be above 1000°C.

Boiling point and vapour pressure: No data.

Volatile materials: No specific data. Expected to be low at 100°C.

Flashpoint: Not flammable by normal test methods.

Specific gravity: 2.85 at 25°C

Solubility in water: Decomposes in contact with water.

Corrosiveness: Not corrosive to human tissues unless wet.

Ingredients	CAS No	Proportion, %	Worksafe Exposure Limits	
			TWA, mg/m ³	STEL, mg/m ³
Chemical Entity				
Aluminium phosphide	20859-73-8	55-60	not set *	not set
Other non hazardous ingredients	secret	to 100	not set	not set

* Phosphine gas is liberated from this product by moisture (even moist air) and has a TWA of 0.42 mg/m³.

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995), nor in NOHSC's "List of Designated Hazardous Substances" (April 1999).

Acute Effects:

Swallowed: Data suggests that this product is very toxic if swallowed. Ingestion of even small quantities may cause death. If swallowed seek immediate urgent medical attention.

Eye: This product is corrosive to the eyes. It will quickly cause intense discomfort such as severe pain, copious watering and redness of the eyes. Unless quickly treated, corrosive effects leading to permanent corneal damage, even blindness will occur.

Skin: This product is corrosive to skin. It will cause effects such as severe itchiness, blistering and skin reddening and death of skin tissues. Exposure may lead to permanent damage including scarring.

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Inhalation: Data indicates that this product is very toxic if vapours or mists are inhaled. Even brief or minor exposure may lead to severe consequences including death.

LD₅₀ Oral (Rat) = 8.7mg/kg

First Aid:

Eyebaths or eyewash stations and safety deluge showers should be provided where this product is being used. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.

Swallowed: If swallowed, rinse mouth with water. Give a glass of water to drink. Contact a doctor or Poisons Information Centre. DO NOT give mouth to mouth resuscitation, even if patient has ceased breathing. To protect rescuer, use air-viva or oxy-viva or one-way mask. Resuscitate in a well-ventilated area.

Eyes: If this product comes into contact with eyes, hold open and wash with running water. Do not try to remove contact lenses unless trained. Seek immediate medical attention.

Skin: If product gets on skin, immediately remove contaminated clothing and brush material away. Wash skin with soap and running water for at least 15 minutes. Seek immediate medical attention if skin blisters, or if it looks or feels unusual. If safety shower is available, use it promptly.

Inhalation: Remove from contaminated area. Give oxygen and if necessary, artificial respiration. If giving mouth-to-mouth resuscitation wash out patients mouth and lips - do not inhale patient's expired air. Remove contaminated clothing and wash contaminated skin thoroughly. Get to a hospital or doctor quickly.

Advice to doctor: Treat symptomatically. Mild cases of poisoning may not manifest themselves for up to 24 hours and the following is recommended: Complete bed rest for one to two days during which time the patient should be kept warm and quiet.

Poisoning is not chronic and the symptoms should disappear by themselves. Severe poisoning will be readily apparent. Steroid therapy should be considered where pulmonary oedema is observed. Blood transfusion may also be required.

III PRECAUTIONS FOR USE

Risk Phrases are: R34, R41, R14/15/29, R39/26/28. Causes burns. Risk of serious damage to eyes. Reacts violently with water liberating highly flammable toxic gas. Very toxic: danger of very serious irreversible effects through inhalation and if swallowed.

Exposure Standards:

Phosphine gas is liberated from this product by moisture (even moist air) and has a TWA of 0.42 mg/m³. A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use.

Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

This product is treated with a substance designed to repel water. However, care should be taken to keep the tablets away from moisture since phosphine (its decomposition product) is very toxic and flammable.

Respiratory Protection: Because of the danger of this product to the respiratory system, it should only be used when the user is equipped with respiratory equipment, unless used the open air with good air circulation. Inhalation of even minor quantities of phosphine is likely to lead to serious harm or death. Thoroughly wash equipment after use. For help in selecting suitable equipment, consult AS/NZS 1715.

Protective Gloves: Impermeable protective gloves must be worn when you are using this product. Failure to do so will lead to burns to the skin, and likely scarring. All skin areas must be covered. For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear must be worn when using this product. Eye contact will prove at best painful and will probably cause irreversible damage if contact is other than brief. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.

Clothing: Clean impermeable overalls or protective clothing should always be worn when handling this product, preferably with an apron. If contaminated, laundry should be advised of the nature of the contamination, or, preferably, clothing should be destroyed. Consult AS2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

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Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Safety Phrases are: S14, S20, S23, S25, S26, S28, S38, S37/9, S36/37/39. Keep away from water. When using, do not eat or drink. Do not breathe dusts or decomposition gases. Avoid contact with eyes. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of water. In case of insufficient ventilation, wear suitable respiratory equipment. Keep container tightly closed in a cool, well ventilated place. Wear suitable protective clothing, gloves and eye/face protection.

Storage & Transport

This product is classed as UN3048, Dangerous Goods Class 6.1 Toxic Substances. Proper Shipping name is ALUMINIUM PHOSPHIDE PESTICIDE. Class 6 Toxic Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids where the Flammable Liquid is nitromethane), 5.1 (Oxidising Agents where the Toxic Substances are Fire Risk Substances), 5.2 (Organic Peroxides where the Toxic Substances are Fire Risk Substances), 8 (Corrosive Substances where the Toxic Substances are cyanides and the Corrosives are acids), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes, 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Toxic Gases), 3 (Flammable liquids, except where the flammable liquid is nitromethane), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents except where the Toxic Substances are Fire Risk Substances), 5.2 (Organic Peroxides except where the Toxic Substances are Fire Risk Substances), 7 (Radioactive Substances), 8 (Corrosive Substances except where the Toxic Substances are cyanides and the Corrosives are acids), 9 (Miscellaneous Dangerous Goods)

This product is a S7 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Spills & Disposals

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including face mask, face shield, gauntlets and self contained breathing apparatus. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Fire & Explosion Hazard

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Flashpoint: Not flammable by normal test methods.

Flammability limits: Not applicable. This product does not burn.

Extinguishing Media: This product does not burn. Use extinguishing media suited to the materials that are burning, preferably carbon dioxide or foam. **UNDER NO CIRCUMSTANCES SHOULD WATER BE USED.**

Extinguishing Media to Avoid: **UNDER NO CIRCUMSTANCES SHOULD WATER BE USED.**

Special Fire Fighting procedures: If a significant quantity of this product is involved in a fire, call the fire brigade.

Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered.

Unusual Fire & Explosion Hazards: Fire decomposition products from this product may form toxic and corrosive mixtures in confined spaces.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Oxides of phosphorus and aluminium.

Materials to avoid: water, any water solutions.

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V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

Contact Points:

Police and Fire Brigade:	Dial	000
If ineffective:	Dial	1100 (Exchange)
For emergency response:	Dial	(02)9370 9300
National Poisons Information Centre:	Dial	13 1126 (from anywhere in Australia)

THE DATA USED TO PREPARE THIS DOCUMENT HAS BEEN COLLATED FROM PUBLISHED INFORMATION. IT IS THE RESPONSIBILITY OF THE USER TO SATISFY HIMSELF OF THE COMPLETENESS OR SUITABILITY OF THE INFORMATION FOR HIS OWN USE.

Please read all labels carefully before using product.

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<http://www.kilford.com.au/> Phone (02)9516 2079