Global Product Strategy (GPS) Safety Summary

PROPINEB 70% WP

This GPS Safety Summary is a high-level summary intended to provide the general public with an overview of product safety information on this chemical substance. It is not intended to provide emergency response, medical or treatment information, nor to provide an overview of all safety and health information. This summary is not intended to replace the Safety Data Sheet. For detailed guidance on the use or regulatory status of this substance, please consult the Safety Data Sheet and the Product Stewardship Bulletin (PSB).

Chemical Identity

Name: Propineb 70% WP
Brand names: Aaroosh
Chemical name (IUPAC): *N-[1-(sulfidocarbothioylamino)propan-2-yl]carbamodithioate*
CAS number: 12071-83-9
EC number: 235-134-0
Molecular formula: $C_5H_8N_2S_4Zn$

Uses and Applications

Propineb is a widely used fungicide in agriculture, primarily applied to control fungal diseases in crops. It belongs to the class of dithiocarbamates and is known for its effectiveness in preventing a variety of fungal infections that can damage plants and reduce agricultural yields. Propineb is used on a range of crops, including fruits and vegetables.

The main use of Propineb is in the protection of crops against diseases caused by fungi such as *Blight*, *Powdery Mildew*, *Rust*, and *Anthracnose*. These diseases can severely impact crop health, leading to poor yield and quality, and in some cases, complete crop failure. Propineb works by inhibiting fungal spore germination and disrupting fungal cell metabolism, preventing the spread and growth of the pathogens.
Propineb is frequently used in the cultivation of crops like potatoes, tomatoes, grapes, strawberries, and citrus fruits, where fungal diseases are common.

Propineb is a highly effective fungicide that plays a critical role in preventing fungal diseases in agriculture. However, like other chemical treatments, it must be used responsibly and in accordance with safety guidelines to minimize risks to both human health and the environment. Integrated pest and disease management strategies that incorporate Propineb as one component of a larger plan are vital to ensuring its effectiveness and minimizing the impact of resistance.

Physical / Chemical Properties

At ambient temperature Propineb is a Cream colour fine power, characteristics of sulphur containing compounds, moderately low molecular weight and Propineb is non-flammable under normal conditions. The flash point for Propineb doesn't flash at normal storage conditions, meaning it does not easily ignites.

Health Effects

Propineb is classified under GHS as hazardous for acute toxicity, single exposure target organ toxicity (nervous system), and developmental/lactation toxicity, fetal development, and causing organ damage.

The table below gives an overview of the health effects assessment results for Propineb.

Effect Assessment	Result
Acute Toxicity Oral / inhalation / dermal	Acutely low toxic via the oral, dermal and inhalation routes of exposure.
Irritation / corrosion Skin / eye/ respiratory tract	Mild eye irritation
Sensitization	Mild Sensitizer
Toxicity after repeated exposure Oral / inhalation / dermal	Repeated exposure to propineb through oral, inhalation, or dermal routes can cause chronic toxicity.
Genotoxicity / Mutagenicity	Propineb is not a significant mutagen
Toxicity for reproduction	No significant effects on fertility or reproductive organs in animal studies.

Environmental Effects

Propineb 70% WP Toxic to aquatic life under the Globally Harmonized System (GHS) due to its potential to cause harmful effects in aquatic ecosystems.

The table below gives an overview of the environmental assessment results for Propineb.

Effect Assessment	Result
Aquatic Toxicity	Moderately toxic to aquatic life under the Globally Harmonized System (GHS

Fate and behaviour	Result
Biodegradation	Moderately biodegradable
Bioaccumulation potential	Low risk
PBT / vPvB conclusion	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

PBT = Persistent, Bio-accumulative and Toxic in the environment.
vPvB = very Persistent and very Bio-accumulative in the environment.

Exposure

Human health

GPS Safety Summary

Respiratory protection	:	Wear a respirator with a particle filter mask (protection factor 20) conforming to European Norm EN149FFP3 or EN140P3 or equivalent. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance
Hand Protection	:	Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.
Eye protection	:	Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU). Safety glasses
Skin and body protection	:	Wear standard coveralls and Category 3 Type 4 suit. If there is a risk of significant exposure, consider a higher protective type of suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Environment

Discharge Prevention: For Propineb, Environmental exposure should be avoided at all costs to minimize the risk of contamination.
Leakage or Spillage Protocol: If a leakage or spillage occurs, the procedure is to prevent further leakage or spillage if it is safe to do so, emphasizing quick containment actions to limit environmental impact.
Contaminated Wash Water: Any contaminated wash water should be carefully retained and disposed of properly to prevent contamination of soil or water sources.
Notification to Authorities: If significant spillages cannot be contained, local authorities must be advised promptly. This ensures that the situation is managed by professionals and the environment is safeguarded.

Risk Management Measures

For detailed guidance on the use of Propineb 70% WP, the Safety Data Sheet and the Product Safety Bulletin should be consulted.

Propineb 70% WP should be handled only by knowledgeable and trained personnel.

Flammability

Propineb is non-flammable under normal conditions

Human health

- **Ventilation & PPE:** Ensure adequate ventilation when handling Propineb. Always wear chemical-resistant gloves, eye protection (such as goggles), and flame-retardant clothing to minimize exposure. Consider using a face shield if there is a risk of splashing or inhalation. Ensure that all protective equipment is in good condition and is used correctly.

- **Hygiene:** Do not eat, drink, or smoke in areas where Propineb is stored or used. After handling, wash hands and skin thoroughly with soap and water. In case of eye contact, immediately rinse with water for at least 15 minutes and seek medical attention. If the substance comes into contact with the skin, wash thoroughly and remove contaminated clothing. Ensure no residue remains on the skin.

- **Transfer & Maintenance:** During transfer or maintenance operations, always clear transfer lines, flush or drain the system into a closed container for recycling and ensure that all equipment is securely closed before opening. Regularly inspect and maintain transfer systems to prevent accidental exposure. Always follow proper decontamination procedures for equipment.

Environmental

In case of accidental release or spill, do not allow the product to enter sewers, surface or ground water.

Regulatory Information / Classification and Labelling

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59).	: Not Applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	: Not Applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	: Not Applicable
REACH - List of substances subject to authorization (Annex XIV)	: Not Applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	E1 ENVIRONMENTAL HAZARDS

Conclusion Statements

- ✓ Propineb is a highly effective fungicide that plays a critical role in preventing fungal diseases in agriculture. However, like other chemical treatments, it must be used responsibly and in accordance with safety guidelines to minimize risks to both human health and the environment. Integrated pest and disease management strategies that incorporate Propineb as one component of a larger plan are vital to ensuring its effectiveness and minimizing the impact of resistance.

- ✓ Propineb 70% WP Toxic to aquatic life under the Globally Harmonized System (GHS) due to its potential to cause harmful effects in aquatic ecosystems.

Contact Information within Company

For further information on this product in general, please consult the Coromandel International limited corporate website (https://www.coromandel.biz/)

Date of issue

Date of issue: 02 April 2025.

Disclaimer

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failureto take account of information or advice contained in this safety data sheet.

End of GPS Sheet