

SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product: **Phostemic 400SL**
 Product Use: Fungicide
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Adria Crop Protection Solutions**
 Address: 407 State Highway 16
 Kumeu 0841,
 Auckland

Telephone: +64 9 412 9817
 Fax: +64 9 412 9807
 Website: www.adria.nz

Emergency No: **0800 734 607 (24hr)**
0800 764 766 (National Poison Centre)

Date of SDS Preparation: 21 March 2023

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR101342

Pictograms



Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Designed for biocidal action		Designed for biocidal action.

Prevention Code	Prevention Statement
P103	Read carefully and follow all instructions.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response code	Response Statement
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Refer to Section 13.

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Content	CAS NUMBER.
Phosphorous acid (Phosphonic acid)	<28%	13598-36-2
Potassium carbonate	<35%	584-08-7
Salicylic acid	<1%	69-72-7
Other ingredients determined not to be hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	If product or spray enters eyes, wash out immediately and continue rinsing with clean water for at least 15 minutes. Obtain medical attention.
If on Skin	After contact with skin, wash immediately with water for at least 15 min. Immediately remove contaminated clothing. Wash contaminated clothing before reuse.
If Swallowed	If swallowed, drink several glasses of water or milk. Do NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764766) or a doctor immediately.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Seek medical assistance is needed.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Not applicable.
Inhalation:	Not applicable.
Skin:	Not applicable.
Eye:	Causes serious eye irritation.
Chronic:	Not applicable.
Treatment:	Treat according to symptoms (decontamination, vital functions). No known specific antidote.

Section 5. Fire Fighting Measures

Hazard Type	This product is non-flammable.
Hazards from products	None known.
Suitable Extinguishing media	Water spray, carbon dioxide (CO ₂), foam, dry chemical.
Recommended protective clothing & Precautions for firefighters	Wear SCBA and chemical-protective clothing. Self-contained breathing apparatus is required. Do not allow the run off from firefighting media to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Addition of water may cause excessive foaming. Vapours may be toxic.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Personal precautions:

Use protective clothing. Avoid contact with skin, eyes and clothing. Remove contaminated clothes and shoes immediately.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Spill and Disposal procedures:

Absorb spills with inert material i.e. clay granules, sand or other absorbent material and place in waste containers. Wash area with water and absorb with further inert material. Dispose of waste safely, according to local Council regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read carefully and follow all instructions.
- Wash hands thoroughly after handling.
- Wear protective clothing as detailed in Section 8.
- Avoid contact with skin and eyes.
- Ventilation required.
- Keep away from: sparks, open flame and direct sunlight.
- Chemical resistant gloves and eye protection should be worn when handling this product. Other personal protective equipment appropriate to the situation when handling product, e.g. Full body cover [ankle to wrist clothing and boots] should also be worn.
- Wash protective clothing daily after work.

Precautions for Storage:

- Keep away from heat and protect from sunlight.
- Protect against freezing.
- Store in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer.
- Store away from incompatible materials listed in Section 10.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls / Industrial Hygiene

Ensure adequate ventilation.

Personal Protection Equipment



Eyes	Safety goggles with side-shields.
Hands	Suitable chemical resistant safety gloves (e.g. nitrile rubber (.4mm)). Contaminated gloves should be washed. Gloves should be disposed of when contaminated on the inside, perforated or contamination on the outside cannot be removed.
Skin	Body protection (chemical protection suit, boots) must be chosen depending on activity and possible exposure. Decontaminate contaminated clothing, remove and dispose of in accordance with the manufacturer's instructions.
Respiratory	Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles. Respiratory protection is not normally required except during the formation of mists or aerosols or in the case of fire.
General	Females of childbearing age should not come into contact with the product. Keep away from food, drink and animal feedstuffs. No eating, drinking or smoking during use. Wash hands and face before breaks and after work. Potentially fatal if inhaled. When handling wear full protective clothing such as gloves, hat, coat and trousers (worn outside rubber boots). Suitable or appropriate respiratory and eye protection should also be worn. The use of a skin barrier cream is useful to give additional skin protection.

Section 9 Physical and Chemical Properties

Appearance	Liquid, SL
Colour	Clear Liquid
Odour	Characteristic
Odour Threshold	Not available
pH	4 – 5.5
Melting Point/Boiling Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Density	1.5 g/L
Water Solubility	Soluble in water
Partition Coefficient:	Not available
Ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal storage and handling conditions.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Temperature extremes and direct sunlight.
Incompatible Materials	No data available.
Hazardous Decomposition Products	None known.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes serious eye irritation.
Skin	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Acute Toxicity -

Chemical Name	LD50 (Oral)	LD50 (Dermal)	LC50 (inhalation)
Monopotassium phosphonate	>5000mg/kg (Rats)	> 4000 mg/kg (Rats)	LC50 (4h) > 5.05 mg/m ³ (Rats)
Dipotassium phosphonate	>5000mg/kg (Rats)	> 4000 mg/kg (Rats)	LC50 (4h) > 5.05 mg/m ³ (Rats)

Section 12. Ecotoxicological Information

Ecological effects information	Designed for biocidal action.
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available
Acute fish toxicity [LC50 mg/L] (96 h, flow-through):	Monopotassium phosphonate: rainbow trout >118 Dipotassium phosphonate: rainbow trout >118
Toxicity for daphnia [EC50 mg/L] (48 h, flow-through):	Monopotassium phosphonate: rainbow trout >118 Dipotassium phosphonate: rainbow trout >118
Toxicity to algae:	No detailed data available.
Toxicity for birds [LD50 mg/kg]	Phosphonic acid: bobwhite quail >2250 mg/kg. Dietary LC50 for bobwhite quail and mallard ducks >5620 mg/kg diet.
Toxicity bees [LD50 µg/bee] (48 h)	Phosphonic acid: bobwhite quail >2250 mg/kg. Dietary LC50 for bobwhite quail and mallard ducks >5620 mg/kg diet.
Precautions:	Do not allow to enter waterways.

Section 13. Disposal Considerations**Disposal Method:**

Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.

**Empty container precautions:**

Avoid contamination of any water supply with chemical or empty container.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2020

Section 15**Regulatory Information**

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR101342

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	Not required
Emergency Response Plan (Schedule 5)	Not required
Secondary Containment (Schedule 5)	Not required
Tracking (Schedule 26)	Not required
For all further controls	Refer to EPA www.epa.govt.nz for controls document - HSR101342
HSNO Additional Controls (Restrictions of use)	
	None known.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P9389

Section 16**Other Information**

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time

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Please contact Adria, if further information is required.

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