

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY:

PRODUCT NAME: **Neptune**
MANUFACTURER: Zelam Ltd
SUPPLIER NAME: Zelam Ltd
SUPPLIER ADDRESS: 13-15 Hudson Rd, Bell Block, New Plymouth, New Zealand
SUPPLIER PHONE: +64 6 7559234 SUPPLIER FAX: +64 6 7551174
EMERGENCY PHONE: 0800 243 622, 0800 CHEMCALL INTERNATIONAL EMERGENCY PHONE: +64 3 353 0199
CHEMICAL FAMILY: Pyrimidinol USE: Agricultural fungicide

2. HAZARDS IDENTIFICATION:

6.3B; Harmful - may cause skin irritation. Avoid contact with skin.
6.4A; Harmful - may cause eye irritation. Avoid contact with eyes.
6.5B; Harmful - may cause skin sensitization from prolonged skin contact. Avoid skin contact.
6.9B; Harmful - may cause organ damage from repeated oral exposure at high doses.
9.1A; Very Toxic to fish/aquatic organisms with long lasting effects. Avoid contamination of any water supply with this product or empty container.

Refer to Section 15 for NZ EPA Requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Water	7732-18-5	50	
Bupirimate	41483-43-6	25	Class 6, 9.
Surfactants and excipients		Balance	

4. FIRST - AID MEASURES:

EYE CONTACT: Immediately flush with flowing water for at least 15 minutes. Seek medical attention if irritation persists.
SKIN CONTACT: Immediately flush with plenty of water while removing contaminated clothing. DO NOT scrub the skin. Continue for at least 15 minutes. Wash clothing before reuse.
INHALATION: If ill-effects occur, move the victim to fresh air. If ill-effects persist, consult a doctor.
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.
NOTES TO DOCTOR: No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

FLASHPOINT: Not applicable. HAZCHEM CODE: 2X
FLAMMABLE LIMITS: No data.
EXTINGUISHING MEDIA: Dry chemical, water spray (fog), foam or carbon dioxide.
THERMAL DECOMPOSITION PRODUCTS: Oxides of nitrogen carbon and sulfur.
SPECIAL FIRE FIGHTING METHODS: Addition of water may cause excessive foaming. Vapours may be toxic. Self contained breathing apparatus required. Do not allow contaminated runoff to enter drains.
UNUSUAL FIRE OR EXPLOSION HAZARDS:None

6. ACCIDENTAL RELEASE MEASURES:

Spills may be slippery and should be cleaned up immediately. Clear area of unnecessary personnel. Use appropriate protective equipment.
Large spill: Dike and pump as much as possible to a salvage container. Absorb the remaining liquid and any small spills with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Minimise runoff into waterways or drains. It may be disposed of as an industrial waste in a manner acceptable to good waste management practice in a land fill and in compliance with all regulations.

7. HANDLING AND STORAGE:

Harmful - Keep out of reach of children.
Store in original container, tightly closed away from food, food related materials, animal feedstuffs, seed or fertilizer. Store below 30°C and above 0°C.
Wear eye protection. Impervious gloves should be worn at all times. Wear other personal protective equipment appropriate to the situation when handling product. Wash protective clothing daily after work.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: Bupirimate exposure limit 10 mg/m3
EYE PROTECTION: Chemical goggles or face shield where splash may occur.
RESPIRATORY PROTECTION: Avoid inhalation of aerosols of this product. Wear face mask or chemical respirator with a filter.
PROTECTIVE CLOTHING: If skin contact or contamination of clothing is likely, protective clothing [impervious gloves, waterproof hat, coat, trousers and boots] should be worn. Wash protective clothing daily after work.
VENTILATION: General (mechanical) room ventilation is considered satisfactory.
HYGIENE PRECAUTIONS: Do not eat drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands before breaks and after work. The use of a skin barrier cream is useful to give additional skin protection.

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9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR:	Light tan creamy liquid with a faint odour.	pH:	7 - 8
BOILING POINT:	>100°C	SETTING POINT:	<0°C
DENSITY:	1.05	AUTOIGNITION TEMP:	Not available
DECOMPOSITION TEMP:	Not available	VAPOUR DENSITY:	Not available
FLASHPOINT:	Not applicable	VAPOUR PRESSURE:	Bupirimate: 0.1 mPa (25°C)
EXPLOSION PROPERTIES:	Not applicable		
SOLUBILITY:	Solubility in water 22 mg/L pH 5.2, 25°C		
OTHER DATA:			
OCTANOL / WATER PARTITION COEFFICIENT:	Bupirimate Kow log P = 3.9		

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID:	Unstable in acid conditions. Avoid storage temperatures greater than 30°C
MATERIALS TO AVOID:	Avoid strong oxidising agents.
HAZARDOUS DECOMPOSITION	Oxides of nitrogen sulfur and carbon.

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL:	Acute oral > 4000 mg/kg (bupirimate tech)
ACUTE DERMAL:	LD50 rats 4800 mg/kg (bupirimate tech)
ACUTE INHALATION:	Bupirimate: 10mg/m ³
OTHER TOXICITY INFORMATION:	
	Low oral toxicity however may cause skin and eye irritation. Avoid contact with skin or eyes.
	May cause skin sensitization from prolonged skin contact and may cause organ damage from repeated oral exposure at high doses.
	In mammals, following oral administration, 68% of the dose is eliminated in the urine within 24 hours.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity:	LC 50 (96 hr) for Rainbow trout: 1.0 mg/L [bupirimate tech].
Soil Toxicity:	Not toxic to soil environment
Terrestrial Vertebrates - Birds:	Not toxic to birds.
Terrestrial Invertebrates - Bees:	Not toxic to bees.

Very Toxic to fish/aquatic organisms with long lasting effects. Avoid contamination of any water supply with this product or empty container.

13. DISPOSAL CONSIDERATIONS:

Triple rinse empty container and add rinsate to the spray tank. If recycling, discard cap and deliver clean container to an Agrecovery depot. Alternatively crush and bury in a suitable landfill.
Dispose of product only by using according to this label, or at an approved disposal facility.
Avoid contamination of any water supply or stream with product or empty container.

14. TRANSPORT INFORMATION:

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Bupirimate)		
UN Number:	3082	UN Hazard Class:	9
Packing Group:	III	Hazchem Code:	2X
Additional Information:	Do not carry more than 1 litre of this product on a passenger service vehicle.		

15. REGULATORY INFORMATION:

This product DOES NOT have Approved Handler or Tracking Requirements.

RECORD KEEPING: A written record of use is required if 3 kg or more of this product is used within 24 hours in a place where:
a) public may lawfully be present; or
b) the substance is likely to enter air or water supply and leave the place where it is under control.
The information must be kept for a minimum of three [3] years.

Approved pursuant to the HSNO Act 1996. NZ EPA Approval Code: HSR000080 See <www.epa.govt.nz> for controls.
Registered pursuant to the ACVM Act 1997. ACVM Pesticide No: P007079 See <www.nzfsa.govt.nz> for registration conditions.

16. OTHER INFORMATION:

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.