

Material Safety Data Sheet

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

PRODUCT NAME: **Headland Jett**
MANUFACTURER: Headland Agrochemicals
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: USE: Micronutrient fertiliser

2. HAZARDS IDENTIFICATION:

Harmful - may be fatal if swallowed, inhaled or absorbed through the skin.
Danger - this product is corrosive to the skin and may cause burns.
Danger - this product is corrosive to the eyes and may cause eye damage.
Harmful to fish/aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.

Refer to Section 15 for NZ EPA Requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Manganese Nitrate	10377-66-9	<45	
Inerts		Balance	

4. FIRST - AID MEASURES:

EYE CONTACT: Flush affected eyes with flowing water for at least 15 minutes. Get prompt medical attention.
SKIN CONTACT: Wash with plenty of soap and flowing water for at least 15 minutes while removing contaminated clothing. DO NOT scrub skin. Seek medical attention if irritation persists. Wash clothing before reuse.
INHALATION: Avoid inhalation of spray or mists which are likely to be highly irritating. Remove to a source of fresh air and seek medical advice.
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Seek medical attention.
NOTES TO DOCTOR: Ingestion may irritate digestive tract. Avoid lung aspiration. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

FLASHPOINT: Not applicable HAZCHEM CODE: 2X
FLAMMABLE LIMITS:
EXTINGUISHING MEDIA: Dry chemical, foam, water spray (fog) or carbon dioxide.
THERMAL DECOMPOSITION PRODUCTS: Vapours may be toxic. Self contained breathing apparatus required.
SPECIAL FIRE FIGHTING METHODS: Do not allow contaminated run-off to enter drains.
UNUSUAL FIRE OR EXPLOSION HAZARDS: Not flammable but may react with reducing agents & will support combustion if the water carrier evaporates at high temperatures.

6. ACCIDENTAL RELEASE MEASURES:

Use appropriate personal protective equipment such as gloves protective eye glasses and impervious vinyl or tyvec outer clothing. 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.

7. HANDLING AND STORAGE:

Harmful - Keep out of reach of children.
Store in original container, tightly closed under lock and key, away from food, food related materials, animal feedstuffs, seed or fertilizer.
Chemical resistant gloves and eye protection should be worn when handling this product. Recommended to have a source of fresh water available for flushing skin and eyes.
Wear other protective equipment appropriate to the situation when handling product. Wash protective clothing daily after work as dried Manganese Nitrate is an oxidiser.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: No exposure limits (EELs) have been specifically assigned for this product.
Occupational Exposure Limit [Manganese Nitrate]; TLV 0.2 mg/m³ (TWA) (USA)
EYE PROTECTION: Avoid contact with eyes. Wear a face shield or full chemical workers goggles when there is a risk of a splash.
RESPIRATORY PROTECTION: Avoid breathing in mist or aerosol from the product. Use an appropriate respirator if exposed to the mist or aerosol from the product.
PROTECTIVE CLOTHING: Avoid skin contact. 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 as dried Manganese Nitrate is an oxidiser.
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.

Material Safety Data Sheet

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR:	Pink to pale brown clear liquid		
BOILING POINT:	Not available	pH:	< 1
DENSITY:	1.47	SETTING POINT:	Not available
DECOMPOSITION TEMP:	Not applicable	AUTOIGNITION TEMP:	Not applicable
FLASHPOINT:	Not applicable	VAPOUR DENSITY:	Not available
EXPLOSION PROPERTIES:	Not applicable	VAPOUR PRESSURE:	Not available
SOLUBILITY:	Dispersible in water		
OTHER DATA:	Manganese Nitrate is an oxidiser when dry.		
OCTANOL / WATER PARTITION COEFFICIENT:	Not available		

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID:	Product is stable under normal temperatures and pressures. Manganese nitrate is an oxidising agent when dry.
MATERIALS TO AVOID:	Reducing agents and highly flammable materials.
HAZARDOUS DECOMPOSITION	None

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL:	Not determined due to corrosivity
ACUTE DERMAL:	Not determined due to corrosivity
ACUTE INHALATION:	
OTHER TOXICITY INFORMATION:	
6.1C;	Harmful - may be fatal if swallowed, inhaled or absorbed through the skin.
8.2B;	Danger - this product is corrosive to the skin and may cause burns.
8.3A;	Danger - this product is corrosive and may cause eye damage.

12. ECOLOGICAL INFORMATION:

9.1C; Harmful to fish/aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty container.
The product is expected to biodegrade in the environment. Bio-accumulation is considered unlikely.

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 approved 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:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Manganese Nitrate)		
UN Number:	3264	UN Hazard Class:	8
Packing Group:	III	Hazchem Code:	2X

Additional Information: Do not carry more than 0.5 L of this product on a passenger service vehicle.

15. REGULATORY INFORMATION:

APPROVED HANDLER: The product must be under the personal control of an approved handler when:
a) the product is applied in a wide dispersive manner; or
b) used by a commercial contractor.
However, it may be handled by a person who is not an approved handler if:
- an approved handler is present at the facility where the substance is being handled; and
- the approved handler has provided guidance to the person in respect to the handling of the product; and
- the approved handler is available at all times to provide assistance if necessary.

This product shall NOT be applied onto or into water.

RECORD KEEPING: A written record of each application or discharge must be kept where -
a) members of the public may lawfully be present; or
b) the substance is likely to enter the air or water supply and leave the area 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: HSR002569 See <www.epa.govt.nz> for controls.

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 product's properties.