

www.lonza.co.nz

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

PRODUCT NAME: **Headstart**
MANUFACTURER: Lonza NZ Ltd
SUPPLIER NAME: Lonza NZ 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 4 917 9888
CHEMICAL FAMILY: Sulfonylurea USE: Herbicide

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.
9.1A; Very Toxic to fish/aquatic organisms with long lasting effects.
9.2B; Toxic to the soil environment [Selective herbicide].
Refer to Section 15 for NZ EPA Requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Flumetsulam	98967-40-9	< 10	
Inerts		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: Wash with plenty of soap and flowing water for at least 15 minutes while removing contaminated clothing. DO NOT scrub skin. Wash clothing before reuse.
INHALATION: If ill-effects occur, move the victim to fresh air. If ill effects persist, seek medical assistance.
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:	>95°C	HAZCHEM CODE:	2X
FLAMMABLE LIMITS:	No data		
EXTINGUISHING MEDIA:	Foam, Carbon dioxide, Dry chemical or Water spray (fog).		
THERMAL DECOMPOSITION PRODUCTS:	Oxides of carbon and nitrogen		
SPECIAL FIRE FIGHTING METHODS	Spills may be slippery and should be cleaned up immediately.		
UNUSUAL FIRE OR EXPLOSION HAZARDS:	None		

6. ACCIDENTAL RELEASE MEASURES:

Warning this substance is very toxic to aquatic organisms. Avoid contamination of any water supply with this substance or empty container. 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.
Chemical resistant gloves and eye protection should be worn when handling this product. 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: No exposure limits (WES, TEL, or EELs) have been specifically assigned for this product.
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: Not normally required. Exceptions: in the case of fire or during the formation of mists or aerosols.
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.
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.

www.lonza.co.nz

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE / STATE / ODOUR:	Cream to tan Liquid		
BOILING POINT:	Not available	pH:	6 -7
DENSITY:	0.95	SETTING POINT:	Not available
DECOMPOSITION TEMP:	Not available	AUTOIGNITION TEMP:	Not available
FLASHPOINT:	> 95 °C	VAPOUR DENSITY:	Not available
EXPLOSION PROPERTIES:	Not available	VAPOUR PRESSURE:	3.7 x 10 ^[-7] mPa [25 °C]
SOLUBILITY:	Miscible in water		Flumetsulam tech
OTHER DATA:			
OCTANOL / WATER PARTITION COEFFICIENT:	Kow logP = -0.68 Flumetsulam tech		

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID:	None
MATERIALS TO AVOID:	None
HAZARDOUS DECOMPOSITION	Oxides of carbon and nitrogen

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL:	LD50 Rats: > 3400 mg/Kg (by calculation)
ACUTE DERMAL:	Not available
ACUTE INHALATION:	Not available
OTHER TOXICITY INFORMATION:	May cause skin and eye irritation. Avoid contact with skin or eyes.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity: LC50 (96h) fish 2.1 mg/L (by calculation).

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

Toxic to the soil environment. Selective herbicide - very toxic to some plant species (certain plants may be killed or damaged from root uptake of this product). Not toxic to earthworms.

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 an 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:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Flumetsulam)		
UN Number:	3082	UN Hazard Class:	9
Packing Group:	III	Hazchem Code:	2X
Additional Information:	IATA Special Provision A197 applies for containers 5L or less (not restricted).		

15. REGULATORY INFORMATION:

APPROVED HANDLER: The product must be under the personal control of an approved handler when:

- the product is applied in a wide dispersive manner; or
- 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.

Headstart shall NOT be applied onto or into water.

This product shall be applied at a maximum rate of 1 L Headstart /ha.
Prevent spray drift as it may cause severe damage to non-target plants.

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:

- public may lawfully be present; or
- 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: HSR100555 See <www.epa.govt.nz> for controls.
Registered pursuant to the ACVM Act 1997. ACVM Pesticide No: P008493 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 product's properties.