

Material Safety Data Sheet

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

PRODUCT NAME: **Stratos**
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 4 917 9888
CHEMICAL FAMILY: Arylamino propionic acid USE: Herbicide

2. HAZARDS IDENTIFICATION:

3.1D; Warning - combustible liquid.
6.1E; Harmful - may be harmful if swallowed, inhaled or absorbed through the skin.
6.3B; Harmful - may cause skin irritation. Avoid contact with skin.
6.4A; Harmful - may cause eye irritation. Avoid contact with eyes.
9.1B; Toxic to fish with long-lasting effects. Avoid contamination of any water supply with product or empty container.
Refer to Section 15 for ERMA Requirements.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

COMMON NAME:	CAS NUMBER:	CONCENTRATION %:	HAZARD CLASSIFICATIONS:
Liquid Hydrocarbon	64742-94-5	<70 %	
Flamprop-M-isopropyl	63782-90-1	<25 %	
Inerts		Balance	

4. FIRST - AID MEASURES:

EYE CONTACT: Immediately flush with flowing water for at least 15 minutes. Seek medical or eye specialist attention.
SKIN CONTACT: Wash with plenty of soap and flowing water for at least 15 minutes while removing contaminated clothing. DO NOT scrub the skin. If irritation develops seek medical attention. Wash clothing before reuse.
INHALATION: If inhaled, move the victim to fresh air immediately. Begin artificial respiration if breathing has stopped. Use mouth to nose rather than mouth to mouth. Obtain medical attention.
INGESTION: If swallowed, rinse mouth with water immediately. DO NOT induce vomiting. Aspiration danger. Seek medical attention.
NOTES TO DOCTOR: No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

FLASHPOINT: >61 °C HAZCHEM CODE: 3 X
FLAMMABLE LIMITS: No data
EXTINGUISHING MEDIA: Foam, Carbon dioxide, Dry chemical or Water spray (fog).
THERMAL DECOMPOSITION PRODUCTS: Thermal decomposition may release ammonia, hydrochloric acid, fluoride and oxides of carbon & nitrogen.
SPECIAL FIRE FIGHTING METHODS: Vapours may be toxic. Self contained breathing apparatus required. Do not allow contaminated run-off to enter drains.
UNUSUAL FIRE OR EXPLOSION HAZARDS: Combustible Liquid

6. ACCIDENTAL RELEASE MEASURES:

Use appropriate protective equipment. Clear area of unnecessary personnel. Spills may be slippery and should be cleaned up immediately.
Large spill: Flammable Liquid; Keep heat and ignition sources away from 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 a well ventilated place in original container, tightly closed away from foodstuffs. Keep from extreme heat and ignition sources.
Wear personal protective equipment appropriate to the situation when handling product.
If re-entry work, on the area treated with Stratos, is required within 24 hours of application then personal protective equipment should be worn.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

EXPOSURE LIMITS: No exposure limits (WES, TEL, or EELs) have been specifically assigned for this product.
EYE PROTECTION: Chemical goggles or face shield where splash may occur.
RESPIRATORY PROTECTION: For short term exposure to a small volume of mists or aerosols use a mask and filter eg. Filter A-P2 or a filter canister for organic vapours.
Use self-contained breathing apparatus in the case of fire or during the formation of large volumes of mists or aerosols.
PROTECTIVE CLOTHING: Wear protective clothing such as impervious gloves, overalls and closed footwear when using.
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 Brown Liquid
BOILING POINT: Not available pH: 4
DENSITY: 0.96 g/L SETTING POINT: Not available
DECOMPOSITION TEMP: Not available AUTOIGNITION TEMP: Not available
FLASHPOINT: >61 °C VAPOUR DENSITY: Not available
EXPLOSION PROPERTIES: Not available VAPOUR PRESSURE: Not available
SOLUBILITY: Product emulsifies in water.
OTHER DATA:
OCTANOL / WATER PARTITION COEFFICIENT: Kow logP = 3.69 for Flamprop-M-isopropyl

10. STABILITY AND REACTIVITY:

CONDITIONS TO AVOID: Product is stable under normal temperatures and pressures.
MATERIALS TO AVOID: Oxidising agents
HAZARDOUS DECOMPOSITION Thermal decomposition may release ammonia, hydrochloric acid, fluoride and oxides of carbon & nitrogen.

11. TOXICOLOGICAL INFORMATION:

ACUTE ORAL: LD50 Rats: >2500mg/Kg (by calculation)
ACUTE DERMAL:
ACUTE INHALATION:
OTHER TOXICITY INFORMATION:
May be harmful if swallowed, inhaled or absorbed through the skin.
May cause skin and eye irritation. Avoid contact with skin or eyes.

12. ECOLOGICAL INFORMATION:

Aquatic Toxicity: LC50 (96h) Rainbow trout; 2.4 mg/L (by calculation).
Toxic to fish/aquatic organisms with long-lasting effects. Avoid contamination of any water supply with 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 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 UN Hazard Class: 9.
UN Number: 3082 Packing Group: III
Hazchem Code: 3X
Additional Information: Contains

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Flamprop-M-isopropyl)
UN Number: 3082 UN Hazard Class: 9
Packing Group: III Hazchem Code: 2X
Additional Information: Do not carry more than 1 L of this product on a passenger service vehicle
IATA Special Provision A197 applies for containers 5L or less (not restricted).
This product requires segregation from certain other Classes of Dangerous Goods. Check the latest LTSA DG Rule 45001 for additional information.

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.

Stratos is NOT to be applied onto or into water.
The maximum application rate for Stratos shall be 1.2 kg ai/ha, once per season and is to be applied by ground based methods only.

Approved pursuant to the HSNO Act 1996. NZ EPA Approval Code: HSR100088 See <www.epa.govt.nz> for controls.
Registered pursuant to the ACVM Act 1997. ACVM Pesticide No: P008051 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.