



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Goltix Flo SC Herbicide**
Chemical name of active Ing: 4-amino-3-methyl-6-phenyl-1,2,4-triazin-5(4H)-one
Product Use: For pre- and post-emergence use for the control of certain weeds in red beet, fodder beet, sugar beet and mangolds
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd
Address: Level 1/93 Bolt Road
Tahunanui, Nelson
Telephone: +64 3 543 8275
Fax Number: +64 3 543 8274

**Emergency Telephone: 0800 764 766 (National Poison Centre)
0800 734 607 (24hr Emergency Response)**

Date of SDS Preparation: 29 June 2020

Section 2. Hazards Identification

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

EPA Approval No: HSR100753

Pictograms



Signal Word: **WARNING**

HSNO Classification	Hazard Code	Hazard Statement
Acute oral toxicity Category 4	H302	Harmful if swallowed.
Hazardous to the aquatic environment acute Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Category 1	H410	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	H421	Harmful to soil organisms.
Hazardous to terrestrial vertebrates	H433	Harmful to terrestrial vertebrates.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid unintended release to the environment.

P280	Wear protective clothing as detailed in Section 8.
Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage Code	Storage Statement
None	Not applicable

Disposal Code	Disposal Statement
P501	Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Metamitron	55-60	41394-05-2
Non hazardous	To bal	-

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
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. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Inhaled:	Not applicable.
Ingestion:	Harmful if swallowed.
Skin:	Not applicable.
Chronic:	Not applicable.

Notes to a physician:

There is no specific antidote. Treat symptomatically and give supportive therapy.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from combustion products	Carbon monoxide, hydrogen cyanide, nitrogen oxides.
Suitable Extinguishing media	Dry chemical, water spray, foam, carbon dioxide.
Precautions for firefighters and special protective clothing	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
HAZCHEM CODE	2X

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow into any sewer, on the ground or into any body of water. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Reposition any leaking containers so as to minimise further leakage. Dam and absorb spill with an absorbent material (e.g. sand, soil, diatomaceous earth or vermiculite). Shovel the absorbed spill into drums. Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable.

Disposal of the absorbed material will depend upon the extent of the spill. Contaminated material must be disposed of in accordance with all local authority requirements.

- For quantities up to 50 L of product bury in a secure approved landfill site.
- For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Prevent formation of explosive mixtures.
- Avoid unintended release to the environment.
- When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Store in the original, unopened container in a cool, dry place, out of direct sunlight and away from stockfeed, seeds, fertilisers or foodstuffs.
- As an environmentally hazardous substance with aquatic ecotoxicity classifications, storage of GOLTIX FLO must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed as a means of meeting the secondary containment provisions of the Hazardous Substances (Hazardous Property Controls) Notice 2017.

Section 8**Exposure Controls / Personal Protection****WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

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

Long term exposure limit 8 hour-Metamitron: 10 (inhal.dust); 4 (respire.dust)

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 NOV 2017 9TH EDITION.

Engineering Controls

In workplace ensure good ventilation. Wash hands thoroughly after handling.
Wash clothing before re-using.

Personal Protection Equipment

Eyes	Safety goggles or face shield.
Hands and Skin	When mixing or applying wear appropriate protective clothing including cotton overalls buttoned to the neck and wrist, impervious, elbow-length gloves, and eye protection. Remove protective clothing and wash hands, arms and face with soap and water before meals and after work.
Respiratory	Respiratory protection is not required if good ventilation is maintained.
General	Do not eat, drink or smoke when using this product. Be careful not to contaminate yourself when removing contaminated clothing.

Section 9**Physical and Chemical Properties**

Appearance	Light beige liquid
Odour	Faint odour
Odour Threshold	Not applicable
pH	6.5-7.5 (Undiluted)
Boiling Point	100°C (water)
Melting Point	Not applicable
Flash Point	Not applicable
Flammability	Not applicable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	0.86 @ 20°C (Metamitron)
Density (g/ml)	1.21 @ 20°C
Specific Gravity	Not applicable
Solubilities	Miscible
Partition Coefficient:	Not applicable
Auto-ignition Temperature	Not applicable
Solid products combustibility:	Not applicable
Log P octanol / water	0.85 @ 21°C (Metamitron)

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions. Thermal decomposition at 170°C (Metamitron)
Conditions to Avoid	None known.
Incompatible Materials	Oxidizing agents, acids and alkali.
Hazardous Decomposition Products	Hydrogen Cyanide , nitrogen oxides (NO, NO ₂) , carbon oxides (CO, CO ₂) .

Section 11 Toxicological Information**Acute Effects:**

Swallowed	Harmful if swallowed. LD50 (rat) = 500-2000 mg/kg
Dermal	Not applicable
Inhalation	Not applicable
Eye	Not applicable
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

Individual component information:**Acute Toxicity:**

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
Metamitron (41394-05-2)	650 mg/kg (dog)	1000mg/kg (Rat)	0.206mg/l (mouse) (dust/mist)

Section 12. Ecotoxicological Information**Classifications****Hazard Statement**

Hazardous to the aquatic environment acute Category 1	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Category 1	Very toxic to aquatic life with long lasting effects.
Hazardous to soil organisms	Hazardous to soil organisms.
Hazardous to terrestrial vertebrates	Hazardous to terrestrial vertebrates.

On product:

96 H-LC50 - [mg/l] : >200 Rainbow trout
 48 H-EC50 - [mg/l] : 170 Daphnia magna
 72 H-EC50 [mg /l] : 0.82 Algae
 LD50 Birds [mg/kg] : (Metamitron): Japanese quail =1,534
 Bees LD50 [µg/Bee] : (Metamitron): Oral & Contact: >100

Common name:**Metamitron**

Mobility:

Soil – Low mobility.

Persistence/degradability:

Soil:

The product is non persistent

Half-life time (t_{1/2}): 30-90 days

Degradation is primarily via: microorganisms.

Water:Hydrolytic DT50 t_{1/2}: 143 d at pH 5 (25°C)DT50 t_{1/2}: 132 d at pH 7 (25°C)DT50 t_{1/2}: 17.5 d at pH 9 (25°C)

Inherently degradable: > 79% in 28 days.

Water pollution class (WGK): 2 – impairment of water quality.

Ecotoxicity:

Fish:

LC50 (96 hours) = 443 mg/L; golden orfe (Leuciscus melanotus)

LC50 (96 hours) = 326 mg/L; rainbow trout (oncorhynchus mykiss)

LC50 (96 hours) = 194 mg/L; carp (Cyprinus carpio)

Daphnia;EC50 (48 hours) = 101.7 mg/L; Water flea (*Daphnia magna*)**Algae**

Growth rate:

IC50 (72 hours) = 1.8 mg/L; green alga (*Selenastrum capricornutum*)

Ecotoxicity:

Birds:

Japanese quail LD50 = 1,534 mg/kg

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Ensure container is empty. Triple rinse empty container and add rinsate to spray tank. Recycle empty container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Otherwise crush or puncture and bury in a suitable landfill. DO NOT reuse this container for any other purpose.



Precautions: Do not allow product to enter waterways.

Disposal methods to avoid: Do not allow product to enter waterways.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433

**Road and Rail Transport**

UN No:	3082
Class-primary	9
Packing Group	III
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Metamitron)

Air Transport

UN No:	3082
Class-primary	9
Packing Group	III
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Metamitron)

Marine Transport

UN No:	3082
Class-primary	9
Packing Group	III
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Metamitron)
Marine Pollutant	Yes

Special Provisions:

If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

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

EPA Approval Code: HSR100753

HSNO Classification: Acute oral toxicity Category 4, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1, Hazardous to soil organisms, Hazardous to terrestrial vertebrates.

HSW (HS) Regulations 2017	Trigger Quantity
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities (Schedule 3)	100L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 16)	100L
Tracking (Schedule 26)	Not required
Record Keeping	Records of use must be kept under certain circumstances – see The New Zealand Standards for Management of Agrichemicals (NZS8409) for details.
Hazardous Property Controls Notice 2017	
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Substances that are hazardous to the environment: Site and storage controls.
HPC Notice Part 4 Subpart B	Use of substances that are hazardous to the environment.
HPC Notice Part 4 Clause 47	Equipment for environmentally hazardous substances must be appropriate.
HPC Notice Part 4 Clause 48	Records of application of agrichemicals
HPC Notice Part 4 Clause 50	The maximum application rate for Goltix Flo SC Herbicide is 4.2 kg metamitron/ha, three times per year.
HPC Notice Part 4 Clause 52	Agrichemicals that are hazardous to the aquatic environment must not be applied to water.
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides
For all further controls:	Refer to EPA website www.epa.govt.nz for controls document - HSR100753
ACVM Act and Regulations	
ACVM Approval No	P8802
See www.foodsafety.govt.nz for registration conditions.	
Tolerable Exposure Level (TEL)	No TEL set
Environmental Exposure Level (EEL)	No EEL set

Section 16 Other Information**Glossary:**

ACVM	Agricultural Compounds and Veterinary Medicines Act 1997.
EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority.
HSNO	Hazardous Substances and New Organisms Act 1996.
HSW	Health and Safety at Work Act 2015.
HSW (HS) Regulations	Health and Safety at Work (Hazardous Substances) Regulations

	2017.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	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 Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer:

This document has been issued by Adama New Zealand Ltd and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which is held by Adama New Zealand Ltd or has been 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 of issue. While Adama New Zealand Ltd have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Adama New Zealand Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS. The information herein is given in good faith, but no warranty, express or implied is made.

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