



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Atranex Flow**
Chemical name of active: Atrazine
Product Use: Selective herbicide for the post emergence control of certain grass and broadleaf weeds in maize, sweet corn, established Lucerne and linseed.
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
Email: nzorders@adama.com

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

Date of SDS Preparation: 20 March 2023

Section 2. Hazards Identification

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

HSNO Approval No: HSR000534

Pictograms



Signal Word: **Warning**

| HSNO Classification | Hazard Code | Hazard Statement |
|---|-------------|--|
| Acute oral toxicity Category 4 | H302 | Harmful if swallowed. |
| Specific target organ toxicity (repeated exposure) Category 2 | H373 | May cause damage to organs through prolonged or repeated exposure. |
| Hazardous to the aquatic environment acute Category 1 | H410 | Very toxic to aquatic life with long lasting effects. |
| Hazardous to the aquatic environment chronic Category 1 | | |
| Hazardous to soil organisms | H421 | Very toxic to the soil environment. |
| 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. |
| P260 | Do not breathe fumes, vapours and spray. |
| P264 | Wash hands thoroughly after handling. |

| | |
|------|---|
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid unintended release into the environment. |

| Response Code | Response Statement |
|----------------------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P314 | Get medical advice/attention if you feel unwell. |
| P330 | Rinse mouth. |
| P391 | Collect spillage. |

| Storage Code | Storage Statement |
|---------------------|--------------------------|
| None allocated | |

| 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. |
|--------------------|------------|--------------------|
| Atrazine | 50 | 1912-24-9 |
| Non hazardous | To bal | - |

Section 4. First Aid Measures

Routes of Exposure:

| | |
|--------------|--|
| If in Eyes | Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| 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. Call a POISON CENTER or doctor/physician if you feel unwell. |
| 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:

Ingestion: Harmful if swallowed. Nausea, stomach cramps

Chronic: May cause damage to organs through prolonged or repeated exposure.

Section 5. Fire Fighting Measures

| | |
|---|--|
| Hazard Type | Non Flammable. |
| Hazards from combustion products | May give off toxic carbon monoxide, cyanides, and hydrogen chloride in a fire. |
| Suitable Extinguishing media | Foam, carbon dioxide, dry chemicals. |
| Precautions for firefighters and special protective clothing | Firefighters must wear self-contained breathing apparatus, protective gloves and clothing. |
| HAZCHEM CODE | 3Z |

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

Absorb spill with an inert material such as sand, sawdust or clay and place in suitable labeled container. Dispose as per Local Regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours and spray.
- In case of inadequate ventilation wear respiratory protection.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid unintended release into the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Store out of direct sunlight.
- Do not store near waterways.
- Do not store where damage may occur.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA | | STEL | |
|----------------------|-----|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |
| Atrazine [1912-24-9] | | 5 | | |

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

Handle in well ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Avoid inhalation of dust.

Personal Protection Equipment

| | |
|-----------------------|--|
| Eyes | Not normally required. But should be used as a matter of good practice when handling any chemical substance. |
| Hands and Skin | Wear nitrile rubber gloves with a minimum layer thickness of 0.11 mm. Break through time: 480 min |
| Respiratory | For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards. |
| 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 | Creamy liquid |
| Odour | Not applicable |
| Odour Threshold | Not applicable |
| pH | Not applicable |
| 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 | Not applicable |
| Bulk Density | Not applicable |
| Bulk Density | Not applicable |
| Specific Gravity | 1.10 – 1.30 |
| Solubility's | Soluble/dispersible in water. |
| Partition Coefficient: | Not applicable |
| Auto-ignition Temperature | Not applicable |
| Kinematic viscosity mm²/s 40 °C | Not applicable |
| Particle Characteristics | Not applicable |

Section 10. Stability and Reactivity

| | |
|---|--|
| Stability of Substance | This product is stable under normal conditions. |
| Conditions to Avoid | Avoid direct sunlight; avoid generation of dust and excessive heat. |
| Incompatible Materials | Incompatible with alkaline materials. |
| Hazardous Decomposition Products | May give off toxic carbon monoxide, cyanides, and hydrogen chloride in a fire. |

Section 11 Toxicological Information**Acute Effects:**

| | |
|-------------------|--|
| Swallowed | Harmful if swallowed. LD 50 = Rat >3000mg/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 | May cause damage to organs through prolonged or repeated exposure. |

Individual component information:**Acute Toxicity:**

| Chemical Name | Oral – LD50 | Dermal – LD50 | Inhalation – LC50 |
|----------------------|-----------------------|----------------------|--------------------------|
| Atrazine (1912-24-9) | 750 mg/kg (rabbit) | - | - |

Section 12. Ecotoxicological Information

| | |
|--------------------------------------|--|
| Persistence and degradability | No data available |
| Bioaccumulation | Strong evidence to show that atrazine can be bioaccumulated in aquatic, vertebrate and invertebrate species. |
| Mobility in Soil | Atrazine is persistent in soil for up to 18 years |
| Other adverse effects | No data available |

Individual component information (Please refer to www.epa.govt.co.nz for full details):**Atrazine (1912-24-9):**

| Route | Species | Duration | Value LC50/EC50 |
|---------------------------------------|--|-----------------|------------------------------|
| Acute aquatic, Crustacean | Brown shrimp (<i>Penaeus aztecus</i>) | 48 hr | 1.0mg/L |
| Acute aquatic, Algal | <i>Scenedesmus subspicatus</i> (Green algae) | 96 hr | 0.0127mg/L |
| Acute aquatic, Fish | <i>Cyprinodon variegatus</i> (Sheepshead minnow) | 96 hr | 2.80mg/l |
| Very ecotoxic in the soil environment | Carrot (<i>Daucus carota</i>) | 28 days | EC25 = 0.0006 mg/kg dry soil |
| Bioaccumulative | No | | |
| Rapidly Degradable | No | | |

Section 13. Disposal Considerations

Disposal Method: Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle. Avoid contamination of any water supply with product or empty container.



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. (2-Chloro-4-ethylamine-6-isopropylamine-1,3,5-triazine). |

Air Transport

| | |
|-----------------------|--|
| UN No: | 3082 |
| Class-primary | 9 |
| Packing Group | III |
| Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Chloro-4-ethylamine-6-isopropylamine-1,3,5-triazine). |

Marine Transport

| | |
|-----------------------|--|
| UN No: | 3082 |
| Class-primary | 9 |
| Packing Group | III |
| Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (% 2-Chloro-4-ethylamine-6-isopropylamine-1,3,5-triazine). |
| Marine Pollutant | Yes |

Special Provisions:

If the product's individual container is below 5L/kg, 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

HSNO Approval Code: HSR000534

HSNO Classification: Acute oral toxicity Category 4, Specific target organ toxicity (repeated exposure) Category 2, 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 Handler | Not required |
| Location Certificate | Not required |
| Signage Trigger Quantities (Schedule 3) | 100 L |
| Emergency Response Plan (Schedule 5) | 100 L |
| Secondary Containment (Schedule 5) | 100 L |
| Tracking (Schedule 26) | Not required |
| Hazardous Property Controls Notice 2017 | |
| HPC Notice Part 1 | Hazardous Property Controls preliminary provisions |
| 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 | Record of application of agrichemicals |
| 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 the application of substances that are hazardous to the environment |
| ACVM Act and Regulations | |
| ACVM Approval No | P008693 |
| 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. |
| 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:

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