



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **ACIERTO 900 EC Herbicide**
Chemical name of active: Acetochlor: 2-chloro-N-ethoxymethyl-6'-ethylaceto-o-toluidide
Product Use: Herbicide
Restriction of Use: Refer to Section 15
New Zealand Supplier: ADAMA New Zealand Ltd
Address: Level 1/93 Bolt Road
Tahunanui, 7011, Nelson
Telephone: +64 3 543 8275
Fax Number: +64 3 543 8274

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 4 June 2020 v 2

Section 2. Hazards Identification

This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017

EPA Approval No: HSR101427

Pictograms



Toxic/Irritant



Chronic



Ecotoxic

Signal Word: **Warning**

| HSNO Classification | Hazard Code | Hazard Statement | GHS Category |
|---------------------|-------------|---|-----------------|
| 3.1D | H227 | Combustible liquid. | Flam. Liq. 4 |
| 6.1D (oral) | H302 | Harmful if swallowed. | Acute Tox. 4 |
| 6.1D (inh) | H332 | Harmful if inhaled. | Acute Tox. 4 |
| 6.1E (dermal) | H313 | May be harmful in contact with skin. | Acute Tox. 5 |
| 6.3A | H315 | Causes skin irritation. | Skin Irrit. 2 |
| 6.4A | H319 | Causes serious eye irritation. | Eye Irrit. 2A |
| 6.5B | H317 | May cause an allergic skin reaction. | Skin Sens. 1 |
| 6.9B | H373 | May cause damage to organs (oral) through prolonged or repeated exposure. | STOT RE 2 |
| 9.1A | H400 | Very toxic to aquatic life. | Aquatic Acute 1 |
| 9.2A | H421 | Very toxic to the soil environment. | - |
| 9.3C | H433 | Harmful to terrestrial vertebrates. | - |

| Prevention Code | Prevention Statement |
|------------------------|--|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P210 | Keep away from heat, sparks, open flames or hot surfaces. No smoking. |
| P260 | Do not breathe fumes, mist, vapours or spray. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid 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. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P330 | Rinse mouth. |
| P362 | Take off contaminated clothing and wash before re-use. |
| P391 | Collect spillage. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P370 + P378 | In case of fire: Use Dry chemical, foam, carbon dioxide for extinction. |

| Storage Code | Storage Statement |
|---------------------|--|
| P403 + P235 | Store in a well-ventilated place. Keep cool. |

| Disposal Code | Disposal Statement |
|----------------------|--|
| P501 | Wherever possible completely use material 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. |
|--|------------|--------------------|
| Acetochlor | 80-85 | 34256-82-1 |
| Solvent napha light aromatic (Low boiling point) | 2-3 | 64742-95-6 |
| Other ingredients not contributing to the overall classification of the substance or non hazardous | To balance | NA |

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 eye irritation persists: Get medical advice/attention.

| | |
|--------------|--|
| If on Skin | Take off contaminated clothing and wash before re-use. Wash off immediately with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. |
| If Swallowed | Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person. 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. |
| Skin: | May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction |
| Inhalation: | Harmful if inhaled. |
| Eyes: | Causes serious eye irritation. |
| Chronic: | May cause damage to organs through prolonged or repeated exposure. |

Notes to physician: There is no specific antidote. Treat symptomatically and give supportive therapy.

Section 5. Fire Fighting Measures

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|---|--|
| Hazard Type | Combustible. |
| Hazardous thermal (de)composition products | Chloride compounds, carbon dioxide and nitrogen oxides |
| Suitable Extinguishing media | Use Dry chemical, foam, carbon dioxide. |
| Precautions for firefighters and special protective clothing | Wear suitable protective clothing, gloves and eye/face protection, Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Exercise caution when fighting any chemical fire. In care of insufficient ventilation wear suitable respiratory equipment. |
| HAZCHEM CODE | 3Z |

Section 6. Accidental Release Measures

Wear full protective clothing as detailed in Section 8. Evacuate area from unnecessary personnel. Remove sources of ignition.

Environmental precautions

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

Contain the spill by damming, recover spilt product by absorbing with sawdust or an inert absorbent material then transfer the recovered spilt material to a properly labelled drum. Deal with all spillages immediately. Dispose of according to Local Regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Do not breathe fumes, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.

- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Clean protective clothing daily after work.
- Avoid release to the environment.
- When mixing or applying, wear overalls, chemical resistant boots and gloves, eye protection and respirator (organic vapour and particulate matter).
- Records of use as described in NZS 8409 Management of Agrichemicals must be kept if using 3 litres or more of ACIERTO within 24 hours.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep away from children.
- Store in original container tightly closed and in a locked dry, cool, well ventilated area, away from foodstuffs.
- Store in accordance with NZS 8409 Management of Agrichemicals.
- Stores containing 100 litres of ACIERTO require secondary containment and signage, and more than 100 litres require emergency response plans.
- Keep container tightly closed in a dry and well-ventilated place.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

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

No ingredients have exposure limits

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

Ensure adequate ventilation.

Personal Protection Equipment



| | |
|-----------------------|---|
| Eyes | Safety goggles or face shield. Avoid wearing contact lenses. |
| Hands and Skin | Wear chemical resistant gloves, suitable protective clothing and boots. |
| Respiratory | Respiratory protection is not required if good ventilation is maintained. |
| General | When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use. |

Section 9 Physical and Chemical Properties

| | |
|------------------------|----------------|
| Appearance | Violet Liquid |
| Odour | Aromatic |
| Odour Threshold | Not applicable |
| pH | 5-7 |
| Boiling Point | Not applicable |
| Melting Point | Not applicable |
| Flash Point | 92°C |
| Flammability | Not flammable |
| Upper and Lower | Not applicable |

| | |
|--|----------------------------|
| Exposure Limits | |
| Vapour Pressure | 6 mPa @ 25°C (Acetochlor) |
| Density | 1.093 +/-0.015 g/mL @ 20°C |
| Bulk Density | Not applicable |
| Relative Density | Not applicable |
| Solubilities | Not applicable |
| Auto-ignition Temperature | Not applicable |
| Octanol/water partition coefficient | log P = 4.14 (Acetochlor) |

Section 10. Stability and Reactivity

| | |
|---|---|
| Stability of Substance | This product is stable under normal conditions. |
| Conditions to Avoid | Keep away from sources of ignition. |
| Incompatible Materials | Oxidizing agents, acids and alkali. |
| Hazardous Decomposition Products | Chloride compounds, carbon dioxide and nitrogen oxides. |

Section 11 Toxicological Information

Acute Effects:

| | |
|-------------------|--|
| Swallowed | Harmful if swallowed. LD50 (rat)= 2,000 mg/kg |
| Dermal | May be harmful if in contact with skin = LD50 (rabbit) > 4,000 mg/kg |
| Inhalation | Harmful if inhaled. = LC50 (rat) > 2.7 mg/L (maximum attainable concentration) (4 hours) |
| Eye | Causes severe eye irritation. |
| Skin | Causes skin irritation. May cause an allergic skin reaction. |

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. |

Section 12. Ecotoxicological Information

HSNO Classes: 9.1A = Very toxic to aquatic life.
9.2A = Very toxic to the soil environment.
9.3C = Harmful to terrestrial vertebrates.

| | |
|--------------------------------------|-------------------|
| Persistence and degradability | No data available |
| Bioaccumulation | No data available |
| Mobility in Soil | No data available |
| Other adverse effects | No data available |

Aquatic Toxicity- Acetochlor

Ecotoxicity: 96H-LC50 - Rainbow trout [mg/l] 0.983
48 Hour - EC50 - Daphnia magna [mg/l]: 12.5
72h - EC50 - Algae [mg/l]: 0.00261
LD50 Birds [mg/kg]: 646 Bobwhite quail
Birds LC50 [ppm] >2000 Mallard duck

Bees LC50 [μ /Bee] Not Toxic to bees
Mobility: Soil –Moderately mobile

Persistence/degradability: Soil: Moderately persistent in soil
Half-life time (t_{1/2}): 8-18 days Readily absorbed in soil

Water

Half-life time (t_{1/2}): 20 days (20°C)

Bioaccumulative potential: BCF: 100-3000

Section 13. Disposal Considerations

Disposal Method: Dispose of this product only by using according to the label or at an approved landfill.

Container Disposal: Triple rinse container and add rinsate to spray tank. Empty containers and product should not be burnt. Dispose of container in a suitable landfill or take to an Agrecovery collection site. Do not use container for any other purpose

Precautions: Do not allow product to enter waterways.

Disposal methods to avoid: Do not burn product or container.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acetochlor)

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acetochlor)

Marine Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Acetochlor)
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**

EPA Approval Code: HSR101427

HSNO Classification: 3.1D, 6.1D(oral, inhalation), 6.1E (dermal), 6.3A, 6.4A, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C

| HSW (HS) Regulations 2017 and EPA Notices | Trigger Quantity |
|--|--|
| Certified Handlers | Not required |
| Location Certificate | Not required |
| Tracking Trigger Quantities | Not required |
| Spray Records | 3 Litres or more within a 24 hour period |
| Fire Extinguishers | 500L – 2 extinguishers (3.1D) |
| Signage Trigger Quantities | 100L (9.1A) |
| Emergency Response Plan | 100L (9.1A) |
| Secondary Containment | 100L (9.1A) |
| HSNO Additional Controls (Restrictions of use) | |
| 77A | This substance must not be applied onto or into water. |
| 77A – Application method | This substance must be applied using ground-based methods only. The substance must not be applied when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site. |
| 77A – Application rate | The maximum application rate of Acierto is 2.8L/ha (corresponding to 2.52 kg acetochlor/ha), with maximum of one application per year. |
| Hazardous Property Controls Notice 2017 | |
| HPC Notice Part 4 Clause 47 | Equipment for class 9 substances must be appropriate |
| HPC Notice Part 4 Clause 48 | Records of application of class 9 pesticides and plant growth regulators |
| HPC Notice Part 4 Subpart A | Site and storage controls for class 9 substances |
| HPC Notice Part 4 Subpart C | Qualifications required for application of class 9 pesticides |
| ACVM Act and Regulations | |
| Registered pursuant to the ACVM Act 1997, See www.foodsafety.govt.nz for registration conditions | No. P8861 |
| For all further controls | Refer to EPA website (www.epa.govt.nz) for controls document - HSR101427 |

Section 16**Other Information****Glossary**

| | |
|------|---|
| EC50 | Median effective concentration. |
| EEL | Environmental Exposure Limit. |
| EPA | Environmental Protection Authority |
| HSNO | Hazardous Substances and New Organisms. |
| 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

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Please contact the Adama, if further information is required.

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