SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: AgMerch Triclopyr/Picloram 400 EC Selective Herbicide

Other Names: Use:	Triclopyr + Picloram, Group 4 Herbicide. A herbicide for control of a range of environmental and noxious woody and herbaceous weeds.
Company:	AgMerch Pty Ltd
Address:	217 Wyndham Street, Shepparton, Vic 3630
ACN/ABN:	26 645 371 017
Email:	info@agmerch.com.au
Emergency Contact:	0498 530 214

SECTION 2

HAZARDS IDENTIFICATION

Classified as Hazardous according to criteria of Safe Work Australia. Not classified as a Dangerous Good according to the ADG Code*.

* Not subjected to the ADG code when transported in Australia by Road or Rail in packages 500 kg (L) or less; or in IBC's (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply. Then the product is classed as a Dangerous Good (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See Section 14 of this SDS for details.

Globally Harmonised System (GHS) classification of the substance/mixture:

Acute Toxicity – Oral: Hazard Category 4.

Hazardous to the Aquatic Environment - Long-Term (Chronic) Hazard: Hazard Category 1

Signal Word: WARNING.

Hazard Statements:

- H302 Harmful if swallowed.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:

- P264 Wash hands, arms and face thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P273 Avoid release to the environment.

Response:

- P301 + P312 If swallowed: Call a POISON CENTRE or doctor if you feel unwell.
- P330 Rinse mouth.
- P391 Collect spillage.

Disposal:

P501 Dispose of contents/container in accordance with national regulations.

Pictogram:





SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CHEMICAL Triclopyr present as the butoxyethyl ester Picloram as hexyloxypropylamine salt Other ingredients determined not to be hazardous

SECTION 4

FIRST AID

Ingestion: If swallowed do not induce vomiting. Wash mouth with water and give water to drink. If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 13 11 26.

Eye contact: Immediately hold eyes open and flood with copious quantities of clean water until chemical is removed. Eyelids to be held open. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes..

Skin contact: Remove contaminated clothing. Wash skin with plenty of soap and water. Contaminated clothing should be laundered before reuse.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

SECTION 5

FIRE FIGHTING MEASURES

FIRST AID MEASURES

Specific Hazard: Generally considered a low risk. Flash point > 82°C.

Extinguishing media: Extinguish fire using foam blanket, carbon dioxide or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

Hazards from combustion products: Product will decompose when burnt and will emit toxic fumes. Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Fire decomposition products from this product may be toxic if inhaled.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or vapours generated.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Emergency procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length rubber gloves and goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, the use of a respirator is recommended. In the case of spillage, stop leak if safe to do so, and contain spill. Absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as per the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons.

Material and methods for containment and cleanup procedures: To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

SECTION 7

HANDLING AND STORAGE

Precautions for Safe Handling: No smoking, eating or drinking should be allowed where material is used or stored. Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When preparing the spray, wear cotton overalls buttoned to the neck and wrists, a washable hat, elbow-

SECTION 7 HANDLING AND STORAGE (Continued)

length chemical resistant gloves and face shield or goggles. If the product is in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

Conditions for Safe Storage: Not classified as a Dangerous Good. Store in the closed, original container in a well-ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements. Do not store or use near naked flame or heat sources. Do not cut or weld container. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations. Not classified as a Dangerous Good. Do not store for prolonged periods in direct sunlight.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Exposure guidelines have been established by Safe Work Australia for picloram, which is contained in this product.

Atmospheric Contaminant	Exposure Standard (TWA)		
Triclopyr	2 mg/m³		
TWA = Time-Weight Average			

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

Personal Protective Equipment (PPE):

<u>General</u>: When preparing the spray, wear cotton overalls buttoned to the neck and wrists, a washable hat, elbow-length chemical resistant gloves and face shield or goggles. If the product is in eyes, wash it out immediately with water.

<u>Personal Hygiene</u>: Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Clear brown liquid.
None.
No data available.
No data available.
Disperses in water.
No data available.
Not flammable.
Schedule 6 poison (S6).
Emulsifiable Concentrate (EC)

SECTION 10

STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

Conditions to avoid: Do not store for prolonged periods in direct sunlight.

Incompatible materials: Strong oxidising agents.

Hazardous decomposition products: When involved in a fire will emit toxic and noxious fumes. **Hazardous reactions:** No particular reactions to avoid.

SECTION 11 TOXICOLOGICAL INFORMATION

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure.

Potential Health Effects:

ACUTE EFFECTS

- **Swallowed:** Acute oral LD₅₀ 630 to 729 mg/kg (Triclopyr). Available data shows that this product is harmful, but symptoms are not available. This product is unlikely to cause any irritation problems in the short or long term.
- **Eye:** Product is not expected to be irritating to the eyes.
- **Skin:** Does not cause skin sensitisation. May be mildly irritating. Acute dermal LD₅₀ > 2000 mg/kg. Low toxicity.
- Inhaled: No adverse effects are anticipated from single exposure to vapour. No adverse effects are anticipated from single exposure to vapour. Mist may cause irritation of upper respiratory tract (nose and throat).

Long Term Exposure:

Chronic toxicity: Rats fed diets containing between 3 and 30 mg/kg/day of Triclopyr experienced no ill effects. Male rats fed much higher doses (100 mg/kg/day) had decreased liver and body weight and increased kidney weight. Male mice also showed reduced liver weight but at 60 mg/kg/day. Monkeys fed smaller doses of Triclopyr (20 mg/kg/day) showed no adverse effects.

Reproductive effects: Triclopyr fed to rabbits on days 6 to 18 of gestation at doses of 25, 50, and 100 mg/kg/day produced no effects on maternal body weight, litter size, or foetal body weight. A three-generation study of rats at doses of 3, 10, and 30 mg/kg/day for an 8- to 10-week period prior to breeding of each generation showed no impact of Triclopyr on fertility rates. Triclopyr does not appear to cause reproductive toxicity.

Teratogenic effects: Pregnant rats given moderate to high doses of 50, 100, and 200 mg/kg/day on days 6 to 15 of gestation had offspring with mild foetotoxicjty, but no birth defects. There were no teratogenic effects in rabbits treated on days 6 to 18 of gestation at dose rates of 10 and 25 mg/kg/day. These data suggest that Triclopyr is not teratogenic.

Mutagenic effects: Triclopyr is nonmutagenic in bacterial and cytogenetic assay systems. A mutagenicity study using rats was weakly positive, but a negative result was found in mice, the more sensitive species. Based on these data, Triclopyr is unlikely to be mutagenic.

Carcinogenic effects: Rats and mice fed oral doses of Triclopyr at 3 to 30 mg/kg/day for 2 years showed no carcinogenic response. Even though the mice did have a high incidence of lymph cancer, this incidence were apparently characteristic of the particular strain of mice and did not represent a dose-related effect. Based on these data, Triclopyr is unlikely to be carcinogenic.

Organ toxicity: Organs affected by exposure to Triclopyr include the kidneys and liver.

Fate in humans and animals: Data from animal studies indicate that Triclopyr is rapidly eliminated via the urine as the unchanged parent compound. At higher oral doses, some Triclopyr may be eliminated through the faeces as the absorption capacity of the intestine is exceeded. Reported half-lives for elimination of Triclopyr from mammals are 14 hours (dog) and <24 hours (monkeys). A human elimination half-life of approximately 5 hours has been suggested. Picloram is of lower toxicity than Triclopyr.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Toxicology: This product is toxic to flora. Very toxic to aquatic organisms.

Triclopyr is slightly to practically nontoxic to birds; LD_{50} 1698 mg/kg (Mallard duck) - Triclopyr. Triclopyr and amine salt are practically nontoxic to fish. Low to moderate toxicity to rainbow trout LC_{50} (96 hr) 117 mg/L and Bluegill Sunfish LC_{50} (96 hr) 148 mg/L. Low toxicity to Daphnia magna LC_{50} 1170 mg/L. Low toxicity to bees.

SECTION 12

ECOLOGICAL INFORMATION

Environmental Fate: Breakdown in soil and groundwater: In natural soil and in aquatic environments, the ester and amine salt formulations rapidly convert to the acid, which in turn is neutralised to a relatively nontoxic salt. It is effectively degraded by soil microorganisms and has a moderate persistence in soil environments. The half-life in soil ranges from 30 to 90 days, depending on soil type and environmental conditions, with an average of about 46 days. The half-life of one of the breakdown products (trichloropyridinol) in 15 soils ranged from 8 to 279 days, with 12 of the tested soils having half-lives of less than 90 days. Longer half-lives may occur in cold or arid conditions. Triclopyr is not strongly adsorbed to soil particles and has the potential to be mobile.

Breakdown in water: Triclopyr is not readily hydrolysed at pH 5 to 9. Hydrolysis of the ester and the amine salt occurs rapidly and results in formation of Triclopyr. Reported half-lives in water are 2.8 to 14.1 hours, depending on season and depth of water. The ester formulation half-life is from 12.5 to 83.4 hours. In water, the most important breakdown process is photolysis. Picloram is rapidly photodegraded on soil and in clear, moving water.

SECTION 13

DISPOSAL CONSIDERATIONS

Spills and Disposal: Keep material out of streams and sewers. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities. In rural areas contact ChemClear <u>http://www.chemclear.com.au</u> for help with collection of unwanted rural chemicals.

Disposal of empty containers: Triple-rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

Do not cut or saw empty containers, as there is the possibility that fumes inside the container maybe ignited and cause the container to explode.

SECTION 14

TRANSPORT INFORMATION

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 500 kg (L) or less; or in IBC's under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082. (See special provision AU01).

Marine and Air Transport: AgMerch Triclopyr/Picloram 400 EC Selective Herbicide is classified as a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-

UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Triclopyr). Hazchem code •3Z. Hazard Identification Number (HIN) 90. Australian Standards Initial Emergency Response Guide No. 47.

SECTION 15

REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is not a scheduled poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 92094

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia.

This product is not classified as a Dangerous Good according to the ADG Code for packages 500 kg (L) or less; or in IBC's (refer to SP AU01) (7th Ed).

SECTION 15 REGULATORY INFORMATION (Continued)

This product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

SECTION 16

OTHER INFORMATION

Issue Date: 15 July 2023. Valid for 5 years till 15 July 2028. (First issue).

Key to abbreviations and acronyms used in this SDS:

- ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).
- Carcinogen: An agent which is responsible for the formation of a cancer.
- Genotoxic: Capable of causing damage to genetic material, such as DNA.
- HCIS: Hazardous Chemical Information System.
- Lacrimation: The production, secretion, and shedding of tears.
- Lavage: A general term referring to cleaning or rinsing.
- Mutagen: An agent capable of producing a mutation.
- Pneumonitis: A general term that refers to inflammation of lung tissue.
- PPE: Personal protective equipment.
- Teratogen: An agent capable of causing abnormalities in a developing foetus.
- TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
- Safe Work Australia: Australian government statutory body established in 2008 to develop national policy relating to Worker Health & Safety and workers' compensation.

References

- 1. "Hazardous Chemicals Information System". Safe Work Australia HCIS website. (2023).
- 2. "Classifying Hazardous Substances" Safe Work Australia. August 2018.
- 3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2017 (7th Ed).

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS