



AGRO-ALLIANCE (AUSTRALIA) PTY LTD

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(AUSTRALIA) PTY LTD
A.B.N.11 130 864 603

2, Mavron Street, Ashwood ,VIC 3147, Australia
Tel: +61 3 86442677 / 86442679 Fax: +61 3 98073883 Email: info@agroalliance.com.au

Section 1 - Identification of Chemical Product and Company

Triclopyr 600

Trade Name: Agro-Essence Triclopyr 600 Herbicide
Product Use: A liquid woody and broadleaf herbicide
Company: Agro-Alliance (Australia) Pty Ltd.
Address: 2, Mavron Street, Ashwood VIC 3147, Australia
Telephone Number: +61 03 86442677 / 86442679
Fax Number: +61 03 98073883
Website: www.agroalliance.com.au
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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

Risk Phrases: R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

Safety Phrases: S2 Keep out of the reach of children.

S13 Keep away from food, drink and animal feeding stuffs.

S20/2 1 When using, do not eat, drink or smoke.

S24/25 Avoid contact with eyes and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap and water.

S29 Do not empty into drains.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.



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Section 3 - Composition/Information on Ingredients

Ingredients:

CHEMICAL	CAS NUMBER	PROPORTION
Triclopyr butoxyethyl ester	64700-56-7	71.7%
Diethylene glycol monoethyl ether	111-90-0	~ 20%
Other ingredients		Up to 100%

Section 4 - First Aid Measures

FIRST AID

Consult the Poisons Information Centre (Ph Australia 131126) or a doctor in every case of suspected chemical poisoning. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur seek medical attention immediately.

Ingestion: Do not induce vomiting. Seek medical advice and show this label or container. Make every effort to prevent vomit from entering the lungs by careful placement of the patient.

Eye contact: Immediately hold eyes open and flood with copious quantities of clean water for several minutes. Eyelids to be held open. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur and persist, consult a physician, preferably an ophthalmologist.

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

Inhalation: Remove from exposure and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or oesophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5 - Fire Fighting Measures

Extinguishing media: Flash point 95°C. Combustible liquid (C1). 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.



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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.

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. Hazchem 3Z.

Section 6 - Accidental Release Measures

Emergency procedures / Material and methods for containment and cleanup procedures: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective glasses and, preferably, 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 indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

After spills, wash area preventing runoff from entering drains. 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: Keep out of reach of children. Harmful if swallowed. Causes skin irritation and sensitivity. Avoid contact with skin and clothing. No smoking, eating or drinking should be allowed where material is used or stored. When opening the container and preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length nitrile/neoprene gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

Conditions for Safe Storage: Store in tightly closed original container in a cool, dry well-ventilated area out of direct sunlight when not in use. 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. 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.

Section 8 - Exposure Controls and Personal Protection

Exposure Guidelines:

Exposure guidelines have not been established for this product by Safe Work Australia, however the manufacturer recommends the following guideline.

Atmospheric Contaminant

Triclopyr

Exposure Standard (TWA)

2 mg/m³ - skin

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):

When opening the container and preparing the spray and using the prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow-length nitrile/neoprene gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

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 9 - Physical and Chemical Properties:

Appearance: Clear brown coloured liquid.

Odour: Hydrocarbon odour.

Boiling point: No data.

Freezing point: No data.

Specific Gravity: 1.2 g/L.

Solubility in Water: Emulsifies in water.

pH: Slightly alkaline.

Vapour pressure: 3.6 x 10⁻⁶ mm Hg @ 25°C (triclopyr butoxyethyl ester).

Flammability: Combustible liquid.

Flashpoint (°C): 95°C.

Poisons Schedule: S6.



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Section 10 - Stability and Reactivity

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture. This product is unlikely to spontaneously decompose.

Conditions to avoid: Do not store for prolonged periods in direct sunlight. Avoid strong oxidising agents.

Incompatible materials: Keep away from strong oxidizing agents.

Hazardous decomposition products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Oxides of sulfur. Hydrogen fluoride gas and fluorides. Water.

Hazardous reactions: Not known to polymerise.

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: The rat LD₅₀ for a similar substance is > 2000 mg/kg. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Eye: May cause slight eye irritation. Corneal injury is unlikely. Dust may irritate eyes. Mist may cause eye irritation.

Skin: Prolonged and repeated contact may cause slight irritation. Prolonged skin contact is unlikely to result in absorption of harmful amounts, the rat dermal LD₅₀ is > 2000 mg/kg. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

Inhaled: No adverse effects are anticipated from single exposure to vapour. Mist may cause irritation of upper respiratory tract (nose and throat).

Long Term Exposure:

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: For the active ingredient, in animals, effects have been reported on the following organs: Blood, kidney, liver. For Glycol Ethers, in animals, effects have been reported in the testes.



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CANCER INFORMATION: In long-term animal studies with ethylene glycol butyl ether, small but statistically significant increases in tumours were observed in mice but not rats. The effects are not believed to be relevant to humans. If the material is handled in accordance with proper industrial handling procedures, exposures should not pose a carcinogenic risk to man. The active ingredient (triclopyr) did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Triclopyr did not cause birth defects in laboratory animals. However triclopyr has been toxic to the foetus in laboratory animals at doses toxic to the mother.

REPRODUCTIVE EFFECTS: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Section 12 - Ecological Information

Environmental Toxicology: No data is available on this product. Based largely or completely on information for the active ingredient, Fish $LC_{50} = 0.36$ mg/L in the most sensitive species tested. Algae 24 hour $EC_{50} = 0.1$ mg/L in the most sensitive species tested. Bird acute $LD_{50} = 735$ mg/kg in the most sensitive species tested.

Environmental Fate: Triclopyr butoxyethyl ester is rapidly hydrolysed to triclopyr acid in soil and water. Based largely or completely on information for the active ingredient, the bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). Measured log octanol/water partition coefficient (Log Pow) is 4.09. Log air/water partition coefficient (Log Kaw) is -4.0. Biodegradation under aerobic static laboratory conditions is moderate (BOD₂₀ or BOD₂₈/ThOD between 10 and 40%).

Section 13 - Disposal Considerations

Spills and Disposal: Persons involved in cleanup require complete skin protection - see section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507- Storage and Handling of Pesticides. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Disposal of empty containers: Triple or preferably pressure 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



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puncture and bury empty containers in a local authority landfill. 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.

Section 14 - Transport Information

Road & Rail Transport: This product is exempt from classification as a Dangerous Good in packs less than 3,000 kg or litres 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.

Marine and Air Transport: Apparent Triclopyr 600 EC 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 butoxyethyl). Hazchem code ●3Z. Hazard Identification Number (HIN) 90.

This product is a **Schedule 6 Poison (S6)** and must be stored, transported and sold in accordance with the relevant Health Department regulations.

Section 15 - Regulatory Information

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP), this product is a schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 66.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xi: irritant, Xn: harmful.

This product is not classified as a Dangerous Good according to the ADG Code for packs less than 3000 litres (SP AU01) (7th Ed).

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.



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THIS MSDS 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 MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2001(2003)]