Amgrow Chemspray Tree & Blackberry Killer

Section 1 - Identification of Chemical Product and Company

Amgrow Pty Ltd
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Trade Name: **Tree & Blackberry Killer**
Product Use: Herbicide to control woody weeds, blackberry and trees
Revised Date: **January 2013**

Section 2 - Hazards Identification

Statement of Hazardous Nature

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA (Xn Harmful)

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Risk Phrases: R22, Harmful by inhalation
Safety Phrases: S23 Do not breathe fumes
SUSMP Classification: S6
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
UN Number: None allocated

Emergency Overview

Physical Description & colour: Clear amber liquid
Odour: Characteristic solvent odour.
Major Health Hazards: Single dose acute oral toxicity is low. Amounts ingested incidental to normal handling are not likely to be harmful; however, ingestion of larger amounts may cause injury. If vomiting occurs liquid may enter the lung and cause lung damage due to chemical pneumonia, a condition caused by petroleum and petroleum-like solvents.

Potential Health Effects

Inhalation: The acute inhalation toxicity of the active ingredient is low. Based on the properties of the other components it is expected that the inhalation toxicity of the formulation is also low. Prolonged exposure to the vapour of the solvent in the product may cause eye and respiratory irritation, headache, dizziness and anaesthetic or narcotic effects.
Skin Contact: The acute dermal toxicity is low and a single prolonged dermal exposure is not likely to result in absorption of harmful amounts. Prolonged contact may result in drying and defatting of the skin, rash and dermatitis.
Eye Contact: Irritant - Contact may result in lacrimation, irritation, pain, redness and conjunctivitis. Prolonged contact – corneal burns and possible permanent damage.
Ingestion: Data suggests that this product is harmful if swallowed
Carcinogen Status:
SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: No significant ingredient is classified as carcinogenic by IARC

Section 3 - Composition/Information on Ingredients

Ingredients	*CAS No*	*Conc,%*
Triclopyr (as butoxyethyl ester)	64700-56-7	5
Ethyl di-icinol	111-90-0	to 100

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Inhalation: If vapour or mists have been inhaled and irritation or unusual symptoms have developed, remove to fresh air and observe til recovered. Seek medical advice if symptoms persist.
Skin Contact: Remove contaminated clothing and wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.
Eye Contact: Flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.
Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is a moderate risk of an explosion from this product if it is involved in a fire. Fire-fighters should take care and appropriate precautions
Extinguishing Media: Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.
Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered
Unusual Fire & Explosion Hazards: Fire decomposition products may form toxic and corrosive mixtures in confined spaces. 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.

Flash point:	84°C
Upper Flammability Limit:	no data
Lower Flammability Limit:	no data
Auto ignition temperature:	No data.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Hydrogen chloride gas, chlorides, and in some circumstances, phosgene. Water.

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including Face mask, face shield, gauntlets and self contained breathing apparatus. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment.
Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.
Storage: This product is a S6 poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep

away from extreme heat and open flames and ensure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10.

Section 8 - Exposure Controls and Personal Protection

Exposure limits	TWA (mg/m3)	STEL (mg/m3)	ADI (mg/Kg/day)	NOEL (mg/Kg/day)
Triclopyr	not set	not set	0.05	0.5

Exposure limits have been set for ingredients in product. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. A TWA has not been established by Worksafe Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m^3 for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, March 2012

Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: If there is a significant chance vapours or mists accumulating in the area where this product is being used, a local exhaust system should be used.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should prevent skin contact by wearing impervious gloves, protective clothing and, preferably, an apron. Make sure that all skin areas are covered

Protective Material Types: We suggest that protective clothing be made from the following materials: PVC, nitrile.

Respirator: If there is a significant chance vapours or mists accumulating in the area where this product is being used, a mask or respirator should be used.

Always wash hands before eating, drinking or smoking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear amber liquid.
Odour:	Characteristic solvent odour.
Boiling Point:	Boils above about 150°C at 100kPa.
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No data. Expected to be low at 100°C
Flashpoint:	84°C (PMCC)
Vapour Pressure:	No data.
Vapour Density:	>1
Specific Gravity:	1.006
Water Solubility:	Emulsifiable.
pH:	No data.
Volatility by volume:	30-40%
Odour Threshold:	No data.
Corrosiveness:	Not corrosive.

Section 10 – Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: Strong oxidising agents.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Hydrogen chloride gas, chlorides, and in some circumstances, phosgene. Water.
Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity: LD_{50} Oral (Rat) = 577-692mg/kg LD_{50} Dermal (Rat) >2000mg/kg
Reproductive effects: No data
Teratogenic effects: No data
Mutagenic effects: No data
Organ toxicity: No data
Fate in humans and animals: No data

Section 12 - Ecological Information

Effects on birds: Low acute toxicity to birds
Effects on aquatic organisms: Triclopyr is toxic to fish, LC_{50} (rainbow trout) 117mg/L moderately toxic to aquatic organisms
Effects on other organisms: Moderately toxic to livestock, Not toxic to bees. Not expected to bioaccumulate in animals.
Environmental Fate:
Breakdown in soil Rapidly hydrolysed to Triclopyr acid which has a half-life of about 40 days in soil.
Breakdown in water: Decomposes rapidly in water with a half-life 1 to 2 days.

Section 13 - Disposal Considerations

Disposal: There are many pieces of legislation covering waste disposal and they differ in each state and territory, so each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. The Hierarchy of Controls seems to be common - the user should investigate: Reduce, Reuse, and Recycle and only if all else fails should disposal be considered. Note that properties of a product may change in use, so that the following suggestions may not always be appropriate. The following may help you in properly addressing this matter for this product. Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 http://www.chemclear.com.au/

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good for transport by road or rail
IMDG/IATA: This product is not classified as a dangerous good for transport by sea or air

Section 15 - Regulatory Information

Poison Schedule: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.
Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
ASCC	Australian Safety & Compensation Council
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
IARC	International Agency for Research on Cancer
IATA	International Air Transport Authority
IMDG	International Maritime Dangerous Good
NOHSC	National Occupational Health and Safety Commission
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
SWA	Safe Work Australia (formerly ASCC and NOHSC)
UN Number	United Nations Number

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 MUST REVIEW THIS SDS 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 SDS is prepared in accord with the SWA document “National Code of Practice for the Preparation of Material Safety Data Sheets” 2nd Edition [NOHSC:2011(2003)]