


Section 1: Identification: Product identifier and chemical identity

Product Identifier:	CHOICE TRIFLURALIN 480 HERBICIDE
Active Constituent:	480g/L TRIFLURALIN 474g/L LIQUID HYDROCARBON
Other Means of Identification:	Agricultural Herbicide. Group D Herbicide. Grow Choice product code number: 480 1000 AVPMA registered number: 59371
Recommended Use:	A pre-emergence herbicide for the control of annual grasses and certain broadleaf weeds in certain horticultural and agricultural crops as listed in the Directions for Use table.
Details of manufacturer or importer:	Grow Choice Pty Ltd ABN 36 161 264 884
Address:	113 Fitzroy Street TAMWORTH NSW 2340 AUSTRALIA
Website:	www.growchoice.com.au
Phone Number & Email:	(02) 6766 3979 - admin@growchoice.com.au
Emergency Phone Number:	In Case Of Emergency Dial 000
Poisons Information Centre:	Phone: 13 11 26 and speak to a Poisons Information Specialist. Fax: +61 2 9845 3597 http://www.chw.edu.au/poisons/contact.htm

Section 2: Hazards identification (cont. page 2)

Classified as HAZARDOUS in accordance with the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004) 3rd Edition and the Globally Harmonized System of Classification and Labelling of Chemicals (the GHS).	
Considered non-dangerous for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition)	
Considered DANGEROUS for transport by sea and air in accordance with the IMDG Code 37-14 (refer Section 14)	
Summary of hazardous identifications:	ADG Classification: Class 9: Miscellaneous dangerous goods. IMDG UN number: 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. SUSMP Classification: S6
GHS classification:	Aspiration Hazard: Category 1 Skin Sensitisation: Category 1 Carcinogenicity: Category 2 Hazardous to aquatic environment (acute) – Category 1 Hazardous to aquatic environment (chronic) – Category 1
GHS Symbol:	
Signal code and word:	DANGER
Precautionary Statements (General):	If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.
Hazard Statements:	H304: May be fatal if swallowed and enters airways. H317: May cause an allergic skin reaction. H351: Suspected of causing cancer. H410: Very toxic to aquatic life with long lasting effects.

Prevention Statements:	<p>P201: Obtain special instructions before use.</p> <p>P202: Do not handle until all safety precautions have been read and understood.</p> <p>P261: Avoid breathing fumes, mists, vapours or spray.</p> <p>P262: Do not get in eyes, on skin, or on clothing.</p> <p>P272: Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280: Wear protective gloves, protective clothing and eye or face protection.</p> <p>P273: Avoid release to the environment.</p>
Response Statements:	<p>P314: Get medical advice or attention if you feel unwell.</p> <p>P337: If eye irritation persists: seek medical attention.</p> <p>P363: Wash contaminated clothing before reuse.</p> <p>P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.</p> <p>P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352: IF ON SKIN: Wash with plenty of soap and water.</p> <p>P308+P313: If exposed or concerned: Get medical advice.</p> <p>P333+P313: If skin irritation or rash occurs: Get medical advice.</p> <p>P391: Collect spillage.</p>
Storage:	<p>P410: Protect from sunlight.</p> <p>P402+P404: Store in a dry place. Store in a closed container.</p> <p>P403+P235: Store in a well-ventilated place. Keep cool.</p>
Disposal:	<p>P501: Dispose of contents and container in accordance with local, regional and national regulations.</p>

Section 3: Composition and information on ingredients

Chemical ingredients: CAS number and other unique identifiers: Concentration of ingredients		
Component	CAS No	Proportion
Trifluralin	1582-09-8	480 g/L
Liquid hydrocarbon	64742-94	499 g/L

Section 4: First aid measures

In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist. Take this SDS and or DFU/Label with you or when calling the Poisons Information Centre.	
Swallow:	If swallowed, DO NOT induce vomiting. Rinse mouth out with water if patient is conscious. Seek urgent medical attention.
Eye:	If product gets in eyes, remove contact lenses if wearing and wash it out immediately with water for several minutes. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water. Seek medical attention if concerned.
Inhaled:	Move affected person to fresh air and keep at rest until recovered. If inhaled remove to fresh air and keep at rest. Obtain medical advice if at all worried. If not breathing give artificial respiration and get medical attention as soon as possible.
First Aid:	In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist with a copy of this SDS or chemical Label.

Section 5: Fire fighting measures

Suitable Extinguishing Media:	Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder) Other Information: STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.
Specific hazards from arising from the chemical:	Combustible liquid. On burning will emit toxic fumes includes hydrogen fluoride, nitrogen oxides and carbon monoxide.
Special Protective Equipment and Precautions for Fire Fighters:	When fighting a major fire wear self-contained breathing apparatus and protective equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:	In case of spillage it is important to take all steps necessary to: Instruct and ensure all bystanders to keep away from and upwind of spill/leak; Avoid eye and skin contact; Do not breathe dust; Avoid contamination of waterways; Ensure adequate ventilation. Refer to Section 8 for Personal Protection Equipment (PPE).
Environmental precautions:	Reposition any leaking containers so as to minimise leakage. In the event of a major spill, prevent spillage from entering drains or water courses.
Methods for containment and cleaning up:	Dam and absorb spill with an absorbent material (eg sand or soil) or proprietary absorbent such as vermiculite. Shovel the absorbed spill into drums. Collect in a suitable, closed container to dispose and clean the spilled area with water.

Section 7: Handling and storage

Precautions for safe handling:	Safe work practices are recommended. Avoid contact with eyes and skin. When opening the container and preparing spray wear appropriate PPE (refer Section 8). Do not spray under high wind conditions. Hygiene measures: When using products, do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after use and before eating, drinking, smoking/using tobacco, chewing gum, using the toilet or applying cosmetics. After each day's use, wash gloves, face shield or goggles and contaminated clothing. Avoid contact with eyes and skin.
Conditions for safe storage, including incompatibilities:	Keep out of reach of children, unauthorised persons and animals. Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food. Store out of direct sunlight and extreme temperature. Always read the label and any attached leaflet before use.

Section 8: Exposure controls and personal protection

Control parameters – exposure standards, biological monitoring:	Control process conditions to avoid contact. Use in a well-ventilated area only. Use local exhaust ventilation to keep exposure levels below the exposure limits above. Keep stored in original container in a cool, well ventilated area, keeping the lid closed at all-times whilst in storage.
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Appropriate engineering controls:	Handle in well ventilated areas, generally natural ventilation is adequate.
Personal protective equipment (PPE):	<p>When opening the container and preparing the spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC chemical resistant and face shield or goggles.</p> <p>When using the prepared the spray, wear cotton overalls buttoned to the neck and wrist and a washable hat and, optional once chemical is prepared for use, elbow length PVC chemical resistant and face shield or goggles if protected from spray drift/contamination.</p> <p>Face and Eye Protection: Face shield or goggles.</p> <p>Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat.</p> <p>Gloves: Elbow-length chemical resistant PVC gloves.</p> <p>Respiratory: If airborne concentrations are likely to exceed the exposure standards above or if exposed to dust, an AS/NZS 1715/1716 approved respirator should be worn.</p> <p>Recommended to use Australian and New Zealand Standard PPE:</p> <p>Overalls: AS 3765, Clothing for protection against Hazardous chemicals</p> <p>Gloves: AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves)</p> <p>Goggles and face shield: AS/NZS 1337, Eye protectors for industrial applications.</p> <p>Footwear: AS/NZS 2210, Occupational protective footwear</p> <p>Respirators: AS/NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices AS/NZS 1716, Respiratory Protective Devices</p>
Requirements concerning special training:	Check State and/or Territory regulations that require people who use pesticides in their job or business to have adequate training in the application of the materials.

Section 9: Physical and chemical properties

Appearance:	Bright Orange, clear liquid	Boiling Point:	180-210 °C (solvent)
Odour:	Solvent odour	pH (1% deion. Water):	7.5 -8.5
Flash Point:	>63 °C	Combustibility:	No data available
Relative Density:	1.10-1.12	Behaviour in water:	Disperses in water
Vapour Pressure:	13.7mPa	Explosive properties:	No data available
Viscosity:	No data available	Specific gravity:	No data available
Flammability:	Combustible. C1		

Section 10: Stability and reactivity (cont. page 5)

Reactivity:	Hazardous Decomposition Products.
Chemical Stability:	Stable under normal conditions. Do not store below 50°C.
Conditions to avoid:	Heat, sparks, open flames, hot surfaces and direct sunlight.
Incompatible materials and possible hazardous reactions:	Prolonged reaction with water can cause slow decomposition and the formation of acid which may attack drums. If a part open drum is to be stored, ensure that no water has been added to the drum. Strong oxidising agents.
Hazardous Decomposition Products:	Oxides of carbon, nitrogen, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen fluoride, other fluorine compounds and water. Hazardous polymerisation is not possible.

Section 11: Toxicological information

Information on routes of exposure and symptoms related to exposure

Chronic health effects:	Prolonged exposure or delayed treatment may cause permanent eye damage.
Inhalation:	May cause mild irritation.
Skin:	May cause skin irritation, itchiness and reddening.
Eye:	May cause eye irritation, stinging, reddening and watering.
Ingestion:	May cause irritation to mucous membranes.
Skin Corrosion / Irritation:	Based on classification principles, the classification criteria are not met.
Serious Eye Damage / Irritation:	Based on classification principles, the classification criteria are not met.
Respiratory or Skin Sensitisation:	May cause an allergic skin reaction.
Germ Cell Mutagenicity:	Based on classification principles, the classification criteria are not met.
Carcinogenicity:	Suspected of causing cancer. Trifluralin is classified by Safe Work Australia as Carcinogen Category 3. Trifluralin is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.
Reproductive Toxicity:	Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity (STOT) - Single Exposure:	Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity (STOT) - Repeated Exposure:	Based on classification principles, the classification criteria are not met.
Aspiration Hazard:	Based on classification principles, the classification criteria are not met.
Data limitations:	The ADI for Trifluralin is set at 0.02mg/kg/day. The corresponding NOEL is set at 2.5mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

Section 12: Ecological information

Eco toxicity:	Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product. Marine pollutant. Spray drift can cause damage, read the label for more information.								
Persistence and degradability:	Trifluralin degrades in soil at a relatively moderate rate, about 85 – 90% of the material is lost in normal soil in ½ to 1 year.								
Bio accumulative potential:	<table border="0"> <tr> <td>Acute Toxicity – Fish</td> <td>The following is data for the active ingredient, trifluralin. LC50 (96gr) For young rainbow trout is 0.088 mg/1. LC50 (96hr) for young bluegill sunfish is 0.089 mg/1</td> </tr> <tr> <td>Acute Toxicity - Daphnia</td> <td>LC50 (48hr) for daphnia is 0.245 mg/1</td> </tr> <tr> <td>Acute Toxicity – Birds</td> <td>Not toxic to birds. LD50 for bobwhite quail is >2,000 mg/kg</td> </tr> <tr> <td>Other Organisms</td> <td>Bees: No toxic to bees. LD50 >100 µ/bee.</td> </tr> </table>	Acute Toxicity – Fish	The following is data for the active ingredient, trifluralin. LC50 (96gr) For young rainbow trout is 0.088 mg/1. LC50 (96hr) for young bluegill sunfish is 0.089 mg/1	Acute Toxicity - Daphnia	LC50 (48hr) for daphnia is 0.245 mg/1	Acute Toxicity – Birds	Not toxic to birds. LD50 for bobwhite quail is >2,000 mg/kg	Other Organisms	Bees: No toxic to bees. LD50 >100 µ/bee.
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Section 13: Disposal considerations (cont. page 6)

Product Disposal:	On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities who hold periodic collections of unwanted chemicals (ChemClear®).
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Container Disposal:	Do not use this container for any other purpose. Triple rinse containers; add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. drumMUSTER is the national program for the collection and recycling of empty, cleaned, non-returnable crop production and on-farm animal health chemical containers. If the label on your container carries the drumMUSTER symbol, triple rinse the container, ring your local Council, and offer the container for collection in the program. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, puncture or shred and bury containers in local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.
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Section 14: Transport information (cont page 7)

General Transport Information:	It is considered good practice not to transport agricultural chemical products with food, food related materials and animal feed products.
Land:	Considered non-dangerous for road and rail transport by the Australian Code for the Transport of Dangerous Goods Road and Rail (August 2014 edition).
Sea and Air:	Considered DANGEROUS for transport by sea and air in accordance with the IMDG Code 37-14. UN Number: 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains trifluralin) Hazchem Code: •3Z Special Provisions: 179, 274, 331, 335, AU01. Limited Quantities: 5L

Section 15: Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5	
Registration status: Registered	APVMA approval: 59371

Section 16: Any other relevant information

Date of preparation or last revision: This Safety Data Sheet (SDS) was completed 10 January 2022 and replaces SDS dated 19 January 2017.

Acronyms:

AVPMA: Australian Pesticides and Veterinary Medicines Authority.
GHS: Globally Harmonised system of Classification and Labelling of chemicals
HSIS: Hazardous Substances Information System
NOHSC: National Occupational Health and Safety Commission
CAS No.: unique numerical identifier assigned by Chemical Abstracts Service (division of the American Chemical Society)
TWA: Exposure Standard - time weighted average
STEL: Exposure standard - short term exposure limit.
mg/m³: Milligrams of substance per cubic metre of air at 25°C and one atmosphere pressure. The value is exact.
AS/NZS: Australian Standards and New Zealand Standards for Personal protective equipment
ADI: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals
ADG: Australian Dangerous Goods
IMDG: International Maritime Code of Dangerous Goods
IATA: International Air Transport Association

END OF SDS

Source of Data: The information provided in this SDS is sourced from Grow Choice studies which have been conducted according to Regulatory requirements including OECD and CIPAC Guidelines and EC Directives. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the government health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

Note: This product is a registered agricultural chemical and must, therefore, be used in accordance with the container label directions

CONTACT POINT: Grow Choice Pty Ltd
(02) 6766 3979
24 HOURS EMERGENCY CONTACT: 1800 033 111

This Material Safety Data Sheet 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.

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Grow Choice's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Grow Choice shall have no liability.

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