



Grow Choice Pty Ltd
 113 Fitzroy Street | TAMWORTH NSW 2340
 Phone: 02 6766 3979 1800 817 676
 Email: admin@growchoice.com.au




Choice Trifluralin 480 Herbicide

Safety Data Sheet

1. Product identifier & identity for the chemical

Product Name	Choice Trifluralin 480 Herbicide
Active Constituent and Solvent	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 of the chemical and restrictions on due	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.
Suppliers name, address and phone number:	Grow Choice Pty Ltd 113 Fitzroy Street TAMWORTH NSW 2340 Phone: 02 6766 3979 1800 817 676 Fax: 02 6766 2922 Email: 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

2. Hazard Identification (continued 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: **S5**

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 word

DANGER

General Precautionary Statements.

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

P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P261: Avoid breathing fumes, mists, vapours or spray.
 P262: Do not get in eyes, on skin, or on clothing.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P280: Wear protective gloves, protective clothing and eye or face protection.
 P273: Avoid release to the environment.

Response Statements

P314: Get medical advice or attention if you feel unwell.
 P337: If eye irritation persists: seek medical attention.
 P363: Wash contaminated clothing before reuse.
 P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
 P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P308+P313: If exposed or concerned: Get medical advice.
 P333+P313: If skin irritation or rash occurs: Get medical advice.
 P391 Collect spillage.

Storage Statements	P410: Protect from sunlight. P402+P404: Store in a dry place. Store in a closed container. P403+P235: Store in a well-ventilated place. Keep cool. ☐ Refer Section 7
Disposal Statements	P501: Dispose of contents and container in accordance with local, regional and national regulations.

3. Composition/information on ingredients

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

4. First Aid Measures

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.

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 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.

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 breath dust; Ensure adequate ventilation; Avoid contamination of waterways. 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 and materials 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.

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 any 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.

8. Exposure controls/personal protection (continued page 3)

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.
Appropriate engineering controls	When opening the container, 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.
Personal protective equipment (PPE):	When using the prepared spray 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. Face and Eye Protection: Face shield or goggles.

Clothing: Cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat.

Gloves: Elbow-length chemical resistant PVC gloves.

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.

Recommended to use Australian and New Zealand Standard PPE:

Overalls	AS 3765, Clothing for protection against Hazardous chemicals
Gloves:	AS/NZS 2161, Industrial safety gloves and mittens (not electrical and medical gloves)
Goggles and face shield	As/NZS 1337, Eye protectors for industrial applications.
Footwear	AS/NZS 2210, Occupational protective footwear
Respirators	AS NZS 1715 Selection, Use and Maintenance of Respiratory Protective Devices AS/NZS 1716, Respiratory Protective Devices

Requirements Concerning 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.

9. Physical and chemical properties (continued on page 3)

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

10. Stability and Reactivity

Reactivity	Hazardous Decomposition Products:
Chemical stability	Stable under normal conditions. Do not store below 50C
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.

11. Toxicological information (continued page 4)

Information on routes of 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. May cause an allergic skin reaction, rash and inflammation.
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.

12. Ecological information

Eco toxicity	Do not spray in high winds.	
Mobility in soil	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	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 LC50 (48hr) for daphnia is 0.245 mg/1
	Acute Toxicity – Daphnia	Not toxic to birds. LD50 for bobwhite quail is >2,000 mg/kg
	Acute Toxicity – Birds	Bees: No toxic to bees. LD50 >100 µ/bee
	Other Organisms	

13. Disposal considerations

Safe handling and disposal methods	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®).
Disposal of any contaminated packaging	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.

14. Transport information

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 Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th 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

15. Regulatory information

Poisons Schedule number	Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) – Poison Schedule: S5
16. Other information	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA). APVMA product number: 59371

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)
STEL Exposure standard - short term exposure limit.
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

DISCLAIMER:

This SAFETY DATA SHEET has been developed according to the Work Health and Safety Regulations (WHS Regulations) Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals December 2011. The data, information and recommendations herein ("information") are represented in good faith and believed to be correct as of the date hereof. The purpose of this SAFETY DATA SHEET is to describe product in terms of their safety requirements. Grow Choice Pty Ltd makes no representation of merchantability, fitness for a particular purpose of application, or of any other nature with respect to the information or the product to which the information refers ("the product"). The information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to the use of the product. The physical data shown herein are typical values based on the material tested. These values should not be construed as a guaranteed analysis of any specific lot or as guaranteed specification for the product or specific lots thereof.

Due care should be taken to make sure that the use or disposal of this product and/or its packaging is in compliance with Relevant Federal, State and Local Government regulations.