




1. Product identifier & identity for the chemical

Product Identifier	Growgard 360 Herbicide
Active Constituent	Glyphosate present as the isopropylamine salt
Other means of Identification	Agricultural herbicide. Grow Choice product code number: 360 AVPMA registered number: 53296/0900
Recommended use of the chemical and restrictions on due	A non-residual herbicide for the control of annual and perennial and weeds.
Suppliers name, address and phone number:	Grow Choice Pty Ltd 113 Fitzroy Street TAMWORTH NSW 2340 Phone: 02 6766 3979 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

This product is classified as: **Hazardous** according to the criteria of SWA, GHS Australia.
Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to Special Provision AU01). However if transported by Sea, this provision does not apply. Then the product is classed as **Dangerous (Class 9 Environmentally Hazardous)** by IMDG Code. (refer Section 14)

Summary of Hazardous Identifications	ADG UN number: 3082 Poisons Schedule number S5
Classification of the hazardous chemical	Eye damage - category 1 Hazardous to the aquatic environment (chronic) - category 2
GHS symbol	Corrosion 
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	H318 Causes serious eye damage
Prevention Statements	P280: Wear eye protection/face protection. As/NZS 1337, Eye protectors for industrial applications.
Response Statements	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician.
Storage Statements	No specific GHS statement - refer to Section 7.
Disposal Statements	No specific GHS statement - refer to Section 7.

3. Composition/information on ingredients

Chemical ingredients:	Component	CAS No	Proportion
CAS number and other unique identifiers:	Glyphosate Present as the isopropylamine salts	1071-83-6	360 g/L
Concentration of ingredients:	Other ingredient – Water (not hazardous)	7732-18-5	

4. First Aid Measures

Swallow	If swallowed DO NOT induce vomiting; seek medical advice immediately and show this container or label or contact the Poisons Information Centre on 13 11 26 (Aust). Make every effort to prevent vomit from entering the lungs by careful placement of the patient. Do not give anything by mouth to a semi-conscious or unconscious person. Rinse mouth thoroughly with water...
Eyes	If in eyes, remove contact lenses if wearing, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice immediately.
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.
Medical Attention and Special Treatment	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	If involved in a fire, the product will not burn. Choose extinguishing media to suit the burning material. Water spray, carbon dioxide, dry chemical or alcohol resistance foam. Keep upwind from the smoke and flames.
Specific hazards arising from the chemical	Reaction with galvanized steel or unlined steel, excluding stainless steel, tanks and containers, may produce hydrogen gas which may form a highly flammable or explosive gas mixture. Product involved in a major fire may evolve oxides of nitrogen or phosphorus
Special protective equipment and precautions for fire fighters	Fire fighters should wear Safe Work Australia approved self-contained breathing apparatus (AS/NZS 1715/1716) and full protective gear. Keep unnecessary people away. If it can be done safely, remove intact containers from the fire. Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of extinguishing agent and spillage safely later. Contamination of water bodies should be avoided.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	For personal protective equipment (PPE) and hygiene advice, refer Section 8.
Environmental precautions	Avoid contamination of waterways, drains and sewers.
Methods and materials for containment and cleaning up	Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (eg sand, clay or soil). Shovel the absorbed spill into drums. Final clean up with detergent or degreaser is recommended.

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

Control parameters – exposure standards, biological monitoring	An exposure standard has not been established for this product.
Appropriate engineering controls	Special ventilation not required for this product.
Personal protective equipment (PPE)	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. 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
Training Requirements	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 (cont. page 3)

Appearance, form, colour and odour	Clear amber liquid with a faint amine odour.
pH (1% deion. Water);	Not available
Melting point	-100C
Boiling point	>1000C
Specific Gravity	1.17
Flash point	None
Flammability	Noncombustible material.
Vapour pressure	Not applicable
Behaviour in water	Soluble
Relative density	Not applicable

10. Stability and Reactivity

Reactivity	Product is corrosive to mild steel, zinc and galvanized steel excluding stainless steel, polyethylene and plastics.
Chemical stability	Glyphosate formulations are stable for extended periods below 60°C.
Conditions to avoid	Do not mix, store or use spray products/apparatus made of galvanized steel or unlined steel containers or spray tanks.
Incompatible materials and possible hazardous reactions	Contact of the concentrate to be avoided with strong alkalis and alkaline material such as lime. Such contact may release isopropylamine and ammonia vapour with a fish like odour, which may be an irritant to eyes.
Hazardous decomposition products	Thermal decomposition may lead release of: Carbon oxides; sulphur oxides; Nitrogen oxides (NO _x) and Hydrogen fluoride. Hazardous polymerization is not possible.

11. Toxicological information

Information on routes of exposure and symptoms related to exposure	If the information and precautions are followed on this SDS, no harmful effects are expected. Will irritate the eyes. May irritate the skin. Avoid contact with eyes and skin. If product gets in eyes, wash it out immediately with water Avoid inhaling when spraying. May cause irritation. The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.	
Inhalation	When applying the product as a spray avoid breathing in spray mist. May cause irritation to mucous membranes and respiratory tract. The concentrated product may cause slight irritation on contact.	
Ingestion	The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Possible symptoms of exposure include: nausea, vomiting and gastrointestinal discomfort and diarrhoea. Ingestion of a large quantity of the undiluted product may result in hypotension and pulmonary oedema.	
Skin Sensitisation	Product is not a skin sensitiser.	
Eye	The concentrate may cause irritation of the eyes. Prolonged contact with the concentrate may cause damage to the eye.	
Serious eye damage/irritation	Slight irritant	
Skin corrosion/irritation	Slight irritant	
Chronic exposure	No information available, no chronic effects expected.	
Immediate, delayed and chronic health effects from exposure	Acute Toxicity – Oral	LD50 (rat) >5,000 mg/kg for a similar product
	Acute Toxicity Dermal	LD50 (rabbit) >5000 mg/kg for a similar product
	Acute Toxicity - Inhalation	LC50 (rat) (4hr) >1.3 mg/l LC50 concentration not reached.
	Eye Irritation	Slight irritant
	Skin Irritation	Slight irritant
	Skin Sensitisation	Product is not a skin sensitiser
Data limitations	The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 30 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Comm. Dept. of Health and Ageing, 'ADI List', 30 June 2014)	

12. Ecological information

Persistence/Degradability	Adsorption studies indicate that glyphosate has very low mobility. Average field half-life for glyphosate is 47 days.
Other Precautions	Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.
Environ. Protection	Glyphosate is a non-selective contact herbicide. Spray drift can cause damage, read the label for more information. This product is permitted for the control of certain weed species in waterways. Carefully read the precautions under 'Aquatic Weed Control' in the 'Directions For Use' table on the label.
Acute Toxicity – Fish	LC50 (96hr) for rainbow trout is >989 mg/l. LC50 (96hr) for carp is >895 mg/l Not toxic to fish. The above data is for the formulated product.
Acute Toxicity – Daphnia	EC50 (48hr) for daphnia is 675 µ/l for the formulated product.
Acute Toxicity – Algae	EC50 (72 hr) for algae 150 mg/a.
Acute Toxicity Other Organisms	Birds: Not toxic to birds. LD50 for mallard ducks and bobwhite quail (diet) is >5620 mg/kg Bees: Not toxic to bees, LD50 >100 µ/bee. LC50 (96hr) for leopard frog tadpole is >1040 mg/l

13. Disposal considerations

Disposal of product	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 Container	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

This product is not classified as a dangerous good according to the Australian Code for the Transport of Dangerous Goods by road or rail (ADG7).

15. Regulatory information

Poisons Schedule number Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) – Poison Schedule: 5
Glyphosate is listed in the Australian Inventory of Chemical Substances (AICS).

16. Other information

Date of Review This Safety Data Sheet (SDS) was completed May 2020 and replaces Material Safety Data Sheet dated June 2015.

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); AUS/NZS: Australian Standards and New Zealand Standards for Personal protective equipment; ADI: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals; EMS Number.; 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.