

Section 1: Identification: Product identifier and chemical identity

Product Identifier:	SALVE HERBICIDE
Active Constituent:	375 g/kg AMINOPYRALID 300 g/kg METSULFURON METHYL
Other Means of Identification:	Grow Choice product code number: 502 500 AVPMA registered number: 88260 / 126379
Recommended Use:	For the control of weeds in pastures, non-agricultural areas, commercial and industrial areas and rights-of-way as specified in the Directions for Use.
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

Classification of the substance and mixture:	Acute aquatic toxicity - Category 1 Chronic aquatic toxicity - Category 1
Signal word:	WARNING!
Hazard statements:	Very toxic to aquatic life with long lasting effects.
Pictogram(s):	
Precautionary statement – Prevention	Avoid release to the environment.
Precautionary statement – Response	Collect spillage.
Precautionary statement – Disposal	Dispose of contents/ container to an approved waste disposal plant.
Other information:	Poisons Schedule S6.

Section 3: Composition and information on ingredients

Chemical characterisation: Mixture

Ingredients:

Chemical name	CAS No	Proportion
Aminopyralid	150114-71-9	37.5 %
Metsulfuron methyl	74223-64-6	30.0 %
Other inert ingredients	Not Available	to 100%

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.

General advice:	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Inhalation:	Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control centre or doctor for treatment advice.
Skin contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. Suitable emergency safety shower facility should be available in work area.
Eye contact:	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control centre or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.
Ingestion:	No emergency medical treatment necessary.
Most important symptoms and effects, both acute and delayed:	Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.
Indication of any immediate medical attention and special treatment needed	
Advice to Doctor:	Skin contact may aggravate pre-existing dermatitis. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control centre or doctor, or going for treatment.

Section 5: Fire fighting measures (cont. page 3)

Hazchem code:	2X
Suitable Extinguishing Equipment:	Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.
Unsuitable Extinguishing Equipment:	No data available.
Specific hazards from combustion products:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
Unusual Fire and Explosion Hazards:	Container may rupture from gas generation in a fire situation. Do not permit dust to accumulate. When suspended in air dust can pose an explosion hazard. Minimize ignition sources. If dust layers are exposed to elevated temperatures, spontaneous combustion may occur.
Advice for Firefighters Fire Fighting Procedures:	Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires. Dust explosion hazard may result from forceful application of fire extinguishing agents. Move container from fire area if this is possible without hazard. Contain fire water run-off if possible. Fire

water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

Special Protective Equipment for Fire Fighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions:

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12: Ecological Information. Spills or discharge to natural waterways is likely to kill aquatic organisms.

Methods and materials for containment and cleaning up:

Contain spilled material if possible. Small spills: Sweep up. Collect in suitable and properly labelled containers. Large spills: Contact Grow Choice for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

Section 7: Handling and storage

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling: Keep out of reach of children. Keep away from heat, sparks and flame. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing dust or mist. Wash thoroughly after handling. Use with adequate ventilation. Good housekeeping and controlling of dusts are necessary for safe handling of product. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage: Store in a dry place. Store in original container. Do not store near food, foodstuffs, drugs or potable water supplies.

Section 8: Exposure controls and personal protection (cont. page 4)

Control Parameters:	Exposure limits are listed below, if they exist.		
Components	Regulation	Type of listing	Value/Notation
Kaolin	ACGIH	TWA Respirable fraction	2 mg/m3
	AU OEL	TWA	10 mg/m3
Sodium Carbonate	Dow IHG	TWA	10 mg/m3
Picloram	ACGIH	TWA	10 mg/m3
	AU OEL	TWA	10 mg/m3
Titanium dioxide	ACGIH	TWA	10 mg/m3, Titanium dioxide
	Dow IHG	TWA	2.4 mg/m3
	AU OEL	TWA	10 mg/m3
RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.			
Exposure controls Engineering controls:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.		

Individual protection measures:	
Eye/face protection:	Use safety glasses (with side shields).
Skin protection	Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Polyvinyl chloride ("PVC" or "vinyl"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact with the solid material. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
Hand protection:	
Other protection:	Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.
Respiratory protection:	Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Organic vapour cartridge with a particulate pre-filter.
Other Information:	Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including: AS/NZS 1336: Recommended practices for occupational eye protection. AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications. AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment. AS/NZS 2161: Occupational protective gloves. AS/NZS 2210: Occupational protective footwear. AS/NZS 4501: Occupational protective clothing set.

Section 9: Physical and chemical properties (cont. on page 5)

Information on basic physical and chemical properties:

Form:	Granules	Appearance:	Brown
Odour:	Mild	Odour threshold:	No test data available
pH:	7.34 1% pH Electrode	Melting point/range:	No test data available
Freezing point:	Not applicable	Boiling point (760 mmHg):	Not applicable
Flash point – closed cup:	Not applicable	Evaporation Rate (Butyl Acetate = 1):	Not applicable
Partitioning coefficient n-octanol/water (log Pow):		No data available:	
Flammability:	No data available	Lower explosion limit:	Not applicable
Upper explosion limit:	Not applicable	Vapour Pressure:	Not applicable
Relative Vapour Density (air = 1):	Not applicable	Relative Density (water = 1):	No test data available
Water solubility:	No test data available	Auto-ignition temperature:	Not applicable

Decomposition temperature:	No test data available	Kinematic viscosity:	No data available
Explosive properties:	No data available	Oxidizing properties:	No data available
Bulk Density:	520 kg/m3	Molecular weight:	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

Section 10: Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Thermally stable at recommended temperatures and pressures.
Possibility of hazardous reactions:	Polymerization will not occur.
Conditions to avoid:	Product decomposes above melting temperature. Generation of gas during decomposition can cause pressure in closed systems.
Incompatible materials:	None known.
Hazardous decomposition products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

Section 11: Toxicological information (cont. page 6)

Acute toxicity - oral	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. As product: LD50, Rat, female > 5,000 mg/kg
Acute inhalation toxicity:	No adverse effects are anticipated from single exposure to dust. Based on the available data, respiratory irritation was not observed. As product: LC50, Rat, male and female, 4 Hour, dust, > 5.12 mg/l. No deaths occurred at this concentration.
Acute dermal toxicity:	Prolonged skin contact is unlikely to result in absorption of harmful amounts. As product: LD50, Rat, male and female > 5,000 mg/kg.
Skin irritation/corrosion:	Brief contact may cause slight skin irritation with local redness. May cause drying and flaking of the skin
Serious eye damage/irritation:	May cause slight eye irritation. Corneal injury is unlikely.
Skin sensitisation:	Did not demonstrate the potential for contact allergy in mice. For respiratory sensitization: No relevant data found.
Specific Target Organ Systemic Toxicity (Single Exposure):	No relevant data found.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	For the active ingredient(s): Metsulfuron-methyl. Based on available data, repeated exposures are not anticipated to cause significant adverse effects. For similar active ingredient(s). Aminopyralid. In animals, effects have been reported on the following organs: Gastrointestinal tract. Based on information for component(s): In animals, effects have been reported on the following organs: Kidney. Liver.
Carcinogenicity:	For the active ingredient(s): Did not cause cancer in laboratory animals. A risk assessment has been conducted for this product and has shown, that under normal handling, the minor components will not pose a hazard.
Teratogenicity:	For the active ingredient(s): Did not cause birth defects or any other foetal effects in laboratory animals.
Reproductive toxicity:	For the active ingredient(s): In animal studies, did not interfere with reproduction.

Mutagenicity:	In vitro genetic toxicity studies were negative.
Aspiration Hazard:	Based on physical properties, not likely to be an aspiration hazard.

Section 12: Ecological information

ECOTOXICITY

Acute toxicity to fish:	Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1mg/l in the most sensitive species). LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 48 hour, > 120 mg/l, OECD Test Guideline 203 or equivalent.
Acute toxicity to aquatic invertebrates:	EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l, OECD Test Guideline 202 or equivalent.
Acute toxicity to algae/aquatic plants:	ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, 1.49 mg/l, OECD Test Guideline 201 or Equivalent EC50, Lemna gibba, semi-static test, 7 d, Growth rate inhibition, 0.00209 mg/l
Toxicity to Above Ground Organisms:	Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). Oral LD50, Colinus virginianus (Bobwhite quail), > 2250mg/kg bodyweight. Oral LD50, Apis mellifera (bees), 48 d, > 214micrograms/bee Contact LD50, Apis mellifera (bees), 48 d, > 200micrograms/bee

PERSISTENCE AND DEGRADABILITY

Aminopyralid Potassium

Biodegradability:	For similar active ingredient(s). Aminopyralid. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. 10-day Window: Fail
Biodegradation:	0%
Exposure time:	28 d
Method:	OECD Test Guideline 301F or Equivalent

Metsulfuron-methyl

Biodegradability:	No appreciable biodegradation is expected.
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Kaolin

Biodegradability:	Biodegradation is not applicable.
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Sodium Carbonate

Biodegradability:	Biodegradation is not applicable.
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Sodium lignosulfonate, sulfomethylated

Biodegradability:	Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.
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Naphthalenesulfonic Acid, Methyl-, Sodium Salt (1:1)

Biodegradability:	No relevant data found.
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Picloram

Biodegradability:	Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation may occur under aerobic conditions (in the presence of oxygen). Surface photodegradation is expected with exposure to sunlight. 10-day Window: Fail
Biodegradation:	1.95%
Exposure time:	28 d
Method:	OECD Test Guideline 301
Stability in Water (1/2-life):	Hydrolysis, half-life, > 1.8 year, pH 5 - 9, Half-life Temperature 45 °C, Measured

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitiser: OH radicals

Atmospheric half-life: 12.5 hour

5-Amino-3,6-dichloro-2-pyridinecarboxylic acid:

Biodegradability: For similar material(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

4-Amino-6-chloro-2-pyridinecarboxylic acid:

Biodegradability: For similar material(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Titanium dioxide:

Biodegradability: Biodegradation is not applicable.

Balance:

Biodegradability: No relevant data found.

BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

MOBILITY IN SOIL**Aminopyralid Potassium**

For similar active ingredient(s). Aminopyralid. Potential for mobility in soil is very high (Koc between 0 and 50).

Metsulfuron-methyl

No data available.

Kaolin

No relevant data found.

Sodium Carbonate

Relevant data not available.

Sodium lignosulfonate, sulfomethylated

Expected to be relatively immobile in soil (Koc > 5000).

Naphthalenesulfonic Acid, Methyl-, Sodium Salt (1:1)

Naphthalenesulfonic Acid, Methyl-, Sodium Salt (1:1) No relevant data found.

Picloram

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 35

5-Amino-3,6-dichloro-2-pyridinecarboxylic acid

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 10.52 Estimated.

4-Amino-6-chloro-2-pyridinecarboxylic acid

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 10 Estimated.

Titanium dioxide

No data available.

Balance

No relevant data found.

RESULTS OF PBT AND vPvB ASSESSMENT

Aminopyralid Potassium

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Metsulfuron-methyl

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Kaolin

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Sodium Carbonate

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Sodium lignosulfonate, sulfomethylated

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Naphthalenesulfonic Acid, Methyl-, Sodium Salt (1:1)

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Picloram

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

5-Amino-3,6-dichloro-2-pyridinecarboxylic acid

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

4-Amino-6-chloro-2-pyridinecarboxylic acid

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Titanium dioxide

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Balance

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

OTHER ADVERSE EFFECTS

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Section 13: Disposal considerations

Disposal methods:

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

This product when disposed of in its unused and uncontaminated state should be treated as a hazardous waste.

Section 14: Transport information

ADG

UN number:	UN 3077	Packing group:	III
Hazard class:	9		
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)		
Marine pollutant:	Metsulfuron-methyl		

Classification for SEA transport (IMO-IMDG):

UN Number:	UN 3077	Packing Group:	III
Hazard class:	9		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)		
Marine pollutant:	Metsulfuron-methyl		
Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code:	Consult IMO regulations before transporting ocean bulk		

Classification for AIR Transport (IATA/ICAO):

UN Number:	UN 3077	Packing Group:	III
Hazard class:	9		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Metsulfuron-methyl)		

Hazchem Code: •2X

Further information:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the Australian Code for the Transport of Dangerous Goods (ADG). This applies when transported by road or rail in packaging's that do not incorporate a receptacle exceeding 500kg(L) or IBCs per ADG Special Provision AU01. Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5L or less for liquids or having a net mass per single or inner packaging of 5KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197.

This information is not intended to convey all specific regulatory or operational requirements/ information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15: Regulatory information

Australia Inventory of Chemical Substances (AICS)	The product is used in a biocide/pesticide application and is subject to the applicable regulation. It contains a component exempt from inventory listing requirements. Because an intentional component of the product is not on the inventory, the product may only be used in the exempt application.		
Other Information:	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).		
Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 6			
Registration status: Registered		APVMA approval: 88260 / 126379	

Section 16: Any other relevant information

Date of preparation or last revision: This Safety Data Sheet was prepared on 12 January 2023 and replaces SDS dated 12 January 2021.

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.

Legend

ACGIH USA. American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV)
AU OEL Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG Dow Industrial Hygiene Guideline
TWA Time weighted average

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: 13 11 26

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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