


Section 1: Identification: Product identifier and chemical identity

Product Identifier:	METSUN 600 HERBICIDE
Active Constituent:	Metsulfuron Methyl 600 g/kg
Other Means of Identification:	Agricultural Herbicide. GROUP B HERBICIDE. Grow Choice product code number: 600 DF AVPMA registered number: 53471/40GB/0907
Recommended Use:	For the control of certain broadleaf weeds in winter cereal crops, pasture renovation and the control of brush and broadleaf weeds in native pastures, rights of way, commercial and industrial areas as per 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

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)	
Poisons Schedule number:	Not scheduled.
Classification of the hazardous chemical:	Hazardous to the Aquatic Environment (acute) Category: 1 Hazardous to the Aquatic Environment (chronic) Category: 1
GHS Symbol:	
Signal code and word:	WARNING
Hazard Statements:	H410: Very toxic to aquatic life with long lasting effects.
Precautionary Statements (General):	P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P103: Read label before use.
Prevention Statements:	P273: Avoid release to the environment.
Response Statements:	P391 Collect spillage.
Storage Statements:	Refer to Section 7
Disposal Statements:	P501: Dispose of contents and container in accordance with local, regional and national regulations.

Section 3: Composition and information on ingredients

Chemical ingredients: CAS number and other unique identifiers: Concentration of ingredients		
Component	CAS No	Proportion
Metsulfuron Methyl	74223-64-6	600g/kg

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:	Rinse mouth and then drink plenty of water. If vomiting occurs, give more water to drink to assist dilution. Do not give anything by mouth to a semi-conscious or unconscious person.
Eye:	If in eyes, hold eyelids open and wash with copious amounts of water for at least 15 minutes. Seek medical advice if irritation develops or persists
Skin:	Wash affected areas thoroughly with soap and water. Remove contaminated clothing and launder before re-use.
Inhaled:	Remove affected person to fresh air until recovered. If symptoms develop or persist, seek medical advice.
First Aid:	If poisoning occurs, contact a doctor or the Poisons Information Centre (Australia) on 13 11 26.
Advice to Doctor:	Treat symptomatically.

Section 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.
Hazards from combustion products:	Non-combustible. If involved in a major fire, could evolve oxides of carbon, nitrogen or sulphur.
Special Protective Equipment and Precautions for Fire Fighters:	Breathable air apparatus must be worn when fighting a fire in which this product is involved.
Other Information:	STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

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:	Avoid contamination of waterways.
Methods for containment and cleaning up:	Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (e.g. 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

Appropriate engineering controls:

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.

Personal protective equipment (PPE):

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.

When using the prepared 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.

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 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:	Off-white to tan granules	Physical State:	Solid
Odour:	No present odour	Vapour Pressure:	3.3 x 10 ⁻⁷ mPa (25°C, metsulfuron methyl)
Flammability:	Non-combustible material	Solubility in water:	Disperses in water
Partition Coefficient:	Kow Log P is 0.0018 (pH7, 25°C for metsulfuron methyl) n-octanol/water		
Other Information:	pKa is 3.8 (20°C, metsulfuron methyl)		

Section 10: Stability and reactivity

Chemical Stability:	Product is considered stable under normal conditions and storage.
Conditions to avoid:	Keep away from strong oxidising agents as product may react violently.
Incompatible materials and possible hazardous reactions:	Strong oxidising agents.
Hazardous Decomposition Products:	Hazardous polymerization is not possible.

Section 11: Toxicological information

Information on routes of exposure and symptoms related to exposure

Acute toxicity - Oral:	LD50 (rat) >5000 mg/kg for metsulfuron methyl
Acute toxicity - Dermal:	LD50 (rabbit) >2000 mg/kg for metsulfuron methyl
Acute toxicity – Inhalation:	LC50 (rat) (4hr) >5 mg/l for metsulfuron methyl
Ingestion:	Low toxicity. However, swallowing large amounts of concentrate may cause nausea and vomiting.
Inhalation:	Not a likely route of exposure when handling the concentrate. May cause irritation to mucous membranes.
Skin:	May irritate the skin.
Eye:	The concentrate may cause irritation of the eyes.
Skin Sensitisation:	Product is not a skin sensitiser.
Chronic Effects:	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Serious eye damage/irritation:	Mild eye irritant.
Skin corrosion/irritation:	Mild skin irritant.
Other Information:	The Australian Acceptable Daily Intake (ADI) for metsulfuron methyl for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 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: Aust Govt Dept. of Health, Office of Chemical Safety, 'ADI List', December 2015).

Section 12: Ecological information (cont. page 6)

Persistence and degradability :	Half-life in soil is typically 52 days.
Other Precautions:	MCPA and its formulations are rapidly degraded by soil microorganisms and it has Do not contaminate dams, waterways or sewers with this product or the containers which have held this product.

Environmental Protection:	Spray drift should be avoided, read the label for more information. Do NOT apply, drain or flush equipment on or near desirable trees or other plants, or on an area where their roots extend, or in locations where the chemical may be washed or moved into contact with their roots.
Acute Toxicity - Fish	LC50 (96hr) for rainbow trout and bluegill sunfish is >150 mg/l for metsulfuron methyl
Acute Toxicity - Daphnia	EC50 (48hr) for daphnia is >120 mg/l for metsulfuron methyl.
Acute Toxicity - Algae	EC50 (72hr) for algae 0.045 mg/l.
Acute Toxicity - Other Organisms	The following data is for the active ingredient, metsulfuron methyl. Birds: Not toxic to birds. LD50 for mallard duck is >2510 mg/kg LD50 for bobwhite quail is >5620 mg/kg Bees: Not toxic to bees. LD50 >44.3 µg/bee.

Section 13: Disposal considerations

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®).
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.

Section 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 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.
For bulk shipments as Class 9, use UN 3077, HazChem code 2Z.	
UN Number (Sea Transport):	3077
IMO Class/Packing Group:	Class 9
IMO Marine Pollutant:	Yes
IMO Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains metsulfuron-methyl 60%)

Section 15: Regulatory information

Regulatory Information:	Australia: WHS regulations (2011) - Schedule 11: classification not listed.
Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP):	Not scheduled
Packaging & Labelling:	READ SAFETY DIRECTIONS BEFORE OPENING OR USING
Other information:	This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).
APVMA approval:	53471

Section 16: Any other relevant information

Date of preparation or last revision: This Safety Data Sheet (SDS) was completed 14 January 2022 and replaces SDS dated 20 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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