

1. Product identifier & identity for the chemical

Product Identifier	Butamine 500 Selective Herbicide
Active Constituent	2,4DB (present as the dimethylamine salt)
Other means of identification	Agricultural Herbicide Grow Choice Product Code:380 APVMA Registered number: 69869/61925
Formulation type	Liquid
Use	For the pre-or post-emergence control of certain weeds in Centrosema (Cavalcade), chickpeas, faba beans, field peas, lucerne, mung beans, peanuts, serradella and soybeans.
Suppliers name, address and phone number:	Grow Choice Pty Ltd 113 Fitzroy Street TAMWORTH NSW 2340 Phone: 02 6766 3979 Email: rfagan@growchoice.com.au
Emergency phone #	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

Classified as **HAZARDOUS** in accordance with the Safe Work Australia, Globally Harmonized System of Classification and Labelling of Chemicals (the GHS).

Not classified as a dangerous goods under the ADG 7.

This product is classified as: **Environmentally Hazardous Substance, Liquid, N.O.S by the IMDG (2015)**

GHS Category	Acute toxicity - Category 4 Eye damage – Category 1 Hazardous to the aquatic environment (chronic) - Category 2
Hazard Statement Code and Statement	H302 Harmful if swallowed H318 Causes serious eye damage H411 Toxic to aquatic life with long lasting effects
GHS symbol	Exclamation mark Corrosion Environmental



Signal word **Danger**

General Precautionary Statements.	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.
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Precautionary Code and Statements P264: **Wash hands, forearms and face thoroughly with soap and water after handling. After each day's use, wash contaminated clothing and safety equipment.**

P270: **Do not eat, drink or smoke when using this product.**
 P280 **Wear protective gloves, eye protection/face protection and clothing. Refer section 8.**
 P301 + P312: **IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.**
 P330: **Rinse mouth**
 P305 + P351 + P338: **IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**

Storage P310: **Immediately call a POISON CENTER or doctor/physician.**
 No specified – refer to section 7
Disposal P501: **Dispose of contents/container to in accordance with State and Local Regulations.**
Other information Poison Schedule S5

3. Composition/information on ingredients

Chemical ingredients:	Component	CAS No	Proportion (w/v)
CAS number and other unique identifiers:	2,4-DB (present as the dimethylamine salt)	94-82-6	500 g/L
Concentration of ingredients:	Water		Balance
	Other; Ingredients (considered non-hazardous)		10-30%

4. First Aid Measures (continued on page 2)

Swallow If swallowed do NOT induce vomiting; seek medical advice immediately and show the 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. The above first aid instructions are mandated by the Commonwealth Department of Health and Ageing via the National Drugs and Poisons Schedule.
 These instructions are suitable for ingestion of spray solution and small amounts of concentrate; however, if SUBSTANTIAL AMOUNTS of the concentrate have been swallowed (more than about one tablespoon for an adult person; AND if medical assistance is more than 30 minutes away, the induction of vomiting should be

CONSIDERED preferably based on MEDICAL ADVICE if a physician can be contacted by phone.
All care must be taken to prevent vomit from being inhaled.
Do not give anything by mouth to a semi-conscious or unconscious person.

Eye:	If product gets in eyes, wash it out immediately with water for at least 15 minutes. Seek medical attention.
Skin:	Remove contaminated clothing and wash affected areas thoroughly with soap and water.
Inhaled	Move affected person to fresh air and keep at rest until recovered.
First Aid	In Case Of Emergency Dial 000 and/or Poisons Information Centre: Phone: 13 11 26 and speak to a Poisons Information Specialist.
Advice to doctor	No specific antidote exists. Treat symptomatically. Present patient with a copy of this Safety Data Sheet.

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.
Specific hazards arising from the chemical	If involved in a fire, it will emit carbon monoxide, phosgene and possibly oxides of phosphorous.
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.

STOP FIRE WATER FROM ENTERING DRAINS OR WATER BODIES.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	In case of spillage it is important to take all steps necessary to: <ul style="list-style-type: none">• Avoid eye and skin contact;• Avoid contamination of waterways;• Keep all bystanders away; and• Refer Section 8 for PPE.
Environmental precautions	Reposition any leaking containers so as to minimise leakage. Dam and absorb spill with an absorbent material (eg sand or soil). Shovel the absorbed spill into drums
Methods and materials for containment and cleaning up	Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite) Collect in sealed open top containers for disposal. For large spills contact GROW CHOICE 1800 817 676

7. Handling and Storage

Precautions for safe handling	Store in tightly sealed original containers in a dry secure place away from fertilizers, feed and food. Store out of direct sunlight. Keep container tightly sealed and do not store with seed, fertilizers or foodstuffs. Equipment that has been used for this chemical should not be used for the application of other materials to sensitive plants, unless it has been well washed out with hot soapy water or 1% solution of ammonia, followed by several clear water rinses. Sprayed weed may become more palatable to stock and a higher intake of some weeds may result in stock poisoning and death from causes such as nitrate poisoning. Care should be taken especially where Capeweed, Paterson's curse and variegated thistles predominate in the pasture. Always read the label and attached leaflet before use.
Conditions for safe storage, including any incompatibilities:	Keep out of reach of children, unauthorised persons and animals. Store in the closed, original container in a dry, well ventilated area out of direct sunlight.

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring	No exposure standard for this product has been set; however, an exposure standard has been set for methylamine vapor at 2 ppm. Use in a well ventilated area only. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment
Appropriate engineering controls	No special requirements. Product is used outdoors.
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 chemical resistant PVC gloves and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist and washable hat. 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	Brown liquid
Odor	Faint ammoniac odor
pH (1% deion. Water);	9.8 – 10.1
Melting point	Approx -5°C
Boiling Point	100°C

Flash point	Not flammable
Flammability	Not flammable
Behavior in water	Soluble in water
Viscosity	No data available
Surface tension	No data available
Corrosiveness	No data available
Combustibility	Non-combustible.
Explosive properties	Non-explosive.
Specific gravity	1.179-1.181

10. Stability and Reactivity

Reactivity and chemical stability	Reaction of the concentrate or spray mix with acids will precipitate solid 2,4-DB acid and largely deactivate the product and cause blockages in spray equipment. Dimethylamine is moderately toxic, LD50 (oral, rat) is 700 mg/kg and a TLV of 2 ppm (TWA) has been set.
Conditions to avoid	Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product.
Incompatible materials and possible hazardous reactions	The addition of a strong alkali such as caustic soda will cause release of dimethylamine vapor.
Hazardous decomposition products	Hazardous polymerisation is not possible.

11. Toxicological information

No harmful effects are expected if the precautions on the label and this SDS are followed.	
Inhalation	When applying the product as a spray avoid breathing in spray mist.
Ingestion	May cause irritation to mouth, throat and stomach.
Skin	Prolonged contact with the concentrate may cause irritation and cause skin eruptions
Eye	This concentration will cause severe irritation and possible damage unless washed off immediately.
Chronic Effects	Chronic overexposure; Weight loss and damage to liver and kidneys may be expected if exposure is excessive.
Acute Toxicity – Oral	LD50 (rat) 700 mg/kg for technical 2,4-DB LD50 (rat) 700 mg/kg for dimethylamine
Acute Toxicity	LD50 (rat) 800 mg/kg for technical 2,4-DB
Dermal Human Effects	Symptoms of acute overexposure may include; headache, nausea, dizziness and vomiting. In extreme cases, possibly twitching and spasms, dyspnea, cyanosis and exhaustion.
Other Information	The Australian Acceptable Daily Intake (ADI) for 2,4 DB 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. Two-year rat study; based on abnormal renal morphology at the next higher dose of 5 mg/kg bw/d. year dog study. The ADI was supported by the same NOELs (based on kidney effects) observed in a 2-year mouse and 1 year dog study. Reference: Australian Government Department of Health, Office of Chemical Safety, ADI List, Acceptable Daily Intakes For Agricultural And Veterinary Chemicals, current as at 30 June 2014.

12. Ecological information

Persistence and degradability	Average field half-life of 2,4-DB dimethylamine salt is 10 days Spray drift can cause damage, read the label for more information.
Environ. Protection	Acute Toxicity – Fish The following is data for the active ingredient, 2,4-DB amine salt and esters LD50 (96hr) for rainbow trout is 4 mg/L Acute Toxicity
Other Precautions	Not toxic to bees. Do not spray in high winds Do not contaminate dams, waterways or sewers with this product.

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

Transport Information: It is good practice not to transport agricultural chemical products with food, food related materials and animal feedstuffs. Storage and Transport

Considered **non dangerous** for transport by the Australian Code for Transport of Dangerous Goods by Road and Rail. (ADG Code 7th Edition)

IMDG Code

This product is classified as: Environmentally Hazardous Substance, Liquid, N.O.S

UN No: **3082**

Class: **9**

Packing Group: **III**

Special Provisions: **274 335969**

Limited Quantities: **5 L**

Excepted Quantities: **E1**

Emergency Schedule: **F-A, S-F**

Packing: Instructions: **P001 LP01** Provisions: **PP1**

IBCs: Instructions: **IBC03**

Tanks: Instructions: **T4** Provisions: **TP2 TP29**

Stowage and Handling: **Category A**

15. Regulatory information

Poisons Schedule number	S5
Safety, health and environmental regulations specific for the product in question	CAUTION KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING All of the components in this product are listed on the Australian Inventory Chemical Substances (AICS) of Chemical Substances AICS (Australia)

16. Other information

Date of Review This Safety Data Sheet (SDS) was completed 3 March 2020.

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 Code 7th Edition

IMDG: International Maritime Dangerous Goods Code

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.