



Safety Data Sheet

In accordance with Safe Work Australia

1. Product identifier & identity for the chemical

Product Identifier	BEAM 750 WG HERBICIDE
Active Constituent	750g/kg ISOXAFLUTOLE
Other means of Identification	Agricultural herbicide. Grow Choice product code number: 750 AVPMA registered number: 69869/61925
Recommended use of the chemical and restrictions on due	For the control and suppression of various broadleaf weeds and grasses in sugarcane and chickpeas and fallow as specified 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: rfagan@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

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).

Classified as **DANGEROUS GOODS** for transport. ADG UN number: 3077, Class: 9 (M7) Miscellaneous dangerous substances and articles.

Summary of Hazardous Identifications ADG UN number: **3077**, Class: 9 (M7) Miscellaneous dangerous substances and articles (refer Section 14).
Poisons Schedule number **5** from the Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP)

Classification of the hazardous chemical **GHS**
Reproductive toxicity – category 2
Hazardous to the aquatic environment (acute) – category 1
Hazardous to the aquatic environment (chronic) – category 1
HSIS
Repr: Toxic to reproduction; Category 3
N, Dangerous to the environment
GHS symbol Health Hazard Environment



Signal word **Warning**

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 H362: **Suspected of damaging the unborn child.**
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.**
P281: **Use personal protective equipment as required.**

Response Statements P308 + P313: **IF exposed or concerned: Get medical advice/attention.**

Storage Statements P405: **Store locked up**

Disposal Statements P501: **Dispose of contents and container in accordance with local, regional and national regulations.**

3. Composition/information on ingredients

Chemical ingredients:	Component	CAS No	Proportion
CAS number and other unique identifiers:	Isoxaflutole	141112-29-0	750g/kg -75%
Concentration of ingredients:	Kaolin	1332-58-7	<= 10
	Silica, quartz (in kaolin)	14808-60-7	<=1 – in kaolin
	Other ingredients, including dispersing and wetting agents to 100%		

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

Inhaled	attention if concerned. 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	Water spray, carbon dioxide, dry chemical or alcohol resistance foam.
Specific hazards arising from the chemical	Hazardous combustion products when in a fire include oxides of carbon, nitrogen and sulphur, and hydrofluoric acid, may be formed. Dust may form from explosive mixture in air. Closed containers may explode when exposed to intense or extreme heat. Spray with water to cool down fire exposed containers.
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	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;
Environmental precautions	Ensure adequate ventilation; Avoid contamination of waterways. Refer to Section 8 for Personal Protection Equipment (PPE).
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 or soil). Shovel the absorbed spill into drums. Use vacuum equipment with high efficiency particulate air filters or sweep up without dust generation. Collect in a suitable, closed container to dispose and clean the spilled area with water.
7. Handling and Storage	
Precautions for safe handling	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. When opening the container and preparing spray wear cotton overalls buttoned on the neck and wrist and a washable hat and elbow length chemical resistant gloves Avoid contact with eyes and skin. . If product in eyes, wash out immediately with water.
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.
8. Exposure controls/personal protection	
Control parameters – exposure standards, biological monitoring	Exposure limits have not been established under Safe Work Australia for the key ingredient in this product. Exposure standards according to the National Occupational Health and Safety Commission (NOHSC) for: 1322-58-7 Kaolin TWA: - ppm 10 mg/m3 STEL: ppm – mg/m3. This value is for inspirable dust containing no asbestos and less than 1% crystalline silica. 14808-60-7 – Quartz (SiO2) TWA – 0.1 mg/m3
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.
Personal protective equipment (PPE)	When opening the container, preparing the spray and using the prepared 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
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, form, colour and odour	Water-dispersible granules, brown in colour and characteristic in odour.
pH (1% deion. Water);	4.0 to 6.0 at 1 %
Melting point	No information or data available
Boiling point	No information or data available
Flash point	Not applicable
Evaporation rate	No information or data available
Flammability	Product not highly flammable
Vapour pressure	No information or data available
Behaviour in water	Disperses in water
Relative density	Bulk density 555 – 625 kg/m ³
Solubility in water	Dispersible
Auto-ignition temperature	Not self-igniting
Decomposition temperature	No information or data available
Viscosity	No information or data available

10. Stability and Reactivity

Reactivity	This product is unlikely to react or decompose under normal storage conditions. If necessary contact the supplier for advice on shelf life properties.
Chemical stability	Stable under normal conditions of use.
Conditions to avoid	Extremes of temperature and direct sunlight. Prevent formation of dust. Store in original container.
Incompatible materials and possible hazardous reactions	No information available for incompatible materials. No hazardous reactions when stored and handled as prescribed.
Hazardous decomposition products	Thermal decomposition may lead release of: Carbon oxides; sulphur oxides; Nitrogen oxides (NOx) and Hydrogen fluoride.

11. Toxicological information

Information on routes of exposure and symptoms related to exposure	Will irritate the eyes and skin. Avoid contact with eyes and skin. Harmful if inhaled. Avoid inhaling and breathing dust. . Harmful if swallowed. Low acute oral toxicity.
Chronic exposure	
Immediate, delayed and chronic health effects from exposure	Assessment toxicity to reproduction: Isoxaflutole did not cause reproductive toxicity in a two-generation study in rats.
Exposure Levels	Under experimental animal studies, the following animal toxicity data was identified: Oral toxicity: LD50rat > 5000 mg/kg Dermal toxicity LD50 rat > 2000 mg/kg Inhalation toxicity LC50 rat (4n): >5.26 mg/L Skin irritation: Slightly irritating (rabbit)
Data limitations	ADI (mg/kg bw) level of 0.02. NOEL (mg/kg bw) 2. Date Set 6 May 1997 Study: 2-year rat dietary study; based on histological alterations of the liver, nerves and skeletal muscle, and cornea effects at the next highest dose of 20 mg/kg/d. Comment: Supported by a 2-generation rat reproduction study; a NOEL of 2 mg/kg bw/d for maternal and pup toxicity was based on increased liver weights and altered liver histology, and reduced pup viability at the next highest dose of 200 mg/kg bw/d. Data from: Acceptable Daily Intakes For Agricultural And Veterinary Chemicals, 30 June 2014.

12. Ecological information

Eco toxicity	This product is very toxic to aquatic organisms, aquatic plants and algae. May cause long term effects in the aquatic environment. It has a low toxicity to earthworms and bees. DO NOT contaminate streams, rivers or waterways or the used containers.
Persistence and degradability	
Bio -accumulative potential	
Mobility in soil	Toxicity to fish LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) > 65.0 mg/l Exposure time: 96 h Toxicity to fish LC50 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) < 1.7 mg/l Exposure time: 69 h The value mentioned relates to the active ingredient isoxaflutole. Toxicity to aquatic invertebrates EC50 (Water flea (<i>Daphnia magna</i>)) 5 mg/l Exposure time: 48 h Toxicity to aquatic invertebrates EC50 (Water flea (<i>Daphnia magna</i>)) 1.5 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient isoxaflutole. Toxicity to aquatic plants EC50 (Algae) 10.5 mg/l Exposure time: 72 h Toxicity to aquatic plants EC50 (<i>Lemna gibba</i> (duckweed)) 0.003 mg/l Exposure time: 14 d The value mentioned relates to the active ingredient isoxaflutole. Toxicity to other organisms (<i>Anas platyrhynchos</i> (Mallard duck)) > 2,150 mg/kg The value mentioned relates to the active ingredient isoxaflutole. Toxicity to other organisms (<i>Colinus virginianus</i> (Bobwhite quail)) < 2,150 mg/kg The value mentioned relates to the active ingredient isoxaflutole. Biodegradability: The product is readily degradable in the environment.

Stability in soil: It has a low potential for leaching into groundwater or moving to deeper soil layers. Isoxaflutole and its major metabolites are potentially mobile in soil under simulated high rainfall; however field studies indicate that residues remain in the surface horizons; after 4 months, virtually no residues remain in the soil.

Bioaccumulation: Bio concentration factor (BCF): 11
The value mentioned relates to the active ingredient isoxaflutole.
Isoxaflutole does not bio-accumulate.

Additional Environmental Information: No information or data available.

13. Disposal considerations (continued on page 4)

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

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

ADG

UN number: 3077

Class: 9 (M7) Miscellaneous dangerous substances and articles

Subsidiary Risk: None

Packaging group: III

Description of the goods: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. [isoxaflutole (ISO)]

According to AU01, Environmentally Hazardous Substances in packaging, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

IMDG

UN number: 3077

Class: 9 Miscellaneous dangerous substances and articles

Subsidiary Risk: None

Packaging group: III

Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. [isoxaflutole (ISO)], MARINE POLLUTANT

IATA

UN number: 3077

Class: 9

Subsidiary Risk: None

Packaging group: III

Environ. Hazardous Mark: YES

Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. [isoxaflutole (ISO)]

Marine pollutant: Yes – Symbol

EMS Number: F-A , S-F

Hazchem Code: 2Z

Special Provisions: 179, 274, 331, 335, AU01

Limited Quantities: 5kg

Packaging and IBCs – Packing instructions: P002, IBC08, LP02

Packaging and IBCs – Special Packing Provisions: PP12, B3

Portable Tanks and Bulk containers – Instructions: T1, BK2

Portable Tanks and Bulk containers – special Provisions: TP33



15. Regulatory information

Poisons Schedule number

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) – Poison Schedule: 5

16. Other information

Date of Review

This Safety Data Sheet (SDS) was completed 10 April 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)
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
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.