SAFETY DATA SHEET

FREEZONE GLYPHOSATE 680 GRANULES TUFFWEED WEED KILLER

APVMA Approval No. 66105

SECTION 1. IDENTIFICATION

Product name:	FREEZONE GLYPHOSATE 680 GRANULES TUFFWEED WEED KILLER APVMA Approval No. 66105
Recommended Use:	Weed Killer.
Restrictions on Use:	None specified.
Supplier of SDS:	Freezone Public Health Pty Ltd
Supplier Address:	18 Gilpin Street Shorncliffe QLD 4017
Supplier Phone:	07 3869 4436
Supplier Fax:	07 3869 4433
Supplier Email:	info@freezone.net.au

Emergency Telephone Number: Craig Jephcott 0412 200 252

Poisons Information Centre 13 11 26

SECTION 2. HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Serious eye damage / eye irritation (Category 1)

GHS Pictograms

Signal Word Warning

Label Elements and Precautionary Statements

Hazard Statements:	Causes serious eye damage. Toxic to aquatic life with long lasting effects.
Precautionary Statements:	**Prevention** Keep out of reach of children. Avoid release to the environment.

Wear protective gloves, protective clothing and eye or face protection.

Response

Immediately call a POISON CENTER or doctor/physician.

Collect spillage.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Disposal

Dispose of contents and containers as specified on the registered label.

SUSMP Classification S5

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Glyphosate (present as mono-ammonium salt) contains 68% CAS number: 1071-83-6	**Classification** Serious eye damage / eye irritation (Category 1)

Inert Ingredients contains 32% CAS number: secret	**Classification**

Full text for all hazard statements is contained in Section 16.

SECTION 4. FIRST AID MEASURES

First aid measures

General information	You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call. ADVICE FOR DOCTORS: Treat symptomatically.
Inhalation	Remove to fresh air until recovered.
Ingestion	If swallowed, do not induce vomiting, seek medical advice immediately. 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.
Skin contact	Remove contaminated clothing, wash skin with plenty of soap and water. Discard contaminated non-waterproof shoes and boots. If irritation persists, seed medical advice.
Eye contact	Flush eyes immediately with plenty of fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. However, if irritation persists, see a doctor.

Symptoms caused by exposure

General information	Severity of the symptoms described will vary depending on the concentration and length of exposure.
Inhalation	May cause irritation to mucous membranes and respiratory tract. Avoid breathing in spray mists when applying the product as a spray.
Ingestion	The concentrate is of low toxicity if swallowed. Amounts swallowed incidental to normal handling procedures and use are not expected to cause injury. Ingestion of this product may cause gastrointestinal discomfort, nausea, diarrhea and vomiting.
Skin contact	Will cause irritation to skin.
Eye contact	Will cause irritation and possible damage unless washed off immediately.

Medical attention and special treatments

Notes to the doctor	Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Water, foam, carbon dioxide or dry chemical.

Specific hazards arising from the chemical

DO NOT mix, store or apply the product or spray solutions of the product in galvanized steel or unlined steel (except stainless steel) containers or spray tanks. The product or spray solutions of the product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture that can flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source. Spray solutions of the product should be mixed, stored and applied only in stainless steel, aluminium, fiberglass, plastic and plastic-lined steel containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear suitable protective clothing, gloves and eye/face protection. **See section 8.**
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent spillage from entering drains or water courses.
Clean up methods	Recover the product by sweeping up or vacuuming without raising dust. Collect in sealed open top containers for disposal. Final clean up with degreasing agent or detergent is advised..

SECTION 7. HANDLING AND STORAGE

Precautions for handling	When handling this product, do not eat, drink or smoke. When mixing this product always wear a PVC or rubber apron, elbow length PVC gloves, face shield or goggles and overalls buttoned at the wrist and neck. When spraying this product, wear a face shield or goggles After each days use, wash gloves, face shield or goggles and overalls. If product gets on skin, immediately wash area with soap and water.
Conditions for safe storage	Store in the closed, original container in a well-ventilated area as cool as possible out of direct sunlight. Keep from contact with fertilisers and seeds.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits

No exposure standards have been established for this product by Worksafe Australia, however, the TWA exposure standard for dusts not otherwise specified is 10 mg/m3.

Engineering Control

No special ventilation required.

Protective Equipment

Skin contact should be minimized during preparation of spray solution by wearing protective clothing including elbow-length PVC gloves and face shield. If product contacts skin, immediately wash area with soap and water. After each use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash gloves, face shield and contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow granules.
Colour	Pale yellow.
Odour	Musty odour.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.

Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Non-Flammable.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Bulk density	0.6 g/kg
Solubility(ies)	Soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions when used and stored in accordance with label.
Hazardous Polymerization	Hazardous polymerisation is not possible.
Materials to Avoid	Corrosive to mild steel, galvanised steel and zinc. Non corrosive to stainless steel, polyethylene and plastics. Do not mix, store or apply the product or spray solutions of the product in galvanised steel or unlined steel (except stainless steel) containers or spray tanks.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological effects	Not regarded as a health hazard under current legislation.

Acute toxicity - oral

Notes (oral LD_{50})	Rats LD50= 2814mg/kg for similar formulation.

Acute toxicity - dermal

Notes (dermal LD_{50})	Rabbits LD50>5000mg/kg for similar formulation.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data	Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation	Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity- development	Based on available data the classification criteria are not met.

Specific target organ toxicity

STOT- single exposure	Not classified as a specific target organ toxicant after a single exposure.
STOT- repeated exposure	Not classified as a specific target organ toxicant after a repeated exposure.

Chronic toxicity	Studies of glyphosate lasting up to 2 years, have been conducted with rats, dogs, mice and rabbits, and with few exceptions no effects were observed. For example, in a chronic feeding study with rats, no toxic effects were observed in rats given doses as high as 400 mg/kg/day. Also, no toxic effects were observed in a chronic feeding study with dogs fed up to 500 mg/kg/day, the highest dose tested.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic organisms.
Acute Toxicity – Fish	The following is data for a similar product. LC50 (96 hr) for bluegill sunfish is 5.8 - 14 mg/l. LC50 (96 hr) for rainbow trout is 8.2 - 26 mg/l. LC50 (96 hr) for fathead minnow is 9.4 mg/l. TL50 (96hr) carp is 19.7 ppm
Acute Toxicity – Other Organisms	The following data is for the active ingredient, glyphosate. Birds: Not toxic to birds. LD50 for bobwhite quail is >3850 mg/kg Bees: Not toxic to bees. LD50 >100 µg/bee.
Persistence and degradability	Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

General information	On site disposal of the concentrated product is not acceptable. 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 collection of unwanted chemicals (ChemCollect).
Disposal of packaging	Empty containers can be sent to landfill after cleaning, if in compliance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

General	Not classified as dangerous for transport within Australia.
UN number	Not applicable.
UN proper shipping name	Not applicable.
Transport hazard class(es)	No transport warning sign required.
Packing group	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Legislation	*Work Health and Safety Act 2011* (Cth)
	Work Health and Safety Regulations 2011 (Cth)
	Work Health and Safety Act 2011 (Qld)
	Work Health and Safety Regulation 2011 (Qld)
	Work Health and Safety Act 2011 (ACT)
	Work Health and Safety Regulation 2011 (ACT)
	Work Health and Safety Act 2011 (NSW)
	Work Health and Safety Regulation 2011 (NSW
	Work Health and Safety (National Uniform Legislation) Act 2011 (NT)
	Work Health and Safety (National Uniform Legislation) Regulations (NT)
	Work Health and Safety Act 2012 (SA)

Work Health and Safety Regulations 2012 (SA)

Work Health and Safety Act 2012 (Tas)

Work Health and Safety Regulations 2012 (Tas)

Occupational Health and Safety Regulations 1996 (WA)

Occupational Health and Safety Act 2004 (Vic)

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)

SECTION 16. OTHER INFORMATION

Revision date	25/12/16
Revision	3
Supersedes date	01/01/15
Complete hazard statements	H318: Causes serious eye damage. H411:Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.