

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Product Name: Freezone Glyphosate 680 Tuffweed Granular Concentrate Herbicide
Product Type: Group M Herbicide
Company Name: FREEZONE PUBLIC HEALTH PTY LTD
Address: 18 Gilpin Street, Shorncliffe, QLD, 4017
Telephone Number: (07) 3869 4436
Facsimile Number: (07) 3869 4433
Emergency Telephone Number: 000 (Police or Fire Brigade)
13 11 26 (Poisons Information Centre)
Use: For the control of many annual, perennial and woody weeds in certain situations as stated in the Directions for Use Table.

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of NOHSC Australia.
Risk Phrase(s): R36/38 Irritating to eyes and skin.
Safety Phrase(s): S24/25 Avoid contact with skin and eyes
SUSDP Classification: S5
ADG Classification: None allocated. Not a Dangerous Good.
UN Number: None allocated.

Emergency Overview

Physical Description & colour: Pale yellow granules.

Odour: Musty odour.

Major Health Hazards: Glyphosate is practically nontoxic by ingestion, with a reported acute oral LD₅₀ of 5600 mg/kg in the rat. The toxicities of the technical acid (glyphosate) and the formulated product are nearly the same. No major health hazards are known.

Potential Health Effects

Health Effects No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute:

Swallowed: 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, diarrhoea and vomiting.

Skin: Will cause irritation.

Inhaled: May cause irritation to mucous membranes and respiratory tract. Avoid breathing in spray mists when applying the product as a spray.

Eye: Will cause irritation and possible damage unless washed off immediately.

Chronic:

No information available, no chronic effects expected.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS number | Proportion |
|--|------------|--------------|
| Glyphosate (present as mono-ammonium salt) | 1071-83-6 | 68.0 % w/w |
| Surfactant | | 10-20% w/w |
| Inert ingredient | secret | To 100 % w/w |

SECTION 4 – FIRST AID MEASURES

| | |
|------------|--|
| Swallowed: | 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: | Remove contaminated clothing, wash skin with plenty of soap and water. Discard contaminated non-waterproof shoes and boots. If irritation persists, seek medical advice. |
| Eyes: | 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. |
| Inhaled: | Remove to fresh air until recovered. |

Advice to Doctor:

Treatment is symptomatic.

SECTION 5 – FIRE FIGHTING MEASURES**Fire/Explosion Hazards:****Dangerous decomposition or Combustion products****Thermal decomposition**

Not a fire or explosion hazard

Hazardous decomposition products

None known

Hazardous reactions

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.

Extinguishing Media

Water, foam, carbon dioxide or dry chemical.

SECTION 6 – ACCIDENTAL RELEASE MEASURES**Spills and Disposal**

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**Storage**

Store in the closed, original container in a well-ventilated area. Do not store for prolonged periods in direct sunlight.

Transport

Considered non-hazardous by Australian Code for the Transport of Dangerous Goods by Road and Rail.

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

| | |
|-----------------------------|--------------------------|
| Form: | granules |
| Colour: | pale yellow granules |
| Odour: | Musty odour |
| Boiling point (°C): | N/A |
| Bulk Density: | 0.6 g/kg |
| Vapour Pressure: | N/A |
| Vapour Density: | N/A |
| Flash Point: | N/A |
| Flammability Limits: | Non combustible material |
| Solubility | Soluble in water |

SECTION 10 – STABILITY AND REACTIVITY**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**Toxicity Data:**

Rats acute oral LD₅₀ = 2814 mg/kg for a similar formulation

Rabbits acute dermal LD₅₀ > 5000 mg/kg for a similar formulation

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**Known Harmful Effects on the Environment**

Harmful to fish and other aquatic organisms (mainly due to the surfactant).

Other Precautions

Do not spray in high winds. Do not contaminate dams, waterways or sewers with this product.

Environmental Protection

Glyphosate is a non-selective contact herbicide. Spray drift can cause damage.

Persistence / Degradability

Adsorption studies indicate that glyphosate has very low mobility. Average field half life of glyphosate is 47 days.

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.

SECTION 13 – DISPOSAL CONSIDERATIONS**Product Disposal**

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).

SECTION 14 – TRANSPORT INFORMATION

ADG Code: This product is not classified as a Dangerous Good. No special transport conditions are necessary unless required by other regulations.

SECTION 15 – REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database. The following ingredients: Diclofop-methyl, Liquid hydrocarbon, are mentioned in the SUSDP.

SECTION 16 – OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

CONTACT POINT:

Police and Fire Brigade:

Dial 000

National Poisons Information Centre:

Dial 13 11 26 (from anywhere in Australia)

For 24 hour emergency response:

Dial

0412 200 252

Ask for Craig Jephcott