

1. IDENTIFICATION

Product Identifier

Product Name **KELPIE® GLY 540 SL HERBICIDE**

Product Code(s) A13270Q

Other Means of Identification

Proper shipping name: Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG CODE) for Transport by Road and Rail.

Recommended Use: Herbicide

Details of Manufacturer or Importer **SINOCHEM INTERNATIONAL AUSTRALIA PTY LTD**
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2. HAZARD IDENTIFICATION

Classification of the Hazardous Chemical: Acute Oral Toxicity Category 4
Long-term (chronic) aquatic hazard Category 2

Signal Word: WARNING

Hazard Statement(s): H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statement(s): **Response:**
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.

Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard Symbols:**3. COMPOSITION AND INFORMATION ON INGREDIENTS****Substance:** Active Ingredient: Glyphosate**Mixture:**

Identity of Chemical Ingredient	CAS Number	Proportion (w/w)
Glyphosate, present as potassium salt	1071-83-6	540 g/L
Ingredients determined not to be hazardous	-	to 100 %

4. FIRST-AID MEASURES

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Description of Necessary First Aid Measures:

Inhalation:	Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.
Skin contact:	If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.
Eye contact:	Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre.
Ingestion:	Rinse mouth with water. If swallowed, do NOT induce vomiting. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

Symptoms Caused by Exposure: Poisoning symptoms in laboratory animals were non-specific**Medical Attention and Special Treatment:** Treat symptomatically. No known specific antidote.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Small fires: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Large fires: Alcohol-resistant foam or water spray. Do not use a solid water stream as it may scatter and spread fire.
Specific Hazards Arising from the Chemical:	This product may burn and/or decompose if exposed to fire. Under fire conditions this product may dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Special Protective Equipment and Precautions for Fire Fighters:	Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.
Hazchem Code:	Not allocated

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:	Isolate spill or leak area immediately. Clear area of all unprotected personnel. Refer to protective measures listed in sections 7 and 8.
Environmental Precautions:	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains advise local emergency services.
Methods and Materials for Containment and Clean Up:	Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up-wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	This product is a herbicide and spills can damage crops, pastures and desirable vegetation. Spray drift hazard - do not allow drift to occur outside the target area. Avoid skin and eye contact and breathing in vapour, mists and aerosols. Thoroughly clean equipment after use. Keep out of reach of children. When using do not eat, drink or smoke.
Conditions for Safe Storage, Including any Incompatibilities:	Store in the closed, original container in a well-ventilated area, as cool as possible and away from children, animals, food, feedstuffs, seed

and fertilisers. Do not store for prolonged periods in direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters:

Exposure Standards: Contains no substances with occupational exposure limit values.

Biological Monitoring: No specific biological monitoring required.

Engineering Controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below any quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Personal Protective Equipment:

The use of technical measures should always have priority over the use of personal protective equipment.

When selecting personal protective equipment, seek appropriate professional advice.

Personal protective equipment should comply with relevant national standards

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GOGGLES, GLOVES, RESPIRATOR.



Wash contaminated clothing and other protective equipment before storage or re-use.

Eye/face protection:

Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace.

Wear as appropriate: overalls.

Hand protection:

Wear protective gloves.

Always wash hands before smoking, eating, drinking or using the toilet.

The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break-through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Respiratory protection:

If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Blue
Odour:	Characteristic
Specific gravity:	1.36
pH:	4.7
Melting point / freezing point:	Not available
Boiling Point/Range (°C):	Not available
Flash point (°C):	Not applicable
Flammability (solid, gas):	Not applicable
Flammability limit in air:	Not available
Upper flammability or explosive limits:	Not available
Lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	1.356 g/mL
Water solubility:	Miscible in water
Solubility(ies):	Not available
Partition coefficient:	Log Pow: <-3.2 @25°C (glyphosate)
Auto-ignition temperature (°C):	Not available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Dynamic viscosity:	Not available

10. STABILITY AND REACTIVITY

Reactivity:	Reacts with unlined mild steel or galvanised steel producing hydrogen gas which may form explosive mixture with air.
Chemical stability:	Stable under normal conditions of use.
Possibility of hazardous Reactions:	Corrosive to some metals.
Conditions to avoid:	Avoid exposure to extremes of temperature, heat, flames and other sources of ignition.
Incompatible materials:	Incompatible with strong acids, strong alkalis, iron, galvanised steel, unlined mild steel.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus.

11. TOXICOLOGICAL INFORMATION

Health Effects from Likely Routes of Exposure:

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.
Eye contact:	May be an eye irritant. May cause physical irritation to the eyes.
Skin contact:	Contact with skin will result in mild irritation.
Inhalation:	Material may be irritant to the mucous membranes of the respiratory tract (airways).

Acute toxicity:	Oral toxicity:	LD ₅₀ , rat: >5,000 mg/kg (glyphosate)
	Dermal toxicity:	LD ₅₀ , rat: >5,000 mg/kg (glyphosate)
	Inhalation toxicity:	LC ₅₀ (4h), rat: >5 mg/L (similar formulation)
	Skin irritation:	Mild irritant
	Eye irritation:	Irritant
	Skin sensitisation:	Repeated exposure may cause skin sensitisation
	Aspiration hazard:	Not an aspiration hazard

Chronic effects:

Mutagenicity: Not mutagenic

Carcinogenicity: Not carcinogenic in rats or mice. Listed as Category 2A by the International Agency for Research on Cancer (IARC) but expert opinion of many national regulatory authorities is that classification as a carcinogen is not warranted. Not genotoxic in Ames, mouse lymphoma, human lymphocyte and mouse micronucleus tests.

Reproductive toxicity: Glyphosate Acid: No developmental effects seen in animal studies.

Specific Target Organ Toxicity (STOT) - single exposure: The substance or mixture is not classified as specific target organ toxicant single exposure.

Specific Target Organ Toxicity (STOT) - repeated exposure: The substance or mixture is not classified as specific target organ toxicant repeated exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Toxicity to fish:	Bluegill sunfish	96 hr LC ₅₀ :	45 mg/L (for glyphosate salt)
	Rainbow trout	96 hr LC ₅₀ :	28 mg/L (similar formulation)
	Carp	96 hr LC ₅₀ :	12 mg/L (similar formulation)
Toxicity to daphnia and other aquatic invertebrates:	<i>Daphnia magna</i>	48 hr LC ₅₀ :	56 mg/L (similar formulation)
	<i>Skeletonema costatum</i> , diatom	96 hr EC ₅₀ :	1.2 mg/L (for glyphosate salt)
Toxicity to soil dwelling organisms:	Earthworm (<i>Eisenia foetida</i>)	14 d LC ₅₀ :	>2,700 mg/kg dry soil (similar formulation)
Toxicity to bees:	Honey bee (<i>Apis mellifera</i>)	Oral: 48 h, LD ₅₀	>285 µg/bee (similar formulation)
		Contact: 48 h, LD ₅₀	>265 µg/bee (similar formulation)
		LD ₅₀ :	>3,851 mg/kg bw (glyphosate)
Toxicity to birds:	Bobwhite quail (single dose)	LD ₅₀ :	>3,851 mg/kg bw (glyphosate)
	Bobwhite quail (dietary)	LC ₅₀ :	> 4,640 mg/kg diet (glyphosate)
	Mallard duck (dietary)	LC ₅₀ :	> 4,640 mg/kg diet (glyphosate)

Persistence/degradability:

Half-life, soil	2 - 174 days	(glyphosate)
Half-life, water:	< 7 days	(glyphosate)

Mobility in Soil:

Immobilized. Adsorbs strongly to soil.

Koc: 884 – 60,000 L/kg

Bioaccumulative Potential: No significant bioaccumulation is expected.

13. DISPOSAL CONSIDERATIONS

Safe Handling and Disposal Methods: Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Disposal of Contaminated Packaging: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

For refillable container, empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

14. TRANSPORT INFORMATION

ADG	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG CODE) for Transport by Road and Rail.
IATA-DGR	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
IMDG-Code	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

15. REGULATORY INFORMATION

APVMA Product Registration Number:	81472
Poisons Schedule (SUSMP):	Schedule 5

16. OTHER INFORMATION

Date of preparation or review: 23/02/2021

Full text of abbreviations and acronyms:

ADG	Australian Code for the Transport of Dangerous Goods by Road and Rail
APVMA	Australian Pesticides & Veterinary Medicines Authority
EmS	Emergency Schedule
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
LD ₅₀	Lethal Dose to 50% of a test population (Median Lethal Dose)
LC ₅₀	Lethal Concentration to 50 % of a test population
MARPOL	International Convention for the Prevention of Pollution from Ships
NO(A)EL	No Observed (Adverse) Effect Level
n.o.s.	Not Otherwise Specified

OECD	Organization for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative and Toxic substance
SDS	Safety Data Sheet
STEL	Short Term Exposure Limit - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
TWA	The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

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