

Sharda International Africa (Pty) Ltd

(Co. Reg. No. 2010/002268/07)
P.O. Box 82021, Southdale, 2135, South Africa.

Tel: 031 764 3011, Tel: 087 822 2397

Email: rsa.regn@shardaintl.com, Website: <http://www.shardaintl.com>

SECTION 1. Chemical product and company identification

Product identifier:

Identification as on the label/Trade name: **Sharda Glyphosate 540 SL**

Additional information: Glyphosate 540 SL

Relevant identification uses of the substance and uses advised against:

Identified uses: Herbicide

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

Company name: Sharda International Africa (Pty) Ltd

Address: P.O. Box 82021, Southdale, 2135

Phone number.: 031-764-3011

Emergency telephone numbers:

UNITAS Hospital: 0800-111-9900

Tygerberg Hospital: 021-931-6129

Netcare 911: 082911

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Skin irritation	H314: Causes severe skin burns & eye damage
Eye irritation	H314: Causes severe skin burns & eye damage
Hazardous to the Environment	H411 Toxic to aquatic life with long lasting effects

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: Causes severe skin & eye damage

Label elements



Hazard pictograms:

Signal Word: Warning

Hazard Statements:

H314: Causes severe skin burns & eye damage. H411 Toxic to aquatic life with long lasting effects

Precautionary Statements: P260 + P264 + P280: Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment. P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce

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vomiting. P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P363, P304+P340, P310: Wash contaminated clothing before reuse. F INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P391: Collect spillage.

Special labelling of certain mixtures: None

Other hazards: None

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % by weight	Classification
			EC1272/2008
Glyphosate	1071-83-6	46.56	Eye damage category 1 Aquatic chronic category 2
2-aminopropane isopropylamine	75-31-0	15.57	Flam liquid category 1 Skin irritation category 2 Eye irritation category 2 STOT SE category 3
N-N-dimethyl-C12-14-(even numbered)-alkyl-1-amines, reaction products with potassium hydroxide and chloroacetic acid	939-682-8	11.48	Skin Corrosion category 1 B Eye damage category 1 Aquatic chronic category 3

For full text of H statements see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure and consult a doctor.

In case of inhalation:

Remove person from contaminated area to fresh air and assist breathing as needed. Qualified personnel should perform administration of oxygen. Seek medical attention if irritation occurs.

In case of skin contact:

Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. Obtain medical attention immediately

In case of eye contact:

Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.

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In case of ingestion:

Do not induce vomiting. Seek medical advice immediately. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water. Administer oxygen if breathing is difficult. If breathing has stopped, give artificial respiration.

Most important symptoms and effects, both acute and delayed:

Inhalation: Harmful if inhaled

Ingestions: Harmful if swallowed

Skin contact: Causes skin irritation

Eye contact: Causes eye irritation

Anticipated delayed effects: None known

Most important symptoms/effects: Causes severe skin burns and eye damage.

Advice to physician:

There is no specific antidote. Treat symptomatically and supportively as and when required. Remove by gastric lavage and catharsis, but not if victim is unconscious. Give oxygen if respiration is depressed

Indication of any immediate medical attention and special treatment needed:

Immediate medical attention is required if exposure to the product. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Extinguish fires with carbon dioxide, dry powder, water fog or alcohol-resistant foam.

SMALL FIRE: See above.

LARGE FIRE: See above.

Unsuitable extinguishing media: High volume water jet. Use a water jet only to cool heated containers.

Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal. Avoid pollution of waterways by run-off from the site.

Specific hazards arising from the mixture:

In case of fire and/or explosion the following hazardous gases may be released: Carbon monoxide, phosphorous oxides and nitrogen oxides.

Advice for fire-fighters:

Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective gear. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Keep all personal away. Avoid contact with eyes and skin. Ventilate area of spill or leak, especially in contained areas.

For emergency responders: Wear appropriate personal protective equipment. Avoid contact and ventilate area of the spill or leakage.

Protective equipment:

Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill.

Emergency procedures:

Alert fire-fighting personnel, evacuate unprotected personal and animals

Environmental precautions:

Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be toxic to aquatic organisms with long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into water courses should be reported immediately to the police and the Department of Water/Environmental Affairs

Methods and materials for containment and cleaning up:

Material for containment and cleaning up:

Contain spilled product by diking area with sand, earth or lime.

Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. See section 13 for disposal considerations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information: None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes and skin. Harmful if swallowed. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4

Protective measures: General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

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Conditions for safe storage, including incompatibilities:

Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container tightly closed, in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances: Product is incompatible with galvanized steel or unlined mild steel.

Packaging material: Plastic containers

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): None known

Biological exposure indices (BEI): None known.

Additional exposure limits under the conditions of use: None known.

Permissible concentrations:

No occupational exposure limits have been determined for the significant ingredients in this product.

Exposure control:

Appropriate engineering controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Where there is possibility that an employee's eyes may be exposed to this substance; the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use

Respiratory protection:

Wear an organic cartridge respirator suitable for protection from mists/ vapours of pesticides if product will be used in an area that is not well ventilated.

Hand protection:

Employee must wear appropriate chemically resistant gloves e.g. nitrile rubber gloves to prevent contact with this mixture

Eye/face protection:

Wear a face shield or safety goggles when handling the concentrate and when applying the product. Contact lenses are not protective eye devices.

Skin and body protection:

The use of protective (impervious) clothing e.g. coveralls is recommended to prevent skin contact with this mixture.

Environmental exposure controls: Environmental manager must be informed of all major spillages.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Clear yellow/brown liquid.
Odour:	Typical odour.
pH (1% aqueous dilution):	4.8.
Melting point:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	None. Water based.
Flammability:	Not available.
Upper/lower explosion limits:	Not available.
Vapour Pressure (mm Hg):	Not available.
Relative Vapour Density:	Not available.
Density:	1,375 g/ml.
Solubility:	Soluble in water.
N-octanol/water partition coefficient:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

A highly flammable gas with a potential to explode may result when product reacts with galvanised steel or unlined mild steel.

Chemical stability:

The product is stable for two (2) years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

Possibility of hazardous reactions:

High when in contact with galvanised steel or unlined mild steel.

Conditions to avoid: None known

Incompatible materials:

Product is relatively stable in neutral, weakly acidic and weakly alkaline media, but reacts strongly (and possibly violently) with strong alkalis. Mixing with other products may reduce the activity of Glyphosate. Incompatible with galvanized steel and unlined mild steel materials for storage.

Hazardous decomposition products:

Toxic oxides of carbon, nitrogen and phosphorus are released when the product decomposes on heating.

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Glyphosate tech	
Acute toxicity	
Acute Oral LD ₅₀ (rat):	>5000
Acute Oral LD ₅₀ (mice):	>10 000
Acute Oral LD ₅₀ (goat):	3530 mg/kg
Acute Dermal LD ₅₀ (rabbits):	>5000 mg/kg
Acute Inhalation LC ₅₀ - 4 h (rats)	>4.98 mg/ℓ air
Skin irritation/ corrosion (rabbits)	Causes severe skin burns
Eye damage / irritation (rabbits)	Eye damage
Respiratory or skin sensitization (Guinea pigs)	Not a skin sensitizer
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific Target Organ Toxicity STOT single exposure	No data available
Specific Target Organ Toxicity STOT repeated exposure	No data available
Aspiration hazard	No data available

SECTION 12. ECOLOGICAL INFORMATION

Anticipated behaviour of the chemical product in the environment /possible environmental impact/ecotoxicity:

Glyphosate potassium salt

This product is toxic to aquatic organisms and may cause long lasting effects in the aquatic environment

Glyphosate tech	
Acute toxicity	
Birds:	
LD ₅₀ bobwhite quail:	>3851 mg/kg
Dietary LC ₅₀ (5 d) for quail and ducks	>4640 mg/kg diet
Fish:	
LC ₅₀ (96 h) for trout	86
Bluegill sunfish	120
Harlequin fish	168
Sheepshead minnows	>1000 mg/ℓ
Daphnia	
LC ₅₀ (48 h)	780 m/ℓ
Algae	E _b C ₅₀ (72 h) for green algae (<i>selenastrum carpicornutum</i>) 485 mg/ℓ, (7 d) 13.8 mg/ℓ, E _r C ₅₀ (72 h) 460 mg/ℓ; EC ₅₀ (96 h) for marine algae (<i>Skeletonema costatum</i>) 1.3 mg/ℓ, (7 d) 0.64 mg/ℓ; EC ₅₀ (7 d) for diatom (<i>Navicula pelliculosa</i>) 42, blue-green algae (<i>Anabaena flos-aquae</i>) 15 mg/ℓ
Other aquatic spp.	
LC ₅₀ (96 h) for mysid shrimps (<i>Mysidopsis bahia</i>)	>1000
Grass shrimps	281
Fiddler crab	934
EC ₅₀ (96 h) for sea urchins	>1000
(14 d) for <i>Lemna gibba</i>	25.5 mg/ℓ
(48 h) for <i>Litoria moorei</i> tadpoles	111 mg/ℓ
Bees	

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LD ₅₀ (48 h) (contact)	>100 µg/bee
LD ₅₀ (48 h) (oral)	100 µg/bee
Other beneficial spp.	Formulation of glyphosate had no effects on carabid beetles; harmless to slightly harmful to green lacewing, parasite species, mites/spiders and insects, except moderately harmful to <i>Bembidion lampros</i>

Plants:

Slowly metabolised to aminomethylphosphonic acid ([1066-51-9]), which is the major plant metabolite.

ENVIRONMENTAL EFFECTS:

Animal:

In mammals, following oral administration, glyphosate is very rapidly excreted unchanged and does not bio-accumulate.

Persistence and degradability: In soil (field), DT50 1- 130 d, depending on edaphic and climatic conditions. In water, DT50 varies from a few to 91 d. Photodegradation in natural water occurs, DT50 33-77 d; no substantial photodegradation in soil was recorded over 31 d. In a lab. Whole system with water and sediment, DT50 27-146 d (aerobic), 14-22 d (anaerobic). The major metabolite in soil and water is aminomethylphosphonic acid.

Bio-accumulative Potential: Not expected.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

General Information: Do not discharge into drains, water courses or onto the ground. Discharge, treatment or disposal may be subject to national, state, or local laws. Empty containers may contain product residues. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Disposal Methods: Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

UN Number: 3082
Un proper shipping name Corrosive liquid, acidic, organic, n.o.s. (Glyphosate 540 g/l)
UN Classification transport hazard class(es): 8
Packing group (if applicable) I
Marine pollutant (Y/N) Yes, Considered a marine pollutant
Transport in bulk according to MARPOL 73/78, Annex II and the IBC Code: Not available

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SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993 Regulation for Hazardous Chemical Substances.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 11014:2010 – Safety data sheet for chemical products, Content and order section

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned

Relevant classification and H statements (number and full text):

H314: Causes severe skin burns & eye damage

H411 Toxic to aquatic life with long lasting effects

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

To the best of our knowledge, the information contained herein is accurate and is based on the present state of our knowledge and does not therefore guarantee specific properties. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for any accuracy or completeness of the information contained herein.

Final determinations of suitability of any material are sole responsibility of the users, who must take responsibility for observing existing laws and regulations. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.