

	MATERIAL SAFETY DATA SHEET	Revised edition no: 1
		Date: 16 January 2019
GLYPHOGAN 360 SL		

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Company Name: ADAMA South Africa (Pty) Ltd
Address: Ground Floor, Simeka House
 The Vineyards Office Estate,
 99 Jip de Jager Drive
 Bellville
 7530

Phone No: [021] 982 1460
Emergency No: 082 331 6463

Substance: Glyphosate
Product Name: Glyphogan 360 SL
Product Use: Herbicide

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Glyphosate 360 SL
Chemical Name: N-(phosphonomethyl) glycine isopropylamine (glyphosate)
CAS No.: 038641-94-0
Chemical formula: C₆H₁₇N₂O₂P
Use: Herbicide

SECTION 3 - HAZARD IDENTIFICATION

HEALTH HAZARDS

Skin contact may initially cause irritation or rash. Eye contact may initially include irritation, tearing or blurring of vision. Significant skin permeation and systemic toxicity, after contact appears unlikely. There are no reports of human sensitization.

ENVIRONMENTAL:

Prevent environmental contamination.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS

INHALATION

Remove source of contamination or move victim to fresh air. Keep affected person warm and at rest. Treat symptomatically and supportively. Administration of oxygen should be performed by qualified personnel. Get medical attention if effects persist.

SKIN CONTACT

Move the victim to fresh air and remove all contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash affected skin areas gently and thoroughly with water and non-abrasive soap. Do not rub the skin. If irritation persists, seek medical advice.

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EYE CONTACT

Immediately flush the eyes with clean, gently flowing lukewarm water or saline solution for 15-20 minutes, holding the eyelid(s). If irritation persists, seek medical advice.

INGESTION

Have victim rinse mouth thoroughly with water. Do not induce vomiting. Seek medical advice immediately showing container and label.

ADVICE TO DOCTOR

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.

SECTION 5 - FIRE-FIGHTING MEASURES

EXTINGUISHING AGENTS:

Extinguish fires carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal.

HAZARDOUS PRODUCTS OF COMBUSTING

Carbon monoxide (CO), Phosphorous oxides (P_xO_y) and nitrogen oxides (NO_x)

FIRE FIGHTING

Remove spectators from surrounding area. Remove container from fire area if possible. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind.

PERSONAL PROTECTIVE EQUIPMENT

Fire may produce irritating or poisonous vapour (toxic of carbon monoxide, phosphorous oxides and nitrogen oxides), mists or other products of combustion. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

PERSONAL PRECAUTIONS

Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see section 8.

ENVIRONMENTAL PRECAUTIONS

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water course (or public water) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

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OCCUPATIONAL SPILL

Remove all sources of flames and sparks. For small liquid spills, soak up with lime, damp earth or sand, or other noncombustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

HANDLING

Avoid contact with eyes, prolonged contact with skin, and inhalation of spray and fumes. Handle product with caution. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Remove clothing immediately if the herbicide gets inside. Then wash skin thoroughly using a nonabrasive soap and put on clean clothing. Operators should change and wash clothing after use. Do not apply directly to areas where surface water is present, or to intertidal area below the mean high-water mark. Water used to clean equipment must be disposed or correctly to avoid contamination.

STORAGE

Store in its original, labelled and closed container in dry, cool, shaded, well-ventilated area, away from heat, sparks and other sources of ignition. Do not store with other pesticides, fertilizers, seeds, foodstuffs and water supplies. Store away from incompatible substances. Product is incompatible with galvanized steel or unlined mild steel. Keep out of reach of unauthorized persons, children and animals. Local regulations should be complied with.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

RESPIRATOR

It is usually safe to use the product without a mask or respirator. If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacture must be observed.

CLOTHING

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

EYE PROTECTION

Wear safety goggles or face shield.

EMERGENCY EYEWASH

Where there is any possibility that an employee's may be exposed to this substance, the employers should provide an eye wash fountain or appropriate altern.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless or Yellow liquid
Density	1.171 g/ml
FLAMMABILITY	Not flammable
EXPLOSIVITY	Not explosive
PH RANGE	4.4-5.0
SOLUBILITY	Miscible

SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature and pressures. Glyphosate reacts strongly (possibly violent exothermic reaction) with strong alkalis. Photodecomposition is negligible. Is stable to light and also stable up to 60°C. product is unlikely to spontaneously polymerise or decompose. Decompose only after heating to dryness followed by further heating. Glyphosate may be photolabile in natural waters, with calcium or other metal ions acting as catalysts for the process.

DILUTION STABILITY

Stable in aqueous solution at 20°C

STORAGE STABILITY

Stable for 2 years under normal warehouse conditions. Store at temperatures below 50°C and above 15°C. Stable to light. Partial crystallization on prolonged storage below 15°C.

INCOMPATIBILITY

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.

THERMAL DECOMPOSITION

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

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute oral LD₅₀, rats (calculated)	: >2000 mg/kg in rat
Acute dermal LD₅₀, rats (calculated)	: >2000 mg/kg in rat
Inhalation LC₅₀, 4hours, and rats	: >4.95 mg/l
Acute skin irritation	: No irritating
Acute eye irritation	: Slightly irritating
Dermal sensitization	: Not sensitizing

SECTION 12 - ECOLOGICAL INFORMATION

TOXICITY	: Low toxic to birds
TOXICITY	: LC50 (96 hours) for rainbow trout 1000 mg/l, Low toxic to fish.
TOXICITY	: LD50 >100 ug/bee, virtually non-toxic to the bees

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SECTION 13 - DISPOSAL CONSIDERATION

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products 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.

Container disposal:

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dump site. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

SECTION 14 - TRANSPORT INFORMATION

UN N° : 3082
 - IMO-IMDG - class or division : 9
 - IMDG-Marine pollution : Marine pollutant - Polluant marin
 - Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 - IMO-IMDG - Packing group : III

SECTION 15 - REGULATORY INFORMATION

EU Classification : According to Commission Directive 67/548/EEC,
 1999/45/EC and its amendments
Symbol(s) : Xi : Irritant
 N : Dangerous for the environment.

R Phrase(s) : R36 - Irritating to eyes.
 R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s) : S0
 2 - Keep out of the reach of children.
 S1 - Keep away from food, drink and animal feedingstuffs.
 S2
 5 - Avoid contact with eyes.
 S29/35 - Do not empty into drains ; dispose of this material and its container in a safe way.
 S4 - If swallowed seek medical advice immediately and show this container or label.
 S5
 7 - Use appropriate container to avoid environmental contamination.

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S6 - Avoid release to the environment. Refer to special instructions/Safety
1 data sheets.

SECTION 16 - OTHER INFORMATION

Packaging:

Packed in 1, 5, 20, 25 ℓ. & [4 x 5 ℓ per box; 12 x 1 ℓ per box] UN approved plastic containers and labelled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF MSDS.