

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8 Issue date: 8/31/2022 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the supplier/undertaking

1.1. GHS product identifier

Product form : Mixture

Trade name : Piranha 510 SL (Glyphosate 510 g/l)

Type of product : Herbicide
CAS-No. : 1071-83-6
Product group : End product

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

A soluble concentrate non-selective foliar, systemic herbicide for the control of a wide range of annual and perennial grasses, broadleaf weeds and certain woody perennials as listed. Also used on glyphosate tolerant crops such as maize and soya. May also be used in program for Banana bunchy top control.

1.4. Supplier's details

Supplier

Farm-Ag International (Pty) Ltd
Old Mill Industrial Park
61, Marshall Drive
P.O. Box 1523
4300 Mount Edgecombe – Durban KwaZulu Natal
South Africa
T 031 003 3486

1.5. Emergency phone number

Emergency number : 24 Hr Emergency Number:

In case of Poisoning:

Poison Information Helpline: 0861 555 777

In case of Spillage: HAZMAT:0800 147 112

SECTION 2: Hazard identification

2.1. GHS classification of the substance/mixture and any national or regional information

Classification according to the United Nations GHS

Skin corrosion/irritation, Category 1 H314
Serious eye damage/eye irritation, Category 1 H318
Specific target organ toxicity – Single exposure, Category 3, H335

Respiratory tract irritation

Hazardous to the aquatic environment – Acute Hazard, Category 2 H401 Hazardous to the aquatic environment – Chronic Hazard, Category 2 H411

Full text of H-statements: see section 16

Adverse physicochemical, human health and

environmental effects

: Harmful if inhaled, Harmful in contact with skin, May cause respiratory irritation, Causes severe skin burns and eye damage, Causes serious eye damage, Toxic to aquatic life with long lasting effects.

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2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)

Hazardous ingredients

Glyphosate Acid Technical 95%, 2-aminopropane, isopropylamine, N-N-dimethyl-C12-14-(even numbered)- alkyl-1-amines, reaction products with potassium hydroxide and

Hazard statements (GHS ZA)

Precautionary statements (GHS ZA)

: H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

H411 - Toxic to aquatic life with long lasting effects

: P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read carefully and follow all instructions.

P260 - Do not breathe mist, vapours.

P261 - Avoid breathing mist, spray, vapours.

P264 - Wash hands, forearms and face thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective clothing, eye protection, face protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor.

P312 - Call a doctor if you feel unwell. P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents and container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification or are not covered by the GHS

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
Glyphosate Acid Technical 95%	CAS-No.: 1071-83-6	≥ 40 – < 45	Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to the United Nations GHS
2-aminopropane, isopropylamine	CAS-No.: 75-31-0	≥ 20 - < 25	Flam. Liq. 1, H224 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
N-N-dimethyl-C12-14-(even numbered)- alkyl-1- amines, reaction products with potassium hydroxide and chloroacetic acid	EC-No.: 939-682-8	≥ 10 - < 15	Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Immediately take off all contaminated clothing. Wash skin

immediately with cold water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be washed before re-use.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Have victim rinse mouth thoroughly with water. Do not induce vomiting. Remove by gastric

lavage and catharsis. give oxygen if respiration is depressed. Do not perform gastric lavage if victim is unconscious. Administration of gastric lavage and oxygen should be performed by qualified medical personnel. Seek medical advice immediately showing

container and label.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects : Symptoms of glyphosate poisoning include: headache, lethargy, diarrhoea, weakness and

collapse. Nausea after ingestion has been observed.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

There is no specific antidote. Symptomatic treatment and supportive therapy as indicated. Remove by gastric lavage and catharsis, but not if victim is unconscious. Give oxygen if respiration is depressed.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Explosion hazard : Slight explosion hazard. Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective actions for fire-fighters

Firefighting instructions : Contain run-off water with, for example, temporary earth barriers.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Personal protection (Emergency response) : Wear respiratory protection, Protective clothing

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions, Protective Equipment and Emergency Procedures

: Ensure suitable personal protection during removal of spillage. This means wearing eye protection, chemically resistant gloves, boots and coveralls.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Do not breathe vapours,

spray, mist.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Small spills:

Soak up with sand or other suitable noncombustible absorbent material, such as sawdust,

and place into containers for subsequent disposal.

Large spills:

Contain liquid far ahead of spill. Contain spillage and contaminated water for subsequent

disposal. Do not flush spilled material into drains. Keep spectators away.

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.

Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)	
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Glycerol
OEL TWA	10 mg/m³ mist
Regulatory reference	Government Notice No. R 904

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection : Protective gloves
Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s)







8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Colour : Colourless.
Odour : Odourless.
Odour threshold : No data available

pH : 4.6 – 4.9

pH solution : No data available Relative evaporation rate (butylacetate=1) : No data available Relative evaporation rate (ether=1) : No data available Melting point : Not applicable Freezing point : No data available No data available Boiling point No data available Flash point Auto-ignition temperature No data available

Decomposition temperature No data available Flammability Not flammable Vapour pressure No data available Vapour pressure at 50°C : No data available No data available Relative vapour density at 20°C No data available Relative density Relative density of saturated gas/air mixture : No data available Density : No data available Relative gas density : No data available

Solubility Water: 10.5 g/l Partition coefficient n-octanol/water (Log Pow) : No data available Partition coefficient n-octanol/water (Log Kow) : No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic : No data available Explosive properties Oxidising properties : No data available **Explosive limits** : No data available Lower explosion limit : No data available

: No data available

Upper explosion limit

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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and Reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	Not classified		
Piranha 510 SL (Glyphosate 510 g/l) (1071-83-6)			
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	76.83% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))		
Glyphosate Acid Technical 95% (1071-83-6)			
LD50 oral rat	> 5000 mg/kg (Rat, Literature study, Oral)		
LD50 oral	> 10000 mg/kg Mice		
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)		
LC50 Inhalation - Rat	> 4.98 mg/l/4h		
Glycerol (56-81-5)			
LD50 oral rat	27200 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral, 10 day(s))		
LD50 dermal	56750 mg/kg (4 day(s), Guinea pig, Male / female, Experimental value, Dermal, 14 day(s))		
LC50 Inhalation - Rat (Vapours)	> 2.75 mg/l/4h		
Water (7732-18-5)			
LD50 oral rat	90000 mg/kg		
Skin corrosion/irritation :	No skin irritation		

pH: 4.6 - 4.9

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Serious eye damage/irritation : Slight eye irritant

pH: 4.6 - 4.9

Respiratory or skin sensitisation : Not a skin sensitizer
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

2-aminopropane, isopropylamine (75-31-0)

STOT-single exposure May cause respiratory irritation.

STOT-repeated exposure : Not classified Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

 $\label{thm:local_equation} \mbox{Hazardous to the aquatic environment, short-term}$

(acute)

: Toxic to aquatic life.

Hazardous to the aquatic environment, long-term $% \left(\mathbf{r}_{\mathbf{r}}^{\prime }\right) =\mathbf{r}_{\mathbf{r}}^{\prime }$

(chronic)

: Toxic to aquatic life with long lasting effects.

(ememo)	
Glyphosate Acid Technical 95% (1071-83-6)	
LC50 - Fish [1]	86 mg/l Trout
LC50 - Fish [2]	120 mg/l Bluegill sunfish
LC50 - Other aquatic organisms [1]	> 1000 mg/l Mysid shrimps
LC50 - Other aquatic organisms [2]	281 mg/l Grass Shrimps
EC50 - Crustacea [1]	2.95 mg/l (48 h, Crustacea, Literature study)
EC50 96h - Algae [1]	1.3 mg/l
ErC50 algae	460 mg/l
Additional data	Birds: Acute oral LD50 for bobwhite quail > 3851 mg/kg. Dietary LC50 (5d) for quail and ducks >4640 mg/kg diet. Bees: (LD50, mg/bee) >100 (contact) (48h); 100 (oral) (48h)
Glycerol (56-81-5)	
LC50 - Fish [1]	54000 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

Piranha 510 SL (Glyphosate 510 g/l) (1071-83-6)		
Persistence and degradability	Strongly absorbed to soil and therefore becomes practically immobile. Microbial degradation is the major cause of loss from soil, with liberation of carbon dioxide. The principal metabolite is aminomethylphosphonic acid. In soil the half life of the product is less than 60 days.	
Glyphosate Acid Technical 95% (1071-83-6)		
Persistence and degradability	Not readily biodegradable in water.	
Biochemical oxygen demand (BOD)	< 0.0057 g O ₂ /g substance	
Chemical oxygen demand (COD)	0.53 g O₂/g substance	

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Glycerol (56-81-5)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.87 g O₂/g substance
Chemical oxygen demand (COD)	1.16 g O₂/g substance
ThOD	1.217 g O ₂ /g substance

12.3. Bioaccumulative potential

Piranha 510 SL (Glyphosate 510 g/l) (1071-83-6)		
Bioaccumulative potential	No additional information available	
Glyphosate Acid Technical 95% (1071-83-6)		
Bioaccumulative potential	Not bioaccumulative.	
Glycerol (56-81-5)		
Partition coefficient n-octanol/water (Log Kow)	-1.75 (Experimental value, Equivalent or similar to OECD 107, 25 °C)	
Bioaccumulative potential	Not bioaccumulative.	
Water (7732-18-5)		
Partition coefficient n-octanol/water (Log Kow)	-1.38	

12.4. Mobility in soil

Piranha 510 SL (Glyphosate 510 g/l) (1071-83-6)		
Mobility in soil	No additional information available	
Glyphosate Acid Technical 95% (1071-83-6)		
Surface tension	No data available in the literature	
Ecology - soil	Adsorbs into the soil. May be harmful to plant growth, blooming and fruit formation.	
Glycerol (56-81-5)		
Surface tension	63.4 mN/m (20 °C, 1000 g/l)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, Calculated value)	
Ecology - soil	Highly mobile in soil.	

12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

SECTION 13: Disposal Considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
3082	3082	3082

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SANS	IMDG	IATA
14.2. UN Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains glyphosate 510 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains glyphosate 510 g/l)	Environmentally hazardous substance, liquid, n.o.s. (contains glyphosate 510 g/l)
14.3. Transport hazard class(es)		
9	9	9

14.4. Packing group, if applicable		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available		

14.6. Special precautions for user

SANS

Special provisions (SANS) : 179, 274, 331, 335

Limited quantities (SANS) : 5 L
Limited quantities (SANS) : 5 L

Packagings, large packagings and IBCs Packing : P001, IBC03, LP01

instructions (SANS)

Packagings, large packagings and IBCs Special : PP1

packing instructions (SANS)

Portable tank and bulk containers instructions : T4

(SANS)

Portable tank and bulk container special provisions : TP1, TP29

(SANS)

IMDG

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : LP01, P001

Special packing provisions (IMDG) : PP1

IBC packing instructions (IMDG) : IBC03

Tank instructions (IMDG) : T4

Tank special provisions (IMDG) : TP1, TP29

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS

Stowage category (IMDG) : A

IATA

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provisions (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

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14.7. Transport in bulk according to IMO instructions

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 31/08/2022

Full text of H-statements:		
H224	Extremely flammable liquid and vapour	
H314	Causes severe skin burns and eye damage	
H315	Causes skin irritation	
H318	Causes serious eye damage	
H319	Causes serious eye irritation	
H331	Toxic if inhaled	
H332	Harmful if inhaled	
H335	May cause respiratory irritation	
H401	Toxic to aquatic life	
H411	Toxic to aquatic life with long lasting effects	
H412	Harmful to aquatic life with long lasting effects	

Safety Data Sheet (SDS), South Africa (HCA)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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