SIMAZINE 500 SC

Safety Data Sheet

according to the GHS Classification and labelling of chemicals – SANS 10234 and the Regulations for Hazardous agents 2021.

Issue date: 18/05/2023 Date of revision: 17/05/2026 Version. 2.0

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

1.1. Product identifier

Product form	:	Mixture
Name	:	SIMAZINE 500 SC
Trade name	:	SIMAZINE 500 SC
Product code	:	UPL_L7201

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	:	Herbicide
Industrial/Professional use spec	:	For agricultural, industrial and professional use only
Use of the substance/mixture	:	A suspension concentrate pre-emergence herbicide for the control of a variety of annual grasses and broadleaf weeds in apples, pears, asparagus, citrus , triazine resistant canola and vines as well as for industrial use.
Function or use category	:	Pesticides

1.2.2. Uses advised against

Restrictions on use	:	Agriculture.

1.3. Details of the supplier of the safety data sheet

UPL South Africa (Pty) Ltd.
Sunbury Office Park (off Douglas Saunders Drive) La Lucia Ridge, 7
P.O. Box 1726, Mount Edgecombe, 4300
4019 Durban – South Africa
South Africa
T +27 31 514 5600
www.upl-ltd.com/za

1.4. Emergency telephone number

Emergency number	:	Griffon Poison Information Centre: 082 4468946, Poisons Information Helpline: 0861 555 777, In case of Spillage: Spill Tech: 086 100 0366 / 083 253 6618

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to UN GHS Purple Book (Rev. 9, 2021)

Acute toxicity (Inhalation), Category 4	H332
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Repeated exposure, Category 2	H373
Carcinogenicity, Category 2	H351
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H401

Full text of H- -statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Classification according to UN GHS Purple Book (Rev. 9, 2021)

Hazard pictograms :

GHS07 GHS08 GHS09

Signal word : Warning

Contains : Simazine, Monoethylene glycol, Lutensol XL 70

Hazard statements : H332 - Harmful if inhaled.
H319 - Causes serious eye irritation.
H351 - Suspected of causing cancer
H373 – May cause damage to organs (kidneys) through prolonged or repeated exposure.
H400 – Very toxic to aquatic life
H410 – Very toxic to aquatic life with long lasting effects.

Precautionary statements : 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.
P203 - Obtain, read and follow all safety instructions before use.
P260 – Do not breath dust/fume/gas/mist/vapours/spray.
P264+P265 - Wash hands, forearms and face thoroughly after handling. Do not touch eyes.
P271 - Use only outdoors or in a well-ventilated area.
P273+P391 - Avoid release to the environment if this is not the intended use and collect spillage.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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.
P317 - Get medical help.
P318 - IF exposed or concerned, get medical advice.
P319 - Get medical help if you feel unwell.
P337 + P317 - If eye irritation persists: Get medical help
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to UN GHS Purple Book, Rev.9, 2021.
Simazine	CAS-No.: 122-34-9 EC-No.: 204-535-2	50 – 80	Acute Tox. 4 (Inhalation), H332 Carc. 2, H351 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Name	Product identifier	%	Classification according to UN GHS Purple Book, Rev.9, 2021.
Monoethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3	2.5 - 10	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Fatty alcohol polyglycol ether	CAS-No.: 9043-30-5	1 – 2.5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318 Aquatic Acute Cat. 2

Full text of H- statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/…. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Seek medical attention if irritation develops. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause damage to organs (kidneys) through prolonged or repeated exposure.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

4.3. Indication of any immediate medical attention and special treatment needed

No specific antidote is available. Treat symptomatically and supportively when required. If large amounts have been ingested, perform gastric lavage and administer activated charcoal. Take steps to limit gastrointestinal absorption.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, dry sand, or alcohol-resistant foam. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Toxic fumes may be released.

Hazardous decomposition products in case of fire : Chlorine. Nitrogen oxides.

5.3. Advice for firefighters

Precautionary measures fire : Do not breathe fumes. Evacuate area.

Firefighting instructions	:	Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Avoid inhaling hazardous vapours. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal. Dyke fire control water for later disposal. Do not scatter the material. Avoid pollution of waterways. Do not use high volume water jet, due to contamination risk. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site. . Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	:	Wear suitable protective clothing, gloves and eye or face protection. Protective clothing. Safety glasses. Gloves.
Emergency procedures	:	Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	:	Equip cleanup crew with proper protection.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	For dry spills, shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labelled, clean, dry container and cover for subsequent disposal; and store in a safe place to await proper disposal. All contaminated cleaning materials should be placed in closable receptacles. Dispose of the containers in accordance with local regulations. Open burning or dumping of this material is prohibited. Do not flush spilled material into drains. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not contaminate water while cleaning equipment or disposing of wastes. For dry spills, shovel up and sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a labelled, clean, dry container and cover for subsequent disposal; and store in a safe place to await proper disposal. All contaminated cleaning materials should be placed in closable receptacles. Dispose of the containers in accordance with local regulations. Open burning or dumping of this material is prohibited. Do not flush spilled material into drains. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not contaminate water while cleaning equipment or disposing of wastes.
Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Remove clothing immediately if the pesticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Monoethylene glycol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL STEL	104 mg/m³
IOEL STEL [ppm]	40 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Protective goggles. Dust/aerosol mask with filter type P1. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses

8.2.2.2. Skin protection

Hand protection:
Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment. Notify authorities if product enters sewers or public waters. Prevent entry to sewers and public waters.

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Off-white.
Appearance	:	liquid.
Odour	:	Estery odour
Odour threshold	:	Not available
Shelf life	:	>2 years
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable.
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	4.6
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	2.19
Vapour pressure	:	0.003 mPa
Vapour pressure at 50 °C	:	Not available
Density	:	1.14 g/ml
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable

Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Spray solutions containing this product should be mixed or applied using stainless steel, aluminium, fibreglass or plastic-lined containers. Compatible with most herbicides at normal rates, but flocculation might occur with paraquat.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Chlorine. Nitrogen oxides. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in UN GHS Purple Book (Rev. 9, 2021)

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Harmful if inhaled.

SIMAZINE 500 SC	
ATE oral rat (calculated)	5154.64 mg/kg
LC50 Inhalation - Rat	2.68 mg/l

Simazine (122-34-9)	
LD50 oral rat	7500 mg/kg
LD50 dermal rat	2000 mg/kg
LC50 Inhalation - Rat	2.21 mg/l/4h

Skin corrosion/irritation	:	Not classified.
Additional information	:	Based on available data, the classification criteria are not met
Serious eye damage/irritation	:	Causes serious eye irritation. pH: 4.6
Respiratory or skin sensitisation	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met

Germ cell mutagenicity	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met
Carcinogenicity	:	Suspected of causing cancer. pH: 4.6
Reproductive toxicity	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met
STOT-single exposure	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met
STOT-repeated exposure	:	May cause damage to organs (kidneys) through prolonged or repeated exposure. pH: 4.6
Additional information	:	Based on available data, the classification criteria are not met
Aspiration hazard	:	Not classified
Additional information	:	Based on available data, the classification criteria are not met

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms	:	None

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	:	Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	:	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	:	Very toxic to aquatic life with long lasting effects.

Not rapidly degradable

Simazine (122-34-9)	
LC50 - Fish	90 mg/l (Bluegill Sunfish)
LC50 fish	100 mg/l (Rainbow Trout)
EC50 - Crustacea	100 mg/l
EC50 72h - Algae	0.042 mg/l
ErC50 other aquatic plants	0.32 mg/l

12.2. Persistence and degradability

SIMAZINE 500 SC	
Persistence and degradability	Not established.

Simazine (122-34-9)	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

SIMAZINE 500 SC	
Partition coefficient n-octanol/water (Log Pow)	2.19
Bioaccumulative potential	Not established.

Simazine (122-34-9)	
Partition coefficient n-octanol/water (Log Kow)	2.1
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (simazine: 500 g/ℓ)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (simazine: 500 g/ℓ)	Environmentally hazardous substance, liquid, n.o.s. (simazine: 500 g/ℓ)
Transport document description		
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (simazine: 500 g/ℓ), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (simazine: 500 g/ℓ), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (simazine: 500 g/ℓ), 9, III
14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III	III	III

ADR	IMDG	IATA
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

Overland transport

Hazard identification number (Kemler No.) : 90

Orange plates :

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulatory Information:

Relevant regulatory information regarding authorization, Safety Data Sheets, Occupational Exposure Limits, Hazardous Substances, Dangerous Goods Transport and Waste South Africa: Occupational Health and Safety Act 1993. Regulations for Hazardous Chemical Agents - 2021. Fertilizer, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947). **Hazardous Substances Act,** 1973 (Act No.15 of 1973). Regulations for Hazardous Chemical Agents – 2021. SANS11014:2010. Safety Data Sheet for Chemical Products – Content and Order of Sections. SANS10206: 2020. The Handling, Storage and Disposal of Pesticides. National Road Traffic Act, 1996 (Act No. 93 of 1996). 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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : Pesticide Manual, ECHA, Supplier SDS's

Other information : None.

Full text of H- statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
STOT-RE 2	Specific target organ toxicity – Repeated exposure, Category 2
Eye Irrit. 1	Serious eye damage/eye irritation, Category 2
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs (kidneys) through prolonged or repeated exposure.
|?H400	Very toxic to aquatic life.

Full text of H- statements:	
H410	Very toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for the mixture according to the UN GHS Purple Book (Rev.9, 2021):		
Acute Tox. 4 (Inhalation)	H332	Calculation method
STOT-RE 2	H373	Calculation method
Eye Irrit. 2	H319	Calculation method
Carc. 2	H351	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Safety Data Sheet (SDS), UN GHS

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.