



CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8
Issue date: 7/5/2023 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	: CYCLOPS 300 SC (Cymoxanil 300 g/l)
Type of product	: Fungicide
CAS-No.	: 57966-95-7
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

No additional information available

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
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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 3	H316
Serious eye damage/eye irritation, Category 2A	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361
Specific target organ toxicity – Repeated exposure, Category 2	H373
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects	: Suspected of damaging fertility or the unborn child, May cause damage to organs (Blood thymus) through prolonged or repeated exposure, Causes mild skin irritation, May cause an allergic skin reaction, Causes serious eye irritation, Very toxic to aquatic life with long lasting effects.
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CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

2.2. GHS label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)

: Warning

Hazardous ingredients

: Cymoxanil TC

Hazard statements (GHS ZA)

: H316 - Causes mild skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS ZA)

: 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.
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing vapours.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P308+P313 - If exposed or concerned: Get medical advice/attention
P314 - Get medical advice/attention if you feel unwell
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of container to an approved waste disposal plant.

SECTION 3: Composition/information on ingredients

Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
Cymoxanil TC	CAS-No.: 57966-95-7	≥ 25 – < 30	Acute Tox. 4 (Oral), H302 Acute Tox. 5 (Dermal), H313 Skin Sens. 1, H317 Repr. 2, H361 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Ethylene glycol	CAS-No.: 107-21-1	≥ 1 – < 5	Acute Tox. 4 (Oral), H302
Sodium dodecyl sulfate	CAS-No.: 151-21-3	≥ 1 – < 5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412

SECTION 4: First aid measures

4.1. Description of necessary first aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention.

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Do not give anything by mouth to an unconscious person.

4.2. Most important symptoms/effect, acute and delayed

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

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

Treat symptomatically.

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	: Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Do not use direct jet of water. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Special protective actions for fire-fighters

Firefighting instructions	: If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers/tanks with water spray.
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, Wear protective gloves, Wear protective clothing, Wear eye protection, Face-shield



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Do not breathe vapours. Avoid contact with skin and eyes.
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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".
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6.2. Environmental precautions

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

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

6.3. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe vapours, spray. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 cool.
Storage area	: Keep only in the original container. Store out of reach of unauthorised persons, children and animals.
Information on mixed storage	: KEEP SUBSTANCE AWAY FROM: Food supplies. Water supplies.
Maximum storage period	: 2 Years

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethylene glycol (107-21-1)

South Africa - Occupational Exposure Limits (Restricted Limits)

Local name	Ethylene glycol
OEL eight hour TWA	20 mg/m ³ (H: aerosol only)
RHCA - STEL/C	50 mg/m ³ (V: vapour fraction) 100 mg/m ³ (V: vapour fraction)
Remark	SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021

South Africa - Occupational Exposure Limits (Airborne Pollutants)

Local name	Ethylene glycol (Ethane-1,2-diol; 1,2-Dihydroxyethane)
OEL TWA	20 mg/m ³
OEL STEL	40 mg/m ³
Regulatory reference	Government Notice No. R 904

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)	

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8



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	: No data available
Colour	: Off-white.
Odour	: Slight chemical odour.
pH	: 3.99
Decomposition temperature	: No data available
Flammability	: Non flammable.
Density	: 1.0957±0.5
Relative gas density	: No data available
Solubility	: No data available
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
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available

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.

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: 2341.136 mg/kg (Not classified)
Acute toxicity (dermal)	: 2550.396 mg/kg (Not classified)
Acute toxicity (inhalation)	: Not classified

Cymoxanil 300 SC (Cymoxanil 300 g/l) (57966-95-7)

Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	2.78% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 99.44% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.44% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))
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Cymoxanil TC (57966-95-7)

LD50 oral rat	760 mg/kg Male
LD50 oral	1200 mg/kg Female
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat (Dust/Mist)	> 5.06 mg/l/4h

Sodium dodecyl sulfate (151-21-3)

LD50 oral rat	1200 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Read-across, Dermal, 14 day(s))

Calcium lignosulphonate (8061-52-7)

LD50 oral rat	> 5000 mg/kg
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Carboxymethyl cellulose sodium (9004-32-4)

LD50 oral rat	27000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)
LC50 Inhalation - Rat	> 5.8 mg/l (4 h, Rat, Literature study, Inhalation)

Water (7732-18-5)

LD50 oral rat	90000 mg/kg
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Skin corrosion/irritation	: Causes mild skin irritation. pH: 5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

Cymoxanil TC (57966-95-7)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Aspiration hazard	: Not classified
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CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: 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.

Cymoxanil TC (57966-95-7)	
LC50 - Fish [1]	61 mg/kg Rainbow trout
LC50 - Fish [2]	29 mg/kg Bluegill sunfish
LC50 - Other aquatic organisms [1]	27 mg/l Daphnia
EC50 96h - Algae [1]	0.231 mg/l Anabaena flos-aquae
EC50 96h - Algae [2]	1.21 mg/l Selenastrum capricornutum
ErC50 algae	0.63 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Experimental value)
Additional data	Acute oral LD50 for bobwhite quail and mallard ducks >2250 mg/kg. Dietary LC50 (8d) for bobwhite quail and mallard ducks >5630 mg/kg diet. Bees: (LD50, ug/bee) >25 (contact) (48h). Worms LC50 (14d) for earthworms >2208 mg/kg soil.

Sodium dodecyl sulfate (151-21-3)	
LC50 - Fish [1]	29 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
ErC50 algae	> 120 mg/l (DIN 38412-9, 72 h, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)

Calcium lignosulphonate (8061-52-7)	
LC50 - Fish [1]	8327.32 mg/l Source: Ecological Structure Activity Relationships
EC50 96h - Algae [1]	79201.828 mg/l Source: Ecological Structure Activity Relationships

Sodium benzoate (532-32-1)	
LC50 - Fish [1]	484 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)

Ethylene glycol (107-21-1)	
LC50 - Fish [1]	41000 mg/l Trout (96h)
LC50 - Fish [2]	34250 mg/l Bluegill sunfish
LC50 - Other aquatic organisms [1]	46300 mg/l Water flea

Carboxymethyl cellulose sodium (9004-32-4)	
LC50 - Fish [1]	> 21000 ppm (96 h, Salmo sp., Fresh water, Literature study)

12.2. Persistence and degradability

Cymoxanil 300 SC (Cymoxanil 300 g/l) (57966-95-7)	
Persistence and degradability	No additional information available
Cymoxanil TC (57966-95-7)	
Persistence and degradability	Not readily biodegradable in water.
Sodium dodecyl sulfate (151-21-3)	
Persistence and degradability	Readily biodegradable in water.

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

Sodium benzoate (532-32-1)

Persistence and degradability	Readily biodegradable in water.
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Ethylene glycol (107-21-1)

Persistence and degradability	Long term degradation products may arise.
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Carboxymethyl cellulose sodium (9004-32-4)

Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.05 – 0.1 g O ₂ /g substance
Chemical oxygen demand (COD)	0.9 g O ₂ /g substance

12.3. Bioaccumulative potential

Cymoxanil 300 SC (Cymoxanil 300 g/l) (57966-95-7)

Bioaccumulative potential	No additional information available
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Cymoxanil TC (57966-95-7)

Partition coefficient n-octanol/water (Log Pow)	0.59
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Sodium dodecyl sulfate (151-21-3)

Partition coefficient n-octanol/water (Log Kow)	≤ -2.03 (Calculated, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

Calcium lignosulphonate (8061-52-7)

Partition coefficient n-octanol/water (Log Kow)	0.33 Source: Quantitative Structure Activity Relation
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Sodium benzoate (532-32-1)

Partition coefficient n-octanol/water (Log Kow)	1.88 (Read-across)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Ethylene glycol (107-21-1)

Partition coefficient n-octanol/water (Log Kow)	-1.4
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Carboxymethyl cellulose sodium (9004-32-4)

Bioaccumulative potential	Not bioaccumulative.
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Water (7732-18-5)

Partition coefficient n-octanol/water (Log Kow)	-1.38
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12.4. Mobility in soil

Cymoxanil 300 SC (Cymoxanil 300 g/l) (57966-95-7)

Mobility in soil	No additional information available
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Cymoxanil TC (57966-95-7)

Surface tension	687 mN/m (19 °C, EU Method A.5: Surface tension)
Ecology - soil	No (test)data on mobility of the substance available.

Sodium dodecyl sulfate (151-21-3)

Surface tension	25.2 mN/m (23 °C, 1 g/l, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.5 – 2.65 (log Koc, Calculated value)

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

Sodium dodecyl sulfate (151-21-3)

Ecology - soil	Low potential for adsorption in soil.
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Sodium benzoate (532-32-1)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.219 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
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Ecology - soil	Highly mobile in soil.
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Carboxymethyl cellulose sodium (9004-32-4)

Ecology - soil	No (test)data on mobility of the substance available.
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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.
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SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
3082	3082	3082
14.2. UN Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cymoxanil 300 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains cymoxanil 300 g/l)	Environmentally hazardous substance, liquid, n.o.s. (contains cymoxanil 300 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		

SECTION 15: Regulatory information

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

No additional information available

CYCLOPS 300 SC (Cymoxanil 300 g/l)

Safety Data Sheet

According to Regulations for Hazardous Chemical Agents, 2021 and United Nations GHS revision 8

SECTION 16: Other information

Issue date : 05/07/2023

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.