

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010 Issue date: 9/8/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Trade name : Orca 125 EC (Fluazifop-p-butyl 125 g/l)

Type of product : Herbicide CAS-No. : 79241-46-6 Product group : End product

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

Use of the substance/mixture

: A selective, systemic emulsifiable concentrate herbicide that is applied as a post-emergent spray for the control of annual and perennial grasses in crops as indicated; for the chemical ripening and eradication of sugarcane and also for the suppression of seeding and grass growth on verges.

1.3. 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

1.4. Emergency telephone 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: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Flammable liquids Not classified Acute toxicity (oral), Category 5 H303 Acute toxicity (dermal), Category 4 H312 Acute toxicity (inhalation:vapour) Category 3 H331 Skin corrosion/irritation, Category 2 H315 Serious eye damage/eye irritation, Category 1 H318 Reproductive toxicity, Category 2 H361 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

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2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA)



Signal word (GHS-ZA)

Hazardous ingredients

Hazard statements (GHS ZA)

Precautionary statements (GHS ZA)

rardous ingradients

: Fluazifop-p-butyl, polyoxyethylene nonylphenol ether, xylene

: H303 - May be harmful if swallowed

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H331 - Toxic if inhaled.

H361 - Suspected of damaging fertility or the unborn child.

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 label before use.

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing vapours, spray.

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 gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of soap and 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.

P308+P313 - IF exposed or concerned: Get medical advice/attention.

P310 - Immediately call a doctor.

P312 - Call a doctor if you feel unwell.

P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it 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

Adverse physicochemical, human health and environmental effects

: Suspected of damaging fertility or the unborn child, Causes damage to organs, Toxic if inhaled, Harmful in contact with skin, Harmful if swallowed, Causes skin irritation, Causes serious eye damage, Toxic to aquatic life, Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
xylene	CAS-No.: 1330-20-7	≥ 80 - < 85	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315

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Name	Product identifier	%	Classification according to the United Nations GHS
Fluazifop-p-butyl	CAS-No.: 79241-46-6	≥ 10 – < 15	Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
polyoxyethylene nonylphenol ether	CAS-No.: 9014-90-8	≥ 1 – < 5	Flam. Liq. Not classified Acute Tox. Not classified (Oral) Eye Dam. 1, H318 Aquatic Acute 3, H402

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if

you feel unwell.

First-aid measures after inhalation

: A combination particulate/ organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not

provide adequate protection.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation 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. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Irritation.

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

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

There is no specific antidote if this product is ingested. Treat symptomatically. Persons suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids. Contains petroleum distillate - vomiting may cause aspiration pneumonia. Medical Condition Likely to be aggravated by exposure.

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

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5.3. Advice for firefighters

Firefighting instructions

: Wear full protective clothing and selfcontained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect run off.

Protection during firefighting

breathing apparatus. Complete protective clothing.

Personal protection (Emergency response)

Wear respiratory protection, Wear protective gloves, Wear protective clothing, Wear eye protection, Face-shield

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











SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures

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

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 material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

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

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

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.

Storage area

Store out of reach of unauthorised persons, children and animals.KEEP SUBSTANCE AWAY FROM: Food supplies. Water supplies.

Information on mixed storage Maximum storage period

: 2 year

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

xylene (1330-20-7)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Xylene, o-, m-, p- or mixed isomers
OEL TWA [ppm]	200 ppm
OEL STEL [ppm]	300 ppm
Remark	SKIN (danger of cutaneous absorption)
Regulatory reference	Government Notice No. R. 280, 2021
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Xylene, o-, m-, p- or mixed isomers
OEL TWA	218 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	435 mg/m³
OEL STEL [ppm]	100 ppm
Remark	Sk (Danger of cutaneous absorption)
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 (PPE)

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. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : No data available

Colour : Brown.

Odour : Aromatic odour.
Odour threshold : No data available

pH : 4-7

pH solution : No data available Relative evaporation rate (butylacetate=1) : No data available Relative evaporation rate (ether=1) : No data available

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Melting point: Not applicableFreezing point: No data availableBoiling point: No data available

Flash point : > 100 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapour pressure : No data available Vapour pressure at 50 °C : No data available Relative vapour density at 20 °C : No data available

Relative density : 0.98

: No data available Relative density of saturated gas/air mixture Density : No data available No data available Relative gas density · No data available Solubility 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 : No data available Explosive properties : No data available Oxidising properties **Explosive limits** : No data available Lower explosion limit : No data available Upper explosion limit : No data available

9.2. Other information

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) : May be harmful if swallowed.
Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Toxic if inhaled.

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Orca 125 EC (Fluazifop-p-butyl 125 g/l) (7924	41-46-6)
ATE ZA (oral)	3291.938 mg/kg bodyweight
ATE ZA (Dermal)	1237.301 mg/kg bodyweight
ATE ZA (vapours)	8.559 mg/l/4h
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	83.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 3.93% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 3.93% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))
Fluazifop-p-butyl (79241-46-6)	
LD50 oral rat	2450 mg/kg Rats female
LD50 oral	> 2000 mg/kg Mice
LD50 dermal rat	> 2110 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.2 mg/l/4h
Sodium dodecyl-benzenesulfonate (25155-3	0-0)
LD50 oral rat	1080 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
polyoxyethylene nonylphenol ether (9014-90-8)	
LD50 oral rat	10000 mg/kg Source: ChemIDPlus
Skin corrosion/irritation	: Causes skin irritation. pH: 4 – 7
Serious eye damage/irritation	: Causes serious eye damage. pH: 4 – 7
Respiratory or skin sensitisation	: Not classified
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	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, short–term : Toxic to aquatic life.

(acute)

Hazardous to the aquatic environment, long-term : Toxic to aquatic life with long lasting effects.

(chronic)

(ornorno)	
Fluazifop-p-butyl (79241-46-6)	
LC50 - Fish [1]	1.3 mg/l Rainbow Trout
EC50 - Crustacea [1]	> 0.62 mg/l
EC50 - Other aquatic organisms [1]	> 1.4 mg/l
ErC50 algae	> 1.8 mg/l
ErC50 other aquatic plants	0.51 mg/l

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Fluazifop-p-butyl (79241-46-6)		
Partition coefficient n-octanol/water (Log Kow)	4.5	
Additional ecotoxicological information	Birds: Acute oral LD50 for bobwhite quail >2000 mallard ducks >3960 mg/kg. Dietary LC50 for bobwhite quail >5230, mallard ducks 4850 mg/kg diet. Bees: (LD50, μg/bee) > 200 (oral and contact). Worms: LC50 (14d) >1000 mg/kg soil.	
Sodium dodecyl-benzenesulfonate (25155-30-	0)	
LC50 - Fish [1]	3.2 – 5.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Daily renewal, Fresh water, Experimental value, Lethal)	
EC50 - Crustacea [1]	6.3 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)	
EC50 72h - Algae [1]	65.4 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
BCF - Fish [1]	130 l/kg (Equivalent or similar to OECD 305, 3 day(s), Leuciscus idus, Semi-static system, Fresh water, Experimental value)	
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, Equivalent or similar to OECD 107, 25 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.96 (log Koc, Calculated value)	
polyoxyethylene nonylphenol ether (9014-90-8	3)	
LC50 - Fish [1]	25 mg/l Source: NITE	
EC50 - Crustacea [1]	21 mg/l Source: NITE	
EC50 72h - Algae [1]	25 mg/l Source: NITE	
Partition coefficient n-octanol/water (Log Pow)	0.02 Source: e-ChemPortal;EnviChem	

12.2. Persistence and degradability

Orca 125 EC (Fluazifop-p-butyl 125 g/l) (79241-46-6)	
Persistence and degradability No additional information available	
Sodium dodecyl-benzenesulfonate (25155-30-0)	
Persistence and degradability Readily biodegradable in water.	

12.3. Bioaccumulative potential

Orca 125 EC (Fluazifop-p-butyl 125 g/l) (79241-46-6)	
Bioaccumulative potential	No additional information available
Fluazifop-p-butyl (79241-46-6)	
Partition coefficient n-octanol/water (Log Kow)	4.5
Sodium dodecyl-benzenesulfonate (25155-30-0)	
BCF - Fish [1]	130 l/kg (Equivalent or similar to OECD 305, 3 day(s), Leuciscus idus, Semi-static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.96 (log Koc, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
polyoxyethylene nonylphenol ether (9014-90-8)	
Partition coefficient n-octanol/water (Log Pow)	0.02 Source: e-ChemPortal;EnviChem

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12.4. Mobility in soil

Orca 125 EC (Fluazifop-p-butyl 125 g/l) (79241-46-6)	
Mobility in soil	No additional information available
Fluazifop-p-butyl (79241-46-6)	
Partition coefficient n-octanol/water (Log Kow)	4.5
Sodium dodecyl-benzenesulfonate (25155-30-	0)
Surface tension	29.3 – 31.8 mN/m (25 °C, 0.012 %)
Partition coefficient n-octanol/water (Log Pow)	1.96 (Experimental value, Equivalent or similar to OECD 107, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.96 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil.
polyoxyethylene nonylphenol ether (9014-90-8)	
Mobility in soil	8205 Source: EPISUITE
Partition coefficient n-octanol/water (Log Pow)	0.02 Source: e-ChemPortal;EnviChem

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
14.2. Proper Shipping Name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains fluazifop-p-butyl 125 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains fluazifop-p-butyl 125 g/l)	Environmentally hazardous substance, liquid, n.o.s. (contains fluazifop-p-butyl 125 g/l)
14.3. Transport hazard class(es)		
9	9	9
		•
14.4. Packing group		
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

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SANS	IMDG	IATA
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

АТА

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

No additional information available

SECTION 16: Other information

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Full text of H-statements	
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.

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Full text of H-statements	
H303	May be harmful if swallowed
H312	Harmful in contact with skin.
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), South Africa

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.