Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l)

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 9/15/2022 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l)
Type of product	:	Herbicide
CAS-No.	:	[2545-60-0] [81406-37-3]
Product group	:	End product

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

Use of the substance/mixture	:	A micro-emulsion of a systemic herbicide for the control of woody plants and other weeds as listed in forestry, grass pastures, conservation and industrial areas.

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 (dermal), Category 5	H313
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
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 2	H411

Full text of H-statements: see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :

Signal word (GHS-ZA) : Danger

Hazardous ingredients : Picloram TC, Fluroxypyr TC, 2-(tricylcoxy) ethyl dihydrogen phosphate, Solvent Naphtha

Hazard statements (GHS ZA) : H313 - May be harmful in contact with skin
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H373 - May cause damage to organs through prolonged or repeated exposure.
H400 - Very toxic to aquatic life.
H411 - 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 label before use.
P260 - Do not breathe vapours, spray.
P264 - Wash hands, forearms and face thoroughly after handling.
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.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
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 POISON CENTER or doctor.
P312 - Call a POISON CENTER or doctor if you feel unwell.
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.
P501 - Dispose of container to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : May cause damage to organs through prolonged or repeated exposure,Harmful in contact with skin,Causes skin irritation,May cause an allergic skin reaction,Causes serious eye damage,Very 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
2-(tricylcoxy) ethyl dihydrogen phosphate	CAS-No.: 9046-01-9	≥ 20 – < 25	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Solvent Naphtha	CAS-No.: 64742-94-5	≥ 10 – < 15	Flam. Liq. 3, H226 Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Eye Irrit. 2A, H319 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Fluroxypyr TC	CAS-No.: 81406-37-3	≥ 10 – < 15	Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to the United Nations GHS
Picloram TC	CAS-No.: 2545-60-0	≥ 10 – < 15	Acute Tox. Not classified (Oral) Acute Tox. 5 (Dermal), H313 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
triisopropanolamine	CAS-No.: 122-20-3	≥ 1 – < 5	Acute Tox. 5 (Oral), H303 Acute Tox. Not classified (Dermal) Eye Irrit. 2A, H319 Aquatic Acute Not classified Aquatic Chronic 3, H412

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

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. Call a physician immediately.

First-aid measures after ingestion : 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. May cause an allergic skin reaction.

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

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

Treat symptomatically.

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.

5.3. Advice for firefighters

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

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

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.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : For small dry spills, sweep up with damp earth or sand or other suitable absorbents, taking care not to raise a dust cloud. Place the material into a clean, dry container for disposal at a later stage. Where the product has come into contact with water, contain contaminated water for disposal at a later stage. Do not flush spilled material into drains. Keep onlookers away and upwind.
Large Spills: These should be covered to prevent further dispersal. Vacuum or shove waste into an approved container. To de-contaminate a spill area, tools and equipment, wash with a suitable solution (organic solvent, detergent bleach, or caustic). Add the solution to the containers already collected. Label the containers stating the contents and dispose in accordance to local regulations.

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. Do not breathe vapours, spray. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment.

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 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.

Incompatible products : Oxidizing agent. Strong acids. Strong bases.

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

Picloram TC (2545-60-0)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Picloram

Picloram TC (2545-60-0)	
OEL TWA	10 mg/m³ 10 mg/m³
OEL STEL	20 mg/m³
Regulatory reference	Government Notice No. R. 280, 2021 Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Picloram
OEL TWA	10 mg/m³
OEL STEL	20 mg/m³
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 insufficient ventilation, wear suitable respiratory equipment

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 : amber.
Odour : Amine-like odour.
Odour threshold : No data available
pH : No data available
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
Boiling 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 : 1.085

Relative density of saturated gas/air mixture	:	No data available
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	Emulsifiable.
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. 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)	:	Not classified
Acute toxicity (dermal)	:	May be harmful in contact with skin.
Acute toxicity (inhalation)	:	Not classified

Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l) ([2545-60-0] [81406-37-3])	
ATE ZA (Dermal)	3510.693 mg/kg bodyweight
Unknown acute toxicity (GHS ZA)Unknown acute toxicity (GHS ZA)	77.82% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 45.5% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 99.98% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))

Picloram TC (2545-60-0)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 1.63 mg/l

Fluroxypyr TC (81406-37-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	> 1 mg/l

poly(dimethylsiloxane) (9016-00-6)	
LD50 oral rat	> 5000 mg/kg (Rat, Literature study, Oral)

dipropylene glycol monomethyl ether (34590-94-8)	
LD50 oral rat	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	9510 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))

Solvent Naphtha (64742-94-5)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: EPA OTS 798.1175 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Remarks on results: other:

triisopropanolamine (122-20-3)	
LD50 oral rat	4000 mg/kg bodyweight (BASF test, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 5000 mg/kg bodyweight (24 h, Rabbit, Female, Experimental value, Dermal)

Water (7732-18-5)	
LD50 oral rat	90000 mg/kg

Skin corrosion/irritation	:	Causes skin irritation.
Serious eye damage/irritation	:	Causes serious eye damage.
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	May cause damage to organs through prolonged or repeated exposure.

Solvent Naphtha (64742-94-5)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEL (dermal, rat/rabbit, 90 days)	200 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	2000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

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

Picloram TC (2545-60-0)	
LC50 - Fish [1]	26 mg/l Rainbow Trout
LC50 - Fish [2]	24 mg/l Bluegill sunfish
BCF - Fish [1]	0.11 – 0.54 (28 day(s), Lepomis macrochirus)
Partition coefficient n-octanol/water (Log Kow)	-2.09
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.506 – 1.588 (log Koc, Calculated value)
Additional ecotoxicological information	Birds: Acute oral LD50 for mallard ducks and bobwhite quail >2250 mg/kg. Dietary LC50 for bobwhie quail >5620 mg/kg diet. Bees: (LD50, µg/bee) >100

Fluroxypyr TC (81406-37-3)	
LC50 - Fish [1]	> 0.225 mg/l Rainbow Trout
LC50 - Other aquatic organisms [1]	> 0.183 mg/l Daphnia
Partition coefficient n-octanol/water (Log Kow)	4.53 pH 5
Additional ecotoxicological information	Birds: Acute oral LD50 for mallard ducks and bobwhite quail >2000 mg/kg. Dietary LC50 for bobwhite quail >5000 mg/kg diet. Bees (LD50, µg/bee) >100 (oral and contact) (48h) Worms: LC50 (14d) for earthworms >1000 mg/kg soil.

poly(dimethylsiloxane) (9016-00-6)	
LC50 - Fish [1]	> 10000 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)

dipropylene glycol monomethyl ether (34590-94-8)	
LC50 - Fish [1]	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	> 969 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)

Solvent Naphtha (64742-94-5)	
LC50 - Fish [1]	8.41 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	4.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	12.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	18.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

triisopropanolamine (122-20-3)	
LC50 - Fish [1]	3128.48 mg/l (DIN 38412-11, 96 h, Leuciscus idus, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 500 mg/l (EU Method, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	710 mg/l (EU Method C.3, Scenedesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)
BCF - Fish [1]	< 0.06 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
BCF - Fish [2]	< 0.57 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.015 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.2. Persistence and degradability

Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l) ([2545-60-0] [81406-37-3])	
Persistence and degradability	No additional information available

Picloram TC (2545-60-0)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water. Not easily biodegradable in water in anaerobic conditions.

poly(dimethylsiloxane) (9016-00-6)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

dipropylene glycol monomethyl ether (34590-94-8)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O_2/g substance
ThOD	2.06 g O_2/g substance

triisopropanolamine (122-20-3)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l) ([2545-60-0] [81406-37-3])	
Bioaccumulative potential	No additional information available

Picloram TC (2545-60-0)	
BCF - Fish [1]	0.11 – 0.54 (28 day(s), Lepomis macrochirus)
Partition coefficient n-octanol/water (Log Kow)	-2.09
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.506 – 1.588 (log Koc, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Fluroxypyr TC (81406-37-3)	
Partition coefficient n-octanol/water (Log Kow)	4.53 pH 5

poly(dimethylsiloxane) (9016-00-6)	
BCF - Fish [1]	2.9 – 1250 (3 day(s), Hypophthalmichthys molitrix, Literature study)
Bioaccumulative potential	No straightforward conclusion can be drawn based upon the available numerical values.

dipropylene glycol monomethyl ether (34590-94-8)	
Partition coefficient n-octanol/water (Log Pow)	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

triisopropanolamine (122-20-3)	
BCF - Fish [1]	< 0.06 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
BCF - Fish [2]	< 0.57 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.015 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)
Bioaccumulative potential	Not bioaccumulative.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.4. Mobility in soil

Quorum 160 ME (picloram 80 g/l + fluroxypyr 80 g/l) ([2545-60-0] [81406-37-3])	
Mobility in soil	No additional information available

Picloram TC (2545-60-0)	
Partition coefficient n-octanol/water (Log Kow)	-2.09
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.506 – 1.588 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil. Not toxic to animals. Not toxic to bees. Toxic to flora.

Fluroxypyr TC (81406-37-3)	
Partition coefficient n-octanol/water (Log Kow)	4.53 pH 5

poly(dimethylsiloxane) (9016-00-6)	
Ecology - soil	Adsorbs into the soil. Low potential for mobility in soil. Not toxic to plants.

dipropylene glycol monomethyl ether (34590-94-8)	
Surface tension	68.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

triisopropanolamine (122-20-3)	
Partition coefficient n-octanol/water (Log Pow)	-0.015 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method)

triisopropanolamine (122-20-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

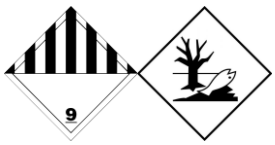
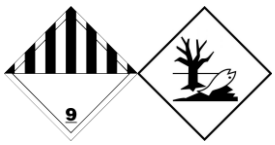
SECTION 13: Disposal considerations

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 picloram 80g/l + fluroxypyr 80 g/l)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains picloram 80g/l + fluroxypyr 80 g/l)	Environmentally hazardous substance, liquid, n.o.s. (contains picloram 80g/l + fluroxypyr 80 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
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 instructions (SANS) : P001, IBC03, LP01
Packagings, large packagings and IBCs Special packing instructions (SANS) : PP1

Portable tank and bulk containers instructions (SANS) : T4
Portable tank and bulk container special provisions (SANS) : TP1, TP29

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

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

Issue date : 15/09/2022

Full text of H-statements	
H226	Flammable liquid and vapour.
H303	May be harmful if swallowed
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

Full text of H-statements	
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.
H412	Harmful 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.