SAFETY DATA SHEET

IMPACT 125 SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	31.05.2022	50000346	Date of first issue: 31.05.2022

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

1.1 Product identifier

Product name IMPACT 125 SC

Other means of identification

Product code 50000346

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

Use of the Substance/Mixture : Can be used as fungicide only.

Recommended restrictions on use : Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address

FMC CHEMICALS (PTY) LTD
COMPANY REGISTRATION NUMBER: 1988/001451/07
WEST END OFFICE PARK, BUILDING C
CNR. WEST AVE & HALL STREET 0014
CENTURION, 0014 SOUTH AFRICA

E-mail address: SDS-Info@fmc.com (E-Mail General Information)

1.4 Emergency telephone

For leak, fire, spill or accident emergencies, call:
South Africa: 0-800-983-611 (CHEMTREC)

Medical emergency:
For any emergency or poisoning contact: Griffon Poison Information Centre (24 hrs) - +27-(0)-82-446-8946

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitization, Sub-category 1B	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P261 Avoid breathing mist or vapors.
P273 Avoid release to the environment.
P280 Wear protective gloves.

Response:

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.

Hazardous ingredients which must be listed on the label:
Flutriafol
1,2-benzisothiazol-3(2H)-one

Signal Word : Warning

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Hazardous ingredients which must be listed on the label:

1,2-benzisothiazol-3(2H)-one

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Flutriafol	76674-21-0	Acute Tox. 4; H302 Aquatic Chronic 2; H411	>= 2.5 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 0.025 - < 0.05
Substances with a workplace exposure limit :			
propane-1,2-diol	57-55-6 200-338-0		>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

If inhaled : Call a physician or poison control center immediately.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	If swallowed, call a poison control center or doctor immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Risks	:	May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam. Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams. Do not spread spilled material with high-pressure water streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Thermal decomposition can lead to release of irritating gases and vapors. Nitrogen oxides (NOx)

Carbon oxides
Fluorinated compounds

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Firefighters should wear protective clothing and self-contained breathing apparatus.

Firefighters should wear protective clothing and self-contained breathing apparatus.

Specific extinguishing methods : Remove undamaged containers from fire area if it is safe to do so.
Use a water spray to cool fully closed containers.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Evacuate personnel to safe areas.
Use personal protective equipment.
If it can be safely done, stop the leak.
Do not touch or walk through the spilled material.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

If the product contaminates rivers and lakes or drains inform respective authorities.
Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

Never return spills in original containers for re-use.

Pick up and transfer to properly labeled containers.
Collect as much of the spill as possible with a suitable absorbent material.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.
See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapors/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Provide sufficient air exchange and/or exhaust in work rooms.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

For personal protection see section 8.
Avoid formation of respirable particles.
Dispose of rinse water in accordance with local and national regulations.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Normal measures for preventive fire protection.

Hygiene measures : Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

General industrial hygiene practice. Do not breathe dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Prevent unauthorized access. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : The product is an approved pesticide and can only be used for the purposes for which it is approved, according to the conditions contained in the label approved by the competent authorities.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Workers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Inhalation	Long-term local effects	10 mg/m3
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m3
	Workers	Dermal	Long-term systemic effects	0.966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.345 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Flutriafol	Water	6.2 µg/l
propane-1,2-diol	Fresh water	260 mg/l
	Intermittent use/release	183 mg/l
	Sea water	26 mg/l
	Sewage treatment plant	20 g/l
	Fresh water sediment	572 mg/kg
	Sea sediment	57.2 mg/kg
	Soil	50 mg/kg
1,2-benzisothiazol-3(2H)-one	Fresh water	0.00403 mg/l
	Sea water	0.000403 mg/l
	Sewage treatment plant	1.03 mg/l
	Fresh water sediment	0.0499 mg/l
	Sea sediment	0.00499 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear a faceshield or other full face protection if there is a

potential for direct contact to the face with dusts, mists, or aerosols.

Hand protection
Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Protective measures : Plan first aid action before beginning work with this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : suspension

Color : blend of white and brown

No data available

Odor : unpleasant

No data available

Odor Threshold : No data available

pH : 6.5 (25 °C)
Concentration: 10 g/l
(1% solution in water)

7.1 (25 °C)

No data available

Melting point/freezing point : < 0 °C

Melting point/range
No data available

Boiling point/boiling range : 99 °C

No data available

Flash point : > 99 °C
Method: Pensky-Martens closed cup - PMCC

No data available

Evaporation rate	:	No data available
Upper explosion limit / Upper flammability limit	:	not determined
		No data available
Lower explosion limit / Lower flammability limit	:	not determined
		No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.06 g/cm3 (20 °C)
		No data available
Solubility(ies)		
Water solubility	:	emulsifiable
		No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
		No data available
Viscosity		
Viscosity, dynamic	:	83 - 560 mPa.s (20 °C)
		No data available
Viscosity, kinematic	:	78 - 528 mm2/s (20 °C)
		64 - 429 mm2/s (40 °C)
		No data available
Explosive properties	:	Not explosive
		Not explosive
Oxidizing properties	:	Non-oxidizing
		Non-oxidizing

9.2 Other information

Flammability (liquids)	:	Will not burn
Molecular weight	:	Not applicable
Particle size	:	Not applicable
Self-ignition	:	does not ignite
		No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

Avoid extreme temperatures.
Avoid formation of aerosol.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents
Strong acids and strong bases

Avoid strong acids, bases, and oxidizers.

10.6 Hazardous decomposition products

See subsection 5.2.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat): > 3,000 mg/kg Method: OECD Test Guideline 423
Acute inhalation toxicity	:	LC50 (Rat): > 2.1 mg/l

Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 4,000 mg/kg
Method: OECD Test Guideline 402

Components:

Flutriafol:

Acute oral toxicity : LD50 (Rat): 1,140 - 1,480 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg

Acute inhalation toxicity : LC0 (Rabbit): 31.7 mg/l
Exposure time: 2 h
Test atmosphere: vapor
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

Components:

Flutriafol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Exposure time	:	72 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

propane-1,2-diol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Product:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	slight irritation

Components:

Flutriafol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Bovine cornea
Method	:	OECD Test Guideline 437
Result	:	No eye irritation

Species	:	Rabbit
Method	:	EPA OPP 81-4
Result	:	Irreversible effects on the eye

propane-1,2-diol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

Respiratory or skin sensitization

Product:

Test Type	:	Buehler Test

Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not a skin sensitizer.

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	The product is a skin sensitizer, sub-category 1B.

Components:

Flutriafol:

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Not a skin sensitizer.

1,2-benzisothiazol-3(2H)-one:

Test Type	:	Maximization Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitization by skin contact.

Species	:	Guinea pig
Method	:	FIFRA 81.06
Result	:	May cause sensitization by skin contact.

propane-1,2-diol:

Test Type	:	Maximization Test
Species	:	Guinea pig
Result	:	negative

Germ cell mutagenicity

Components:

Flutriafol:

Genotoxicity in vivo	:	Test Type: dominant lethal test Method: OECD Test Guideline 478 Result: negative

1,2-benzisothiazol-3(2H)-one:

Genotoxicity in vitro	:	Test Type: gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Ames test Method: OECD Test Guideline 471 Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay
Species: Rat (male)
Cell type: Liver cells
Application Route: Ingestion
Exposure time: 4 h
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

propane-1,2-diol:

Genotoxicity in vitro : Test Type: reverse mutation assay
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Result: negative

Carcinogenicity

Components:

Flutriafol:

Species : Mouse
Exposure time : 2 Years
NOAEL : 1.2 mg/kg bw/day
Result : negative

Species : Rat
Exposure time : 2 Years
NOAEL : 1 mg/kg bw/day
Result : negative

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

propane-1,2-diol:

Species : Rat
Application Route : Oral
Exposure time : 2 Years
Result : negative

Reproductive toxicity

Components:

Flutriafol:

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.
Animal testing showed no developmental toxicity.

1,2-benzisothiazol-3(2H)-one:

Effects on fertility : Species: Rat, male
Application Route: Ingestion
General Toxicity Parent: NOAEL: 18.5 mg/kg body weight
General Toxicity F1: NOAEL: 48 mg/kg body weight
Fertility: NOAEL: 112 mg/kg bw/day
Symptoms: No effects on reproduction parameters.
Method: OPPTS 870.3800
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

propane-1,2-diol:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Mouse
Application Route: Oral
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 414
Result: Animal testing did not show any effects on fertility.
Remarks: Based on data from similar materials

STOT-single exposure

Components:

Flutriafol:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Components:

1,2-benzisothiazol-3(2H)-one:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Flutriafol:

Species	:	Rat
NOAEL	:	13.3 mg/kg bw/day
Application Route	:	Oral - feed
Exposure time	:	90 d
Symptoms	:	anemia, Liver effects

Species	:	Dog
NOAEL	:	5 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	90 d
Symptoms	:	anemia, Liver effects

1,2-benzisothiazol-3(2H)-one:

Species	:	Rat, male and female
NOAEL	:	15 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 d
Method	:	OECD Test Guideline 407
Symptoms	:	Irritation

Species	:	Rat, male and female
NOAEL	:	69 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 d
Symptoms	:	Irritation, Reduced body weight

propane-1,2-diol:

Species	:	Rat, male and female
NOAEL	:	1,700 mg/kg
Application Route	:	Oral
Exposure time	:	2 Years

Species	:	Rat, male and female
NOAEL	:	1,000 mg/kg
LOAEL	:	160 mg/kg
Application Route	:	Inhalation
Exposure time	:	90 Days

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

Flutriafol:

The substance does not have properties associated with aspiration hazard potential.

Neurological effects

Components:

Flutriafol:
No neurotoxicity observed in animal studies.

Further information

Product:

Remarks	:	No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	LC50 (Salmo gairdneri): 7.9 mg/l Exposure time: 96 h Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 7.5 mg/l Exposure time: 48 h Remarks: Based on data from similar materials
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 10 mg/l Exposure time: 72 h ErC50 (Skeletonema costatum (Diatom)): 4.7 mg/l Exposure time: 72 h EC50 (Lemna gibba (gibbous duckweed)): 53 mg/l Exposure time: 7 d NOEC (Lemna gibba (gibbous duckweed)): 1.1 mg/l Exposure time: 7 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Remarks: Based on data from similar materials
Toxicity to terrestrial organisms	:	LD50: > 2,000 mg/kg Exposure time: 14 d Species: Coturnix japonica (Japanese quail) Remarks: Based on data from similar materials LD50: > 100 µg/bee Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees)

Components:

Flutriafol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 61 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 78 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Selenastrum capricornutum (green algae)): 12 mg/l Exposure time: 96 h IC50 (Scenedesmus subspicatus): 1.9 mg/l Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 6.2 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.31 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
Toxicity to soil dwelling organisms	:	NOEC: 0.01 mg/cm2 Exposure time: 180 d Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organisms	:	LD50: > 50 µg/bee End point: Acute contact toxicity Species: Apis mellifera (bees) LD50: > 2 µg/bee End point: Acute oral toxicity Species: Apis mellifera (bees) LD50: > 5,000 mg/kg Species: Anas platyrhynchos (Mallard duck)

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): 16.7 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.9 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0.070 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0.04 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 (activated sludge): 24 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209 EC50 (activated sludge): 12.8 mg/l Exposure time: 3 h Test Type: Respiration inhibition Method: OECD Test Guideline 209

propane-1,2-diol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	(Mysidopsis bahia (opossum shrimp)): 18,800 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 34,100 mg/l Exposure time: 48 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 13,020 mg/l Exposure time: 7 d

12.2 Persistence and degradability

Components:

Flutriafol:

Biodegradability	:	Result: Not readily biodegradable.

1,2-benzisothiazol-3(2H)-one:

Biodegradability	:	Result: rapidly biodegradable Method: OECD Test Guideline 301C

propane-1,2-diol:

Biodegradability	:	Result: Readily biodegradable.

Biodegradation: 23.6 %
Exposure time: 64 d
Method: OECD Test Guideline 306

12.3 Bioaccumulative potential

Components:

Flutriafol:

Bioaccumulation	:	Species: Salmo gairdneri Bioconcentration factor (BCF): 7 Remarks: Bioaccumulation is unlikely. See section 9 for octanol-water partition coefficient.
Partition coefficient: n-octanol/water	:	log Pow: 2.29

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation	:	Species: Lepomis macrochirus (Bluegill sunfish) Exposure time: 56 d Bioconcentration factor (BCF): 6.62 Method: OECD Test Guideline 305 Remarks: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Partition coefficient: n-octanol/water	:	log Pow: 0.7 (20 °C) pH: 7 log Pow: 0.99 (20 °C) pH: 5

propane-1,2-diol:

Partition coefficient: n-octanol/water	:	log Pow: -1.07

12.4 Mobility in soil

Components:

Flutriafol:

Distribution among environmental compartments	:	Remarks: medium mobility in soil

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments	:	Koc: 9.33, log Koc: 0.97 Method: OECD Test Guideline 121

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

Components:

Flutriafol:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

IMDG : UN 3082

IATA : UN 3082

14.2 UN proper shipping name

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Flutriafol)

IATA : Environmentally hazardous substance, liquid, n.o.s. (Flutriafol)

14.3 Transport hazard class(es)

IMDG : 9

IATA : 9

14.4 Packing group

IMDG

Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft) : 964
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous

14.5 Environmental hazards

IMDG

Marine pollutant : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

The ingredients of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

Sulfurous acid, monosodium salt, reaction products with cresol-formaldehydenonylphenol polymer (average MW 300-600)
Siloxanes and Silicones, di-Me, reaction products with chlorotrimethylsilane, iso-Pr alc., silica and sodium silicate
Flutriafol
Agalmatolite
Sodium alkylnaphthalenesulfonate, formaldehyde condensate

ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H400	:	Very toxic to aquatic life.
H411	:	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitization

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration as-

sociated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Other information :

Classification of the mixture:		**Classification procedure:**
Skin Sens. 1B	H317	Based on product data or assessment
Aquatic Chronic 1	H410	Based on product data or assessment

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