

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CALARIS PRO

Version
3.0

Revision Date:
02.12.2020

SDS Number:
S00007467524

This version replaces all previous versions.

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

1.1 Product identifier

Trade name : CALARIS PRO

Design code : A15901A

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

Use of the Substance/Mixture : Herbicide

1.3 Details of the supplier of the safety data sheet

Company : Syngenta Crop Protection AG
Rosentalstrasse 67, Postfach
CH-4002 Basel
Switzerland

Telephone : +41 61 323 11 11

Telefax : +41 61 323 12 12

E-mail address of person responsible for the SDS : sds.ch@syngenta.com

1.4 Emergency telephone number

Emergency telephone number : +44 1484 538444

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4

H302: Harmful if swallowed.

Specific target organ toxicity - repeated exposure, Category 2

H373: May cause damage to organs through prolonged or repeated exposure.

Short-term (acute) aquatic hazard, Category 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Category 1

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



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Signal word	:	Warning
Hazard statements	:	H302 Harmful if swallowed. H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	:	EUH208 Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction. EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Precautionary statements	:	Prevention: P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P273 Avoid release to the environment. Response: P314 Get medical advice/ attention if you feel unwell. P391 Collect spillage. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

terbuthylazine (ISO)

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)
terbuthylazine (ISO)	5915-41-3 227-637-9 613-323-00-2	Acute Tox. 4; H302 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 30 - < 50

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C16-18 alcohols, ethoxylated	68439-49-6 500-212-8	Acute Tox. 4; H302 Eye Dam. 1; H318	$\geq 3 - < 10$
mesotrione(ISO)	104206-82-8 609-064-00-X	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	$\geq 2.5 - < 10$
phosphoric acid	7664-38-2 231-633-2 015-011-00-6 01-2119485924-24	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	$\geq 1 - < 3$
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	$\geq 0.025 - < 0.05$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
- If inhaled : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.
- In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- If swallowed : If swallowed, seek medical advice immediately and show this

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container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Nonspecific
No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : There is no specific antidote available.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or
Water spray

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

Further information : Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

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If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Specific use(s) : For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
terbutylazine (ISO)	5915-41-3	TWA	0.8 mg/m ³	Syngenta
mesotrione(ISO)	104206-82-8	TWA	5 mg/m ³	Syngenta
phosphoric acid	7664-38-2	TWA	1 mg/m ³	2000/39/EC
Further information: Indicative				
	7664-38-2	STEL	2 mg/m ³	2000/39/EC
Further information: Indicative				
	7664-38-2	TWA	2 mg/m ³	CH SUVA

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	Further information: National Institute for Occupational Safety and Health, Occupational Safety and Health Administration, Harm to the unborn child is not to be expected when the OEL-value is respected		
	7664-38-2	STEL	4 mg/m ³ CH SUVA
	Further information: National Institute for Occupational Safety and Health, Occupational Safety and Health Administration, Harm to the unborn child is not to be expected when the OEL-value is respected		

8.2 Exposure controls

Engineering measures

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.

Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection

Remarks : No special protective equipment required.

Skin and body protection : No special protective equipment required.
Select skin and body protection based on the physical job requirements.

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : suspension
Colour : white to light brownish

Odour : sweetish
Odour Threshold : No data available

pH : 2.2 - 2.8
Concentration: 100 % w/v

2 - 5
Concentration: 1 % w/v

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Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Method: Pensky-Martens closed cup does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.122 g/cm ³ (20 °C)
Solubility(ies) Solubility in other solvents	: No data available
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: 450 °C
Decomposition temperature	: No data available
Viscosity Viscosity, dynamic	: 200 - 494 mPa.s (20 °C) 107 - 348 mPa.s (40 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

9.2 Other information

Surface tension : 35.4 mN/m, 0.1 %, 20 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

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10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, female): ca. 310 mg/kg
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

Components:

terbuthylazine (ISO):

Acute oral toxicity : LD50 (Rat, male and female): 1,590 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.3 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

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

C16-18 alcohols, ethoxylated:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after

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single ingestion.

mesotrione(ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 4.75 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

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

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

Acute oral toxicity : LD50 (Rat, male): 670 mg/kg

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

Skin corrosion/irritation

Product:

Species : Rabbit
Result : No skin irritation
Remarks : Based on data from similar materials

Components:

terbuthylazine (ISO):

Species : Rabbit
Result : No skin irritation

mesotrione(ISO):

Species : Rabbit
Result : No skin irritation

phosphoric acid:

Result : Corrosive after 3 minutes to 1 hour of exposure

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

Species : Rabbit
Result : Mild skin irritation

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Serious eye damage/eye irritation

Product:

Species : Rabbit
Result : No eye irritation
Remarks : Based on data from similar materials

Components:

terbuthylazine (ISO):

Species : Rabbit
Result : No eye irritation

C16-18 alcohols, ethoxylated:

Result : Irreversible effects on the eye

mesotrione(ISO):

Species : Rabbit
Result : No eye irritation

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

Species : Rabbit
Result : Risk of serious damage to eyes.

Respiratory or skin sensitisation

Product:

Test Type : Buehler Test
Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.
Remarks : Based on data from similar materials

Components:

terbuthylazine (ISO):

Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.

mesotrione(ISO):

Test Type : Maximisation Test
Species : Guinea pig
Result : Does not cause skin sensitisation.

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

Result : Probability or evidence of skin sensitisation in humans

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Germ cell mutagenicity

Components:

terbuthylazine (ISO):

Germ cell mutagenicity-
Assessment : Animal testing did not show any mutagenic effects.

mesotrione(ISO):

Germ cell mutagenicity-
Assessment : Animal testing did not show any mutagenic effects.

phosphoric acid:

Germ cell mutagenicity-
Assessment : In vitro tests did not show mutagenic effects

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

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

Carcinogenicity

Components:

terbuthylazine (ISO):

Carcinogenicity -
Assessment : No evidence of carcinogenicity in animal studies.

mesotrione(ISO):

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

Reproductive toxicity

Components:

terbuthylazine (ISO):

Reproductive toxicity -
Assessment : No toxicity to reproduction

mesotrione(ISO):

Reproductive toxicity -
Assessment : Animal testing did not show any effects on fertility.

phosphoric acid:

Reproductive toxicity -
Assessment : No toxicity to reproduction

STOT - repeated exposure

Components:

terbuthylazine (ISO):

Target Organs : hematopoietic system
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

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Repeated dose toxicity

Components:

mesotrione(ISO):

Remarks : No adverse effect has been observed in chronic toxicity tests.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 6.7 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 53 mg/l
aquatic invertebrates : Exposure time: 48 h
Remarks: Based on data from similar materials

Toxicity to algae/aquatic : EbC50 (Pseudokirchneriella subcapitata (green algae)):
plants : 0.0232 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.087 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

EC50 (Lemna gibba (gibbous duckweed)): 0.114 mg/l
Exposure time: 7 d
Remarks: Based on data from similar materials

NOEC (Pseudokirchneriella subcapitata (green algae)):
0.0039 mg/l
Exposure time: 96 h
Remarks: Based on data from similar materials

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life., Classification of the product is based on the summation of the concentrations of classified components.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects., Classification of the product is based on the summation of the concentrations of classified components.

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Components:

terbuthylazine (ISO):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.2 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Americamysis): 0.092 mg/l
Exposure time: 96 h
- Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): > 0.03 mg/l
Exposure time: 72 h
- NOEC (Desmodesmus subspicatus (green algae)): 0.0011 mg/l
End point: Growth rate
Exposure time: 72 h
- ErC50 (Microcystis aeruginosa (blue-green algae)): 0.018 mg/l
Exposure time: 96 h
- NOEC (Microcystis aeruginosa (blue-green algae)): 0.0037 mg/l
End point: Growth rate
Exposure time: 96 h
- M-Factor (Acute aquatic toxicity) : 10
- Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
- Toxicity to fish (Chronic toxicity) : NOEC: 0.045 mg/l
Exposure time: 90 d
Species: Oncorhynchus mykiss (rainbow trout)
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.019 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- M-Factor (Chronic aquatic toxicity) : 10

mesotrione(ISO):

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 120 mg/l
Exposure time: 96 h
- LC50 (Cyprinus carpio (Carp)): > 97.1 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 900 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 12

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plants

mg/l

Exposure time: 96 h

NOEC (Raphidocelis subcapitata (freshwater green alga)):
0.75 mg/l

End point: Growth rate

Exposure time: 96 h

ErC50 (Lemna gibba (gibbous duckweed)): 0.028 mg/l

Exposure time: 7 d

NOEC (Lemna gibba (gibbous duckweed)): 0.002 mg/l

End point: Growth rate

Exposure time: 7 d

M-Factor (Acute aquatic toxicity)

: 10

Toxicity to fish (Chronic toxicity)

: NOEC: 12.5 mg/l

Exposure time: 36 d

Species: Pimephales promelas (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

: NOEC: 180 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity)

: 10

phosphoric acid:

Toxicity to fish

: LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 mg/l

Exposure time: 96 h

Ecotoxicology Assessment

Acute aquatic toxicity

: This product has no known ecotoxicological effects.

Chronic aquatic toxicity

: This product has no known ecotoxicological effects.

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

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): 2.18 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 2.94 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic plants

: ErC50 (Raphidocelis subcapitata (freshwater green alga)):
0.15 mg/l

Exposure time: 72 h

EC10 (Raphidocelis subcapitata (freshwater green alga)):
0.04 mg/l

End point: Growth rate

Exposure time: 72 h

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M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.3 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 1.7 mg/l Exposure time: 21 d Species: Daphnia (water flea)

12.2 Persistence and degradability

Components:

terbuthylazine (ISO):

Biodegradability	:	Result: Not readily biodegradable.
Stability in water	:	Degradation half life: 6 d Remarks: Product is not persistent.

mesotrione(ISO):

Stability in water	:	Degradation half life: > 30 d (25 °C) Remarks: Persistent in water.
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1,2-benzisothiazol-3(2H)-one:

Biodegradability	:	Result: rapidly degradable
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12.3 Bioaccumulative potential

Components:

terbuthylazine (ISO):

Bioaccumulation	:	Remarks: Does not bioaccumulate.
Partition coefficient: n-octanol/water	:	log Pow: 3.4 (25 °C)

mesotrione(ISO):

Bioaccumulation	:	Remarks: Low bioaccumulation potential.
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1,2-benzisothiazol-3(2H)-one:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
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12.4 Mobility in soil

Components:

terbuthylazine (ISO):

Distribution among	:	Remarks: Moderately mobile in soils
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environmental compartments
Stability in soil

: Dissipation time: 77 - 169 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

mesotrione(ISO):

Distribution among
environmental compartments
Stability in soil

: Remarks: Mesotrione has medium to high mobility in soil.
: Dissipation time: 6 - 105 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

12.5 Results of PBT and vPvB assessment

Product:

Assessment

: 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..

Components:

terbuthylazine (ISO):

Assessment

: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

mesotrione(ISO):

Assessment

: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

phosphoric acid:

Assessment

: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

: Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.

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If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

ADN : UN 3082
ADR : UN 3082
RID : UN 3082
IMDG : UN 3082
IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TERBUTHYLAZINE)
ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TERBUTHYLAZINE)
RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TERBUTHYLAZINE)
IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(TERBUTHYLAZINE)
IATA : Environmentally hazardous substance, liquid, n.o.s.
(TERBUTHYLAZINE)

14.3 Transport hazard class(es)

ADN : 9
ADR : 9
RID : 9
IMDG : 9
IATA : 9

14.4 Packing group

ADN
Packing group : III
Classification Code : M6

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Hazard Identification Number : 90
Labels : 9

ADR

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9
Tunnel restriction code : (-)

RID

Packing group : III
Classification Code : M6
Hazard Identification Number : 90
Labels : 9

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

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Environmentally hazardous : yes

IATA (Cargo)

Environmentally hazardous : 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.

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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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable
PIC Ordinance, ChemPICO (814.82) : Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2): Young people undergoing basic vocational training may only work with this product if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not completing any basic vocational training are not permitted to work with this product. Employees of either sex who are under 18 years old are classed as young people.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Full text of H-Statements

H290 : May be corrosive to metals.
H302 : Harmful if swallowed.
H314 : Causes severe skin burns and eye damage.
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.

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H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
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
Met. Corr.	: Corrosive to metals
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
2000/39/EC	: Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
CH SUVA	: Switzerland. Limit values at the work place
2000/39/EC / TWA	: Limit Value - eight hours
2000/39/EC / STEL	: Short term exposure limit
CH SUVA / TWA	: Time Weighted Average
CH SUVA / STEL	: Short Term Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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 associated 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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Further information

Classification of the mixture:

Acute Tox. 4	H302
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Classification procedure:

Based on product data or assessment
Calculation method
Based on product data or assessment
Based on product data or assessment

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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