

CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

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

1.1 Product identifier

Trade name : CELEST TOP
Design code : A9997B

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

Use of the Substance/Mixture : Fungicide, Insecticide, Seed treatment

1.3 Details of the supplier of the safety data sheet

Company : Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland
Telephone : +41 61 323 11 11
Telefax : +41 61 323 12 12
E-mail address : 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 aquatic toxicity, Category 1 H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 1 H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning
Hazard statements : H410 Very toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements : EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

EUH208 Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction.

Precautionary statements :

Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

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

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
thiamethoxam (ISO)	153719-23-4 428-650-4 01-0000017497-60	Flam. Sol. 1; H228 Acute Tox. 4; H302 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 20 - < 25
poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-[tris(1-phenylethyl)phenoxy]-, ammonium salt	119432-41-6	Aquatic Chronic 3; H412	>= 2.5 - < 10
fludioxonil	131341-86-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2.5
difenoconazole	119446-68-3	Acute Tox. 4; H302 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2.5
vinyl acetate	108-05-4 203-545-4 01-2119471301-50	Flam. Liq. 2; H225 Acute Tox. 4; H332 Carc. 2; H351 STOT SE 3; H335 Aquatic Chronic 3; H412	>= 0.25 - < 1
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317	>= 0.025 - < 0.05

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

		Aquatic Acute 1; H400	
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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 container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

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.
Flash back possible over considerable distance.

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.
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).

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

of the reach of children. Keep away from food, drink and animal feedingstuffs.

Other data : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

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
thiamethoxam (ISO)	153719-23-4	TWA	3 mg/m ³	Syngenta
fludioxonil	131341-86-1	TWA	5 mg/m ³	Syngenta
difenoconazole	119446-68-3	TWA	5 mg/m ³	Syngenta
vinyl acetate	108-05-4	TWA	5 ppm 17.6 mg/m ³	2009/161/EU
Further information	Indicative			
	108-05-4	STEL	10 ppm 35.2 mg/m ³	2009/161/EU
Further information	Indicative			
	108-05-4	STEL	10 ppm 35 mg/m ³	CH SUVA
Further information	Carcinogenic Category 3, National Institute for Occupational Safety and Health, Institut National de Recherche et de Sécurité pour la prévention des accidents du travail et des maladies professionnelles			
	108-05-4	TWA	10 ppm 35 mg/m ³	CH SUVA
Further information	Carcinogenic Category 3, National Institute for Occupational Safety and Health, Institut National de Recherche et de Sécurité pour la prévention des accidents du travail et des maladies professionnelles			

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.

CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

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 : liquid
- Colour : red to dark red
- Odour : sweetish
- pH : 4 - 8
Concentration: 1 % w/v
- Boiling point/boiling range** : > 90 °C
(1,013.25 hPa)
- Density : 1.14 - 1.18 g/cm³ (20 °C)
- Auto-ignition temperature : 440 °C
- Viscosity
Viscosity, dynamic : 55.6 - 393 mPa.s (20 °C)
42.1 - 331 mPa.s (40 °C)
- Explosive properties : Not explosive
- Oxidizing properties : The substance or mixture is not classified as oxidizing.

CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

9.2 Other information

Surface tension : 31.7 mN/m, 100 %

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3 "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under normal conditions.

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

Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, male and female): > 3,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 4,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Components:

thiamethoxam (ISO):

Acute oral toxicity : LD50 (Rat, male and female): 1,563 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 3.72 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

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

fludioxonil:

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

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.6 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

difenoconazole:

Acute oral toxicity : LD50 (Rat, male and female): 1,453 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat, male and female): > 3,300 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,010 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

vinyl acetate:

Acute oral toxicity : LD50 (Rat): 3,500 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): 15.810 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 7,440 mg/kg

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

Acute oral toxicity : Acute toxicity estimate: 500 mg/kg
Method: Converted acute toxicity point estimate

Assessment: The component/mixture is moderately toxic after single ingestion.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0	Revision Date: 07.03.2017	SDS Number: S1384383780	This version replaces all previous versions.
-----------------	------------------------------	----------------------------	--

Skin corrosion/irritation

Product:

Species: Rabbit
Result: No skin irritation

Components:

thiamethoxam (ISO):

Species: Rabbit
Result: No skin irritation

fludioxonil:

Species: Rabbit
Result: No skin irritation

difenoconazole:

Species: Rabbit
Result: No skin irritation

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

Assessment: Irritating to skin.

Serious eye damage/eye irritation

Product:

Species: Rabbit
Result: No eye irritation

Components:

thiamethoxam (ISO):

Species: Rabbit
Result: No eye irritation

fludioxonil:

Species: Rabbit
Result: No eye irritation

difenoconazole:

Species: Rabbit
Result: Irritation to eyes, reversing within 7 days

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

Result: Irreversible effects on the eye

CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

Respiratory or skin sensitisation

Product:

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

Components:

thiamethoxam (ISO):

Species: Guinea pig
Result: Does not cause skin sensitisation.

fludioxonil:

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

difenoconazole:

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

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

Result: May cause sensitisation by skin contact.

Germ cell mutagenicity

Components:

thiamethoxam (ISO):

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

fludioxonil:

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

difenoconazole:

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

vinyl acetate:

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

Carcinogenicity

Components:

thiamethoxam (ISO):

Carcinogenicity - Assessment : Liver tumours noted in mice that are not relevant to humans.

fludioxonil:

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

difenoconazole:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen, In a two-year feeding study of mice, an oncogenic effect was seen in the livers of males and females., The observed tumors do not appear to be relevant for men.

vinyl acetate:

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

Reproductive toxicity

Components:

thiamethoxam (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction

fludioxonil:

Reproductive toxicity - Assessment : No toxicity to reproduction

difenoconazole:

Reproductive toxicity - Assessment : No toxicity to reproduction

vinyl acetate:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT - single exposure

Components:

vinyl acetate:

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

CELEST TOP

Version 12.0	Revision Date: 07.03.2017	SDS Number: S1384383780	This version replaces all previous versions.
-----------------	------------------------------	----------------------------	---

Repeated dose toxicity

Components:

thiamethoxam (ISO):

Remarks: Did not show neurotoxicity in animal experiments.

fludioxonil:

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

difenoconazole:

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

Further information

Components:

thiamethoxam (ISO):

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

- | | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 14 mg/l
Exposure time: 96 h |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 24 mg/l
Exposure time: 48 h |
| Toxicity to algae | : | ErC50 (Pseudokirchneriella subcapitata (green algae)): 29 mg/l
Exposure time: 72 h |

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. |

Components:

thiamethoxam (ISO):

- | | | |
|------------------|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h |
|------------------|---|---|

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
- EC50 (Cloeon sp.): 0.014 mg/l
Exposure time: 48 h
- EC50 (Chironomus riparius (harlequin fly)): 0.035 mg/l
Exposure time: 48 h
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (algae)): > 81.8 mg/l
Exposure time: 72 h
- NOEC (Pseudokirchneriella subcapitata (algae)): 81.8 mg/l
End point: Growth rate
Exposure time: 72 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: > 100 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: flow-through test
- NOEC: > 20 mg/l
Exposure time: 88 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: Early-life Stage
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 100 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- NOEC: 0.01 mg/l
Exposure time: 30 d
Species: Chironomus riparius (Midge larvae)
- M-Factor (Chronic aquatic toxicity) : 10

poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-[tris(1-phenylethyl)phenoxy]-, ammonium salt:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 33 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 24 mg/l
Exposure time: 48 h

Ecotoxicology Assessment

- Acute aquatic toxicity : This product has no known ecotoxicological effects.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

fludioxonil:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.23 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.4 mg/l
Exposure time: 48 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0.44 mg/l
Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.132 mg/l
Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0.43 mg/l
Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0.14 mg/l
End point: Growth rate
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.04 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.035 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 1

difenoconazole:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1.1 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.77 mg/l
Exposure time: 48 h

EC50 (Americamysis bahia (Mysid shrimp)): 0.15 mg/l
Exposure time: 96 h

Toxicity to algae : EC50 (Navicula pelliculosa (Freshwater diatom)): 0.091 mg/l
Exposure time: 72 h

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

NOEC (*Navicula pelliculosa* (Freshwater diatom)): 0.053 mg/l
Exposure time: 72 h

NOEC (*Desmodesmus subspicatus* (green algae)): 0.0086 mg/l
Exposure time: 72 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: 0.0076 mg/l
Exposure time: 34 d
Species: *Pimephales promelas* (fathead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.0056 mg/l
Exposure time: 21 d
Species: *Daphnia magna* (Water flea)

NOEC: 0.0046 mg/l
Exposure time: 28 d
Species: *Americamysis*

M-Factor (Chronic aquatic toxicity) : 10

vinyl acetate:

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 12.6 mg/l
Exposure time: 48 h

Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (green algae)): 12.7 mg/l
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC: 0.16 mg/l
Exposure time: 34 d
Species: *Pimephales promelas* (fathead minnow)

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

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

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

12.2 Persistence and degradability

Components:

thiamethoxam (ISO):

Biodegradability : Result: Not readily biodegradable.
Stability in water : Degradation half life: 11 d
Remarks: Product is not persistent.

fludioxonil:

Biodegradability : Result: Not readily biodegradable.

difenoconazole:

Biodegradability : Result: Not readily biodegradable.
Stability in water : Degradation half life: 1 d
Remarks: Product is not persistent.

vinyl acetate:

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

Components:

thiamethoxam (ISO):

Bioaccumulation : Remarks: Low bioaccumulation potential.
Partition coefficient: n-octanol/water : log Pow: -0.13 (25 °C)

fludioxonil:

Bioaccumulation : Remarks: Does not bioaccumulate.
Partition coefficient: n-octanol/water : log Pow: 4.12 (25 °C)

difenoconazole:

Bioaccumulation : Remarks: High bioaccumulation potential.
Partition coefficient: n-octanol/water : log Pow: 4.4 (25 °C)

12.4 Mobility in soil

Components:

thiamethoxam (ISO):

Distribution among : Remarks: Moderately mobile in soils

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

environmental compartments

Stability in soil : Percentage dissipation: 50 % (DT50: 51 d)
Remarks: Product is not persistent.

fludioxonil:

Distribution among environmental compartments : Remarks: immobile

Stability in soil : Percentage dissipation: 50 % (DT50: 14 d)
Remarks: Product is not persistent.

difenoconazole:

Distribution among environmental compartments : Remarks: Low mobility in soil.

Stability in soil : Percentage dissipation: 50 % (DT50: 149 - 187 d)
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:

fludioxonil:

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)..

difenoconazole:

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)..

vinyl acetate:

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)..

CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

12.6 Other adverse effects

Components:

thiamethoxam (ISO):

Additional ecological information : No data available

poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-[tris(1-phenylethyl)phenoxy]-, ammonium salt:

Additional ecological information : No data available

fludioxonil:

Additional ecological information : No data available

difenoconazole:

Additional ecological information : No data available

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

Additional ecological information : 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.
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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

IMDG : UN 3082

IATA : UN 3082

14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(THIAMETHOXAM AND DIFENOCONAZOLE)

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(THIAMETHOXAM AND DIFENOCONAZOLE)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(THIAMETHOXAM AND DIFENOCONAZOLE)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(THIAMETHOXAM AND DIFENOCONAZOLE)

IATA : Environmentally hazardous substance, liquid, n.o.s.
(THIAMETHOXAM AND DIFENOCONAZOLE)

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
Hazard Identification Number : 90
Labels : 9

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

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

CELEST TOP

Version 12.0 Revision Date: 07.03.2017 SDS Number: S1384383780 This version replaces all previous versions.

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

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID

Environmentally hazardous : yes

IMDG

Marine pollutant : yes

IATA (Passenger)

Marine pollutant : yes

IATA (Cargo)

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

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

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E1	ENVIRONMENTAL HAZARDS	Quantity 1 100 t	Quantity 2 200 t
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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.

Youth Employment Protection Regulation (ArGV 5, SR 822 115): Adolescents up to completion of their 18th year are only allowed to come in contact or get exposed to this product at their place of work if the Federal Office for Professional Education and Technology (BBT) or the State Secretariat for Economic Affairs (SECO) has granted an exemption.

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

H225 : Highly flammable liquid and vapour.
H228 : Flammable solid.
H302 : Harmful if swallowed.
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.
H335 : May cause respiratory irritation.
H351 : Suspected of causing cancer.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Acute : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Carc. : Carcinogenicity
Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Flam. Sol. : Flammable solids
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation
STOT SE : Specific target organ toxicity - single exposure

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



CELEST TOP

Version	Revision Date:	SDS Number:	This version replaces all previous
12.0	07.03.2017	S1384383780	versions.

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; TCSI - Taiwan Chemical Substance 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

Further information

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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