

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

1.1. Product identifier

Product form : Mixture
Product name : Latitude
Product code : CE 114 C0252
Type of formulation : Flowable concentrate for seed treatment (FS)
Active Ingredient : Silthiofam

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

1.2.1. Relevant identified uses

Main use category : Plant protection product for professional use. Agriculture.
Use of the substance/mixture : Seed treatment - Fungicide.

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

CERTIS UK
Suite 5, 3 Riverside
Granta Park
Great Abington
Cambridgeshire CB21 6AD
United Kingdom
Tel: +44 (0)845 373 0305
Fax: +44 (0)1223 891210
Email: infocertisuk@certiseurope.com
Website: www.certiseurope.co.uk

1.4. Emergency telephone number

Emergency number : Certis Carechem24 multilingual 24 hours emergency number: +44 (0) 870 190 6777.
For further advice for medical professionals:
The National Poisons Information Service: +44 (0) 870 600 6266.
For further advice for veterinary surgeons: +44 (0) 20 7635 9195
Dublin - National Poisons Information Centre, Beaumont Hospital, Dublin 9:
Available from 8 am to 10 pm - 7 days: +353 (01) 809 2166
Available 24hrs: +353 (01) 809 2566

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Precautionary statements (CLP) : P234 - Keep only in original container.
EUH-statements : EUH208 - Contains 3,5,7-Triaza-1-azoniaadamantane, 1-(3-chloroallyl)-, chloride and 1,2-Benzisothiazolin-3-one. May produce an allergic reaction.

EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	% (w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Silthiofam	(CAS No) 175217-20-6 (EC no) 605-752-9 (REACH-no) 02-2119558408-30-0000	12	Aquatic Chronic 3, H412

Full text of H-statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In the event of any complaints or symptoms, avoid further exposure.
- First-aid measures after inhalation : IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
If symptoms persist call a doctor.
- First-aid measures after skin contact : IF ON SKIN: Wash with plenty of soap and water.
Remove contaminated clothing and shoes.
If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult an eye specialist.
- First-aid measures after ingestion : IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Never give anything by mouth to an unconscious person.

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

- Symptoms/injuries : No information available.
- Risques : No information available.

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

The first aid procedure should be established with the assistance of the occupational physician.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray
Dry chemical powder
Alcohol resistant foam
Carbon dioxide (CO₂).

Unsuitable extinguishing media : Jet of water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustion or thermal decomposition may generate toxic vapours: carbon monoxide (CO), sulphur oxides (SO_x), nitrogen oxides (NO_x), oxides of silica.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.
Fight fire from safe distance and protected location.
Do not breathe fumes
Cool closed containers exposed to fire with water spray
If possible, take the containers out of dangerous zone.
Contain fire-fighting water with dikes or absorbents to prevent migration and entry into sewers or streams.

Protection during firefighting : Wear suitable protective clothing, gloves, eye/face protection and respiratory protection
Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures : Evacuate area.
Ensure adequate ventilation.
Avoid direct contact with the substance.
Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.2. Environmental precautions

Prevent entry to sewers and public waters.
Notify the authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.
Once absorbed collect spilled material with shovels, buckets and place in closed containers and label properly.
Remove as chemical waste, according to national or local legislation.
In the event of major spillage: contact an expert.

6.4. Reference to other sections

See sections 7-8-13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Read label before use.
- Avoid contact with eyes, skin, nose and mouth.
- Wear suitable protective clothing, gloves and eye/face protection.
- Opened containers must be carefully closed and kept upright to avoid leakage.
- Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not eat, drink or smoke when using this product.
- Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Minimum shelf life : 2 year
- Storage temperature : 0 - 40 °C
- Packaging material : Compatible materials for storage steel, high-density polyethylene (HDPE), polypropylene (PP)

7.3. Specific end use(s)

Fungicide for agricultural use. Refer to the label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Exposure controls

- Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Hand protection : Wear impervious gloves chemical resistant nitrile rubber (EN 374-3)
- Eye protection : Safety goggles or a face shield. (EN 166)
- Skin and body protection : Protective clothing with long sleeves waterproof and resistant to chemicals. Rubber boots. (EN 1383-3/EN ISO 20345)
- Respiratory protection : Wear appropriate respirator for dust / organic vapors.
- Hygiene measures : Do not eat, drink or smoke while handling the product.
- Clean gloves with soap and water before removing.
- Wash hands and face with soap and water before eating, drinking or smoking.
- Clean equipment, premises and work clothes regularly.
- Work clothing should remain on the work area and stored separately from street clothes.
- Environmental exposure controls : Discharge into the environment must be avoided.
- Do not contaminate surface and groundwater.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Red
- Odour : Paint-like
- Odour threshold : No data available
- pH : 8,7 (20°C, 10 g/l)

pH solution	: 10 g/l (20°C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable.
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: Does not flash
Auto-ignition temperature	: 425 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No significant volatility
Relative vapour density at 20 °C	: Not applicable
Relative density	: No data available
Density	: 1,058 g/cm ³ (20°C)
Solubility	: Water: Completely miscible.
Log Pow	: 3,48 (20°C) (active ingredient)
Log Kow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: 15,8 – 93,1 mPa.s (20°C)
Explosive properties	: No explosive properties.
Oxidising properties	: No data available
Explosive limits	: No data available
Specific gravity	: 1,05 (20°C/4°C)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

Is not explosive and does not exhibit oxidant properties.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Combustion or thermal decomposition may generate toxic vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Latitude	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 5000 mg/kg

Skin corrosion/irritation	: Not classified Rabbit, 6 animals, OECD 404 test: Redness, mean EU score: 0,22 Swelling, mean EU score: 0,00 Days to heal: 3
Serious eye damage/irritation	: Not classified Rabbit, 6 animals, OECD 405 test: Conjunctival redness, mean EU score: 0,06 Conjunctival swelling, mean EU score: 0,00 Corneal opacity, mean EU score: 0,00 Iris lesions, mean EU score: 0,00 Days to heal: 2
Skin sensitisation	: Not classified Guinea pig, 3-induction Buehler test: Positive incidence: 0 % Negative.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified <u>Active ingredient data:</u> Rat, oral, 23 months: NOAEL toxicity: 100 mg/kg diet Target organs/systems: liver Other effects: decrease of food consumption, decrease of body weight gain, organ weight change, histopathologic effects, increased mortality, blood biochemistry effects NOEL tumour: >= 3.000 mg/kg diet Tumours: none Mouse, oral, 18 months: NOAEL toxicity: 1.000 mg/kg diet Target organs/systems: liver Other effects: weight loss, decrease of body weight gain, organ weight change, histopathologic effects, blood biochemistry effects NOEL tumour: 4.000 mg/kg diet Tumours: liver, (adenoma), (carcinoma) Tumours not relevant to man.
Reproductive toxicity	: Not classified <u>Active ingredient data:</u> Rat, oral, 2 generations: NOAEL toxicity: 400 mg/kg diet NOAEL reproduction: > 4.000 mg/kg diet Target organs/systems in parents: kidneys, liver Other effects in parents: weight loss, decrease of body weight gain, histopathologic effects, decrease of food consumption, organ weight change Other effects in pups: weight loss Effects on offspring only observed with maternal toxicity.
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)

: Not classified

Active ingredient data:

Mouse, oral, 60 days:

NOAEL toxicity: 1.000 mg/kg diet

Target organs/systems: liver

Other effects: decrease of body weight gain, organ weight change, haematological effects, histopathologic effects, blood biochemistry effects

Rat, oral, 3 months:

NOAEL toxicity: 250 mg/kg diet

Target organs/systems: liver

Other effects: decrease of food consumption, weight loss, decrease of body weight gain, organ weight change, haematological effects, histopathologic effects, blood biochemistry effects

Rat, dermal, 21 days:

NOAEL toxicity: 1.000 mg/kg body weight/day

Target organs/systems: none

Other effects: none

Aspiration hazard

: Not classified

Developmental toxicity/teratogenicity

Active ingredient data:

Rat, oral, 6 - 15 days of gestation:

NOAEL toxicity: 50 mg/kg body weight/day

NOAEL development: 500 mg/kg body weight/day

Target organs/systems in mother animal: liver

Other effects in mother animal: organ weight change

Developmental effects: weight loss, post-implantation loss, delayed ossification

Effects on offspring only observed with maternal toxicity.

Rabbit, oral, 7 - 19 days of gestation:

NOAEL toxicity: 60 mg/kg body weight/day

NOAEL development: 60 mg/kg body weight/day

Other effects in mother animal: none

Developmental effects: none

SECTION 12: Ecological information

12.1. Toxicity

Latitude	
LC50 Fishes (<i>Onorhynchus mykiss</i>)	115,3 mg/l (96h)
EC50 Daphnia (<i>Daphnia magna</i>)	141,2 mg/l (48h)
EbC50 (<i>Scenedesmus subspicatus</i>)	207,5 mg/L
NOEC (<i>Scenedesmus subspicatus</i>)	32 mg/L (72 hours)
LD50 (<i>Apis mellifera</i>)	> 837 µg/bee (48h)
LD50 (<i>Apis mellifera</i>)	> 871 µg/bee (48h)

Silthiofam	
LC50 Bobwhite quail (<i>Colinus virginianus</i>)	>5,670 mg/kg (5 days)
LC50 Mallard duck (<i>Anas platyrhynchos</i>)	>5,400 mg/kg (5days)

Silthiofam	
LD50 Japanese quail (<i>Coturnix japonica</i>)	>2,250 mg/kg body weight
LC50 Earthworm (<i>Eisenia foetida</i>)	133 mg/kg dry soil (14 days)

12.2. Persistence and degradability

Silthiofam	
Photochemical degradation	Half life: 16 days (water)
Biodegradation (modified Sturm test)	Degradation: 2% within 28 days Not readily biodegradable
Dissipation	Soil, 20°C Half life: 25 – 34 days Koc: 173 – 328 L/kg
	Water, aerobic, 20°C Half life: 5 - 52 days

12.3. Bioaccumulative potential

Rapid depuration after end of exposure.

Silthiofam	
BCF (<i>Oncorhynchus mykiss</i>)	98

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H412	Harmful to aquatic life with long lasting effects
EUH208	Contains . May produce an allergic reaction
EUH401	To avoid risks to human health and the environment, comply with the instructions for use