

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Silvosol

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

Relevant identified uses of the substance or mixture:

Cleaner

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

GB

PRIMUS BEIER & Co. GmbH & Co. KG, Ruhpoldinger Strasse 5, 81825 München, Germany
 Phone: +49 (0)89 43 25 64, Fax: +49 (0)89 4 31 01 21
 info@primus-beier.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0)89 43650063 (Mon. - Thu. 8.00 - 16.00 Uhr, Fri. 8.00 - 14.00 Uhr)

Lieferant / Supplier:
 Carl Roth GmbH + Co KG
 Schoemperlenstr. 3-5
 76185 Karlsruhe, Germany
 +49 721 5606 0
 sicherheit@carlroth.de

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

| Hazard class | Hazard category | Hazard statement |
|-----------------|-----------------|---|
| Carc. | 2 | H351-Suspected of causing cancer. |
| Repr. | 2 | H361d-Suspected of damaging the unborn child. |
| Aquatic Chronic | 3 | H412-Harmful to aquatic life with long lasting effects. |
| Met. Corr. | 1 | H290-May be corrosive to metals. |

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Warning

H351-Suspected of causing cancer. H361d-Suspected of damaging the unborn child. H412-Harmful to aquatic life with long lasting effects. H290-May be corrosive to metals.

P201-Obtain special instructions before use. P280-Wear protective gloves/protective clothing and eye protection/face protection.
 P308+P313-IF exposed or concerned: Get medical advice/attention. P390-Absorb spillage to prevent material damage.

Thiourea

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

Hazardous to drinking water, on escape of even small quantities.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

| Thiourea | |
|---|--|
| Registration number (REACH) | -- |
| Index | 612-082-00-0 |
| EINECS, ELINCS, NLP | 200-543-5 |
| CAS | 62-56-6 |
| content % | 5-10 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Carc. 2, H351 Repr. 2, H361d Acute Tox. 4, H302 Aquatic Chronic 2, H411 |

| Phosphoric acid | Substance for which an EU exposure limit value applies. |
|---|---|
| Registration number (REACH) | -- |
| Index | 015-011-00-6 |
| EINECS, ELINCS, NLP | 231-633-2 |
| CAS | 7664-38-2 |
| content % | 1-<10 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Skin Corr. 1B, H314 Met. Corr. 1, H290 |

| (+)-tartaric acid | |
|---|--------------------|
| Registration number (REACH) | -- |
| Index | --- |
| EINECS, ELINCS, NLP | 201-766-0 |
| CAS | 87-69-4 |
| content % | 1-5 |
| Classification according to Regulation (EC) 1272/2008 (CLP) | Eye Irrit. 2, H319 |

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

The following may occur:

Irritation of the eyes

Irritation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Adapt to the nature and extent of fire.

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher

Unsuitable extinguishing media

n.c.

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of sulphur

Oxides of nitrogen

Oxides of phosphorus

Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

If applicable, caution - risk of slipping

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.

Neutralising is possible (only from a specialist).

Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Pregnant women should avoid contact with this product.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not use acid sensitive materials.

Store at room temperature.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

| (GB) Chemical Name | Phosphoric acid | Content %:1- <10 |
|----------------------------|---|---------------------|
| WEL-TWA: 1 mg/m3 (WEL, EU) | WEL-STEL: 2 mg/m3 (WEL, EU) | --- |
| Monitoring procedures: | DFG (2) (Inorganic acids mist) - 2002 - EU project BC/CEN/ENTR/000/2002-16 - card 94-2 (2004) - MTA/MA-019/A90 (Determination of inorganic acid anions in air) - OSHA ID-165SG (Acid mist in workplace atmospheres) - 1985 - OSHA ID-111 (Phosphoric Acid in Workplace Atmospheres) - NIOSH 7903 (Acids, inorganic) - 1994 | |
| BMGV: --- | Other information: --- | |

| (GB) Chemical Name | Glycerine | Content %: |
|--------------------------|------------------------|------------|
| WEL-TWA: 10 mg/m3 (mist) | WEL-STEL: --- | --- |
| Monitoring procedures: | --- | |
| BMGV: --- | Other information: --- | |

(GB) WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

| Phosphoric acid | | | | | | |
|---------------------|--|--------------------------|------------|-------|-------|------|
| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 2,92 | mg/m3 | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 0,73 | mg/m3 | |

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Use acid resistant protective gloves (EN 374).

If applicable

Rubber gloves (EN 374).

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,5

Permeation time (penetration time) in minutes:

480

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:

Normally not necessary.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|--|--------------------------------|
| Physical state: | Liquid |
| Colour: | According to specification |
| Odour: | Characteristic |
| Odour threshold: | Not determined |
| pH-value: | Not determined |
| Melting point/freezing point: | Not determined |
| Initial boiling point and boiling range: | ~ 100 °C |
| Flash point: | n.a. |
| Evaporation rate: | Not determined |
| Flammability (solid, gas): | Not determined |
| Lower explosive limit: | Not determined |
| Upper explosive limit: | Not determined |
| Vapour pressure: | Not determined |
| Vapour density (air = 1): | Not determined |
| Density: | 1,06 g/cm ³ (20°C) |
| Bulk density: | Not determined |
| Solubility(ies): | Not determined |
| Water solubility: | Mixable |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | 440 °C (Ignition temperature) |
| Auto-ignition temperature: | No |
| Decomposition temperature: | Not determined |
| Viscosity: | Not determined |

Explosive properties:

Product is not explosive.

Oxidising properties:

No

9.2 Other information

Miscibility:

Not determined

Fat solubility / solvent:

Not determined

Conductivity:

Not determined

Surface tension:

Not determined

Solvents content:

Not determined

SECTION 10: Stability and reactivity**10.1 Reactivity**

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

Avoid contact with strong alkalis (exothermic reaction possible).

10.4 Conditions to avoid

See also section 7.

None known

10.5 Incompatible materials

See also section 7.

Avoid contact with strong alkalis.

Avoid contact with strong oxidizing agents.

Avoid contact with acid sensitive materials.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

Silvosol

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|----------|-------|-------|----------|-------------|--|
| Acute toxicity, by oral route: | ATE | >2000 | mg/kg | | | calculated value |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | | | | | | n.d.a. |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |
| Other information: | | | | | | Classification according to calculation procedure. |

Thiourea

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|----------------------------------|----------|-------|-------|----------|-------------|-------|
| Acute toxicity, by oral route: | LD50 | 1750 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | 2800 | mg/kg | Rabbit | | |

| | | | | | | |
|------------------------------------|--|--|--|------------|--|--|
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Mild irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Not sensitizing |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Symptoms: | | | | | | breathing difficulties, diarrhoea, fever, joint pain, swelling of lymph nodes, gastrointestinal disturbances, muscle pains, nausea and vomiting. |

| Phosphoric acid | | | | | | |
|---|-----------------|--------------|-------------|-----------------|--|---|
| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | 2600 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | 2740 | mg/kg | Rabbit | | |
| Acute toxicity, by inhalation: | LC50 | 1,689 | mg/l/1h | Rabbit | | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Corrosive |
| Serious eye damage/irritation: | | | | Rabbit | | Corrosive |
| Respiratory or skin sensitisation: | | | | Human being | (Patch-Test) | Not sensitizing |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Carcinogenicity: | | | | | | Negative |
| Reproductive toxicity: | NOAEL | 370-410 | mg/kg | | OECD 414 (Prenatal Developmental Toxicity Study) | Not to be expected |
| Reproductive toxicity (Effects on fertility): | NOAEL | >=500 | mg/kg | | OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developmental Tox. Screening Test) | Not to be expected |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAEL | 250 | mg/kg | Rat | OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developmental Tox. Screening Test) | |
| Symptoms: | | | | | | respiratory distress, vomiting, coughing, collapse, cramps, mucous membrane irritation, shock |

(+)-tartaric acid

| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|------------------------------------|----------|-------|------|------------|-------------|--|
| Acute toxicity, by oral route: | LDLo | 7500 | mg/g | Rat | | |
| Skin corrosion/irritation: | | | | | | Mild irritant |
| Skin corrosion/irritation: | | | | | | Possible, Irritant |
| Serious eye damage/irritation: | | | | | | Irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Not sensitizing |
| Symptoms: | | | | | | diarrhoea, heart/circulatory disorders, cornea opacity, stomach pain, mucous membrane irritation, nausea and vomiting. |

| Glycerine | | | | | | |
|---|----------|--------|---------|------------|--|--|
| Toxicity/effect | Endpoint | Value | Unit | Organism | Test method | Notes |
| Acute toxicity, by oral route: | LD50 | >12600 | mg/kg | Rat | | |
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | | |
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rabbit | | |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | IUCLID Chem. Data Sheet (ESIS) | |
| Acute toxicity, by dermal route: | LD50 | >10000 | mg/kg | Rabbit | | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | IUCLID Chem. Data Sheet (ESIS) | |
| Skin corrosion/irritation: | | | | Rabbit | IUCLID Chem. Data Sheet (ESIS) | Not irritant |
| Skin corrosion/irritation: | | | | | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | | | Not irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Not sensitizing |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Reproductive toxicity: | NOAEL | 2000 | mg/kg/d | | | Negative |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAEL | 3,91 | mg/l | Rat | | 14d |
| Aspiration hazard: | | | | | | Negative |
| Symptoms: | | | | | | abdominal pain, drowsiness, diarrhoea, vomiting, headaches, mucous membrane irritation |

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

| Silvosol | | | | | | | |
|----------------------|----------|------|-------|------|----------|-------------|--------|
| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| Toxicity to fish: | | | | | | | n.d.a. |
| Toxicity to daphnia: | | | | | | | n.d.a. |

| | | | | | | |
|------------------------------------|--|--|--|--|--|--------|
| Toxicity to algae: | | | | | | n.d.a. |
| Persistence and degradability: | | | | | | n.d.a. |
| Bioaccumulative potential: | | | | | | n.d.a. |
| Mobility in soil: | | | | | | n.d.a. |
| Results of PBT and vPvB assessment | | | | | | n.d.a. |
| Other adverse effects: | | | | | | n.d.a. |

| Thiourea | | | | | | | |
|--------------------------------|----------|------|--------|------|-------------------------|-------------|-------------------|
| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| Toxicity to fish: | LC50 | 96h | 10000 | mg/l | Brachydanio rerio | | |
| Toxicity to daphnia: | EC50 | 48h | 35 | mg/l | Daphnia magna | | |
| Toxicity to algae: | EC50 | 72h | 3,8-10 | mg/l | Desmodesmus subspicatus | | |
| Persistence and degradability: | | 34d | 0 | % | | | Not biodegradable |
| Toxicity to bacteria: | EC10 | 18h | 1265 | mg/l | Pseudomonas putida | | |

| Phosphoric acid | | | | | | | |
|------------------------------------|------------|------|-------|------|-------------------------|--|-------------------------------------|
| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| Toxicity to fish: | LC50 | 96h | 138 | mg/l | Gambusia affinis | | |
| Toxicity to daphnia: | EC50 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| Toxicity to daphnia: | NOEC/NO EL | 48h | 56 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| Toxicity to algae: | EC50 | 72h | >100 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| Toxicity to algae: | NOEC/NO EL | 72h | 100 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| Bioaccumulative potential: | Log Pow | | -0,77 | | | | calculated value |
| Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| Toxicity to bacteria: | EC50 | | 270 | mg/l | activated sludge | | |

| (+)-tartaric acid | | | | | | | |
|--------------------------------|----------|------|-------|------|-------------------|-------------|---|
| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| Toxicity to fish: | LC0 | | 200 | mg/l | Carassius auratus | | References |
| Toxicity to daphnia: | EC50 | 24h | 135 | mg/l | | | References |
| Persistence and degradability: | | | | | | | Readily biodegradable |
| Bioaccumulative potential: | Log Pow | | -1,00 | | | | Bioaccumulation is unlikely (LogPow < 1). |

| Glycerine | | | | | | | |
|----------------------|----------|------|--------|------|-------------------|-------------|------------|
| Toxicity/effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
| Toxicity to fish: | LC50 | 24h | >5000 | mg/l | Carassius auratus | | References |
| Toxicity to fish: | LC50 | 96h | > 5000 | mg/l | Carassius auratus | | |
| Toxicity to fish: | LC50 | 96h | >10000 | mg/l | Leuciscus idus | | |
| Toxicity to daphnia: | EC50 | 24h | >10000 | mg/l | Daphnia magna | | |

| | | | | | | | |
|---------------------------------------|---------|-----|------------|------|------------------------------|--|--|
| Toxicity to daphnia: | EC50 | 24h | >1000 0 | mg/l | Daphnia magna | IUCLID Chem. Data Sheet (ESIS) | |
| Toxicity to daphnia: | EC5 | 72h | 3200 | mg/l | | | References |
| Toxicity to algae: | EC50 | | 2900 | mg/l | Chlorella vulgaris | | |
| Toxicity to algae: | IC5 | 7d | >1000 0 | mg/l | Scenedesmus quadricauda | | |
| Toxicity to algae: | IC5 | 7d | >1000 0 | mg/l | Selenastrum capricornutum | | References |
| Persistence and degradability: | | 14d | 63 | % | | OECD 301 C (Ready Biodegradability - Modified MITI Test (I)) | |
| Persistence and degradability: | | 14d | 63 | % | | OECD 301 C (Ready Biodegradability - Modified MITI Test (I)) | |
| Bioaccumulative potential: | Log Pow | | -1,76 | | | | |
| Bioaccumulative potential: | Log Pow | | -2,6 | | | | A notable biological accumulation potential is not to be expected (LogPow 1-3). |
| Results of PBT and vPvB assessment | | | | | | | n.a. |
| Toxicity to bacteria: | EC5 | 16h | > 10000 | mg/l | Pseudomonas putida | | |
| Other information: | BOD5 | | 0,87 | g/g | | | |
| Other information: | COD | | 1,16 | g/g | | | |

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

UN number:

3264

Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, LIQUID)

Transport hazard class(es):

8

Packing group:

III

Classification code:

C1

LQ (ADR 2015):

5 L

Environmental hazards:

Not applicable



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 Valid from: 12.06.2015
 PDF print date: 16.06.2015
 Silvosol

Tunnel restriction code:

E

Special precautions for user

Persons employed in transporting dangerous goods must be trained.
 All persons involved in transporting must observe safety regulations.
 Precautions must be taken to prevent damage.

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

Freighted as packaged goods rather than in bulk, therefore not applicable.

Minimum amount regulations have not been taken into account.

Danger code and packing code on request.

Comply with special provisions.

SECTION 15: Regulatory information

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

National rules/regulation for the compliance with maximum quantities with regard to phosphates and or phosphorous compounds must be observed and complied with.

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

Observe youth employment law (German regulation).

Observe law on protection of expectant mothers (German regulation).

Directive 2010/75/EU (VOC): 0 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1 - 16

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Employee training in handling dangerous goods is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|---|--|
| Carc. 2, H351 | Classification according to calculation procedure. |
| Repr. 2, H361d | Classification according to calculation procedure. |
| Aquatic Chronic 3, H412 | Classification according to calculation procedure. |
| Met. Corr. 1, H290 | Classification based on test data. |

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H361d Suspected of damaging the unborn child.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

Carc. — Carcinogenicity

Repr. — Reproductive toxicity

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Met. Corr. — Substance or mixture corrosive to metals

Acute Tox. — Acute toxicity - oral

Skin Corr. — Skin corrosion

Eye Irrit. — Eye irritation

Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWC European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

IBC (Code) International Bulk Chemical (Code)

IC Inhibitory concentration

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

LC lethal concentration

LC50 lethal concentration 50 percent kill

LCLo lowest published lethal concentration

LD Lethal Dose of a chemical

LD50 Lethal Dose, 50% kill

LDLo Lethal Dose Low

LOAEL Lowest Observed Adverse Effect Level

LOEC Lowest Observed Effect Concentration

LOEL Lowest Observed Effect Level

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available

n.c. not checked

n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level

NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon

PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration

POCP Photochemical ozone creation potential

ppm parts per million

PROC Process category

PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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