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

### 1.1. Product identifier

Tin(II) chloride dihydrate for analysis

| | |
|---|---|
| REACH Registration Number: | 01-2119971277-28-0000 |
| CAS No: | 10025-69-1 |
| EC No: | 231-868-0 |

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

**Use of the substance/mixture**

Laboratory chemicals
Industrial uses: Uses of substances as such or in preparations at industrial sites
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Uses advised against**

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

| | | | |
|---|---|---|---|
| Company name: | AnalytiChem GmbH<br>ACD | | |
| Street: | Stempelstraße 6 | | |
| Place: | D-47167 Duisburg | | |
| Telephone: | 0203/5194-0 | Telefax: | 0203/5194-290 |
| E-mail: | info@analytichem.de | | |
| Contact person: | Abteilung Produktsicherheit | Telephone: | 0203/5194-107/117 |
| E-mail: | produktsicherheit@analytichem.de | | |
| Internet: | www.analytichem.de | | |
| Responsible Department: | Abteilung Produktsicherheit | | |

### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

**Further Information**

No data available

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) No 1272/2008**

Met. Corr. 1; H290
Acute Tox. 4; H332
Acute Tox. 4; H302
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H335
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

**Regulation (EC) No 1272/2008**

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

| | |
|---|---|
| H290 | May be corrosive to metals. |
| H302+H332 | Harmful if swallowed or if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs (heart/blood circulation) through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing and eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |

### 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Sum formula: $SnCl_2 * 2 H_2O$

Molecular weight: 225,63 g/mol

**Relevant ingredients**

| CAS No | Chemical name | | | Quantity |
|---|---|---|---|---|
| | EC No | Index No | REACH No | |
| | Classification (Regulation (EC) No 1272/2008) | | | |
| 10025-69-1 | Tin(II) chloride dihydrate | | | 100 % |
| | 231-868-0 | | 01-2119971277-28-0000 | |
| | Met. Corr. 1, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 3, STOT RE 2, Aquatic Chronic 3; H290 H332 H302 H314 H318 H317 H335 H373 H412 | | | |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No | EC No | Chemical name | Quantity |
|---|---|---|---|
| | Specific Conc. Limits, M-factors and ATE | | |
| 10025-69-1 | 231-868-0 | Tin(II) chloride dihydrate | 100 % |
| | inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: ATE = 500 mg/kg | | |

**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information**

First aider: Pay attention to self-protection!

**After inhalation**

Provide fresh air.
Call a physician immediately.

**After contact with skin**

Wash immediately with: Water
Take off immediately all contaminated clothing and wash it before reuse.
Call a physician immediately.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
Remove contact lenses, if present and easy to do. Continue rinsing.
Protect uninjured eye.

**After ingestion**

Rinse mouth immediately and drink plenty of water.
Do NOT induce vomiting. Do not allow a neutralisation agent to be drunk.
Call a physician immediately.

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

Causes burns.
Irritant
Cough
Dyspnoea
Allergic reactions
Vomiting
Risk of serious damage to eyes.

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

No data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

### 5.2. Special hazards arising from the substance or mixture

Non-combustible solids
Hazardous combustion products
In case of fire may be liberated:
Hydrogen chloride (HCl)

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.
In case of fire and/or explosion do not breathe fumes.
Avoid contact with skin, eyes and clothes.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Move undamaged containers from immediate hazard area if it can be done safely.
Use water spray jet to protect personnel and to cool endangered containers.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

Provide adequate ventilation.
Use personal protection equipment.
Avoid contact with skin, eyes and clothes.
Remove persons to safety.
Emergency procedures
Consult an expert
Do not breathe dust/fume/gas/mist/vapours/spray.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

**For containment**

Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).
Collect in closed and suitable containers for disposal.
Take up carefully when dry. Take up dust-free and set down dust-free.

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Provide adequate ventilation.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling**

Read label before use. Handle and open container with care.
When using do not eat, drink, smoke, sniff. Use personal protection equipment.
Provide adequate ventilation. Avoid contact with skin, eyes and clothes.
Do not breathe dust. Avoid dust formation.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs.
Remove contaminated, saturated clothing immediately.
Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary.
When using do not eat or drink.
Do not breathe dust. Avoid dust formation.

**Further information on handling**

Draw up and observe skin protection programme.
Wash hands and face before breaks and after work and take a shower if necessary.
Take off immediately all contaminated clothing and wash it before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

**Requirements for storage rooms and vessels**

Keep container tightly closed.

**Further information on storage conditions**

Keep container dry.
storage temperature: +15°C - +25°C

### 7.3. Specific end use(s)

Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.
If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

goggles
Wear eye/face protection.

**Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact
Recommended glove articles: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11mm
Wearing time with permanent contact: >480min

By short-term hand contact
Recommended glove articles: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11mm
Wearing time with occasional contact (splashes): >480min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

**Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing.
Wash hands before breaks and after work.
The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Respiratory protection**

Respiratory protection necessary at: dust formation
Filtering device with filter or ventilator filtering device of type: P2
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state: | solid | |
| Colour: | white | |
| Odour: | odourless | |
| Odour threshold: | No data available | |
| Melting point/freezing point: | | 38 °C |
| Boiling point or initial boiling point and boiling range: | | 623 °C |
| Flammability: | | No data available |
| Lower explosion limits: | | No data available |
| Upper explosion limits: | | No data available |
| Flash point: | | X |
| Auto-ignition temperature: | | No data available |
| Decomposition temperature: | | No data available |
| pH-Value (at 20 °C): | | 1-2 (100 g/l) |
| Viscosity / kinematic: | | No data available |
| Water solubility: (at 20 °C) | | 1187 g/l |

Solubility in other solvents

No data available

| | |
|---|---|
| Dissolution rate: | No data available |
| Partition coefficient n-octanol/water: | No data available |
| Dispersion stability: | No data available |
| Vapour pressure: | No data available |
| Vapour pressure: | No data available |
| Density (at 20 °C): | 2,71 g/cm³ |
| Relative density: | No data available |
| Bulk density: | 1250 kg/m³ |
| Relative vapour density: | No data available |
| Particle characteristics: | No data available |

### 9.2. Other information

**Information with regard to physical hazard classes**

Explosive properties

No data available

| | |
|---|---|
| Sustaining combustion: | No data available |

Self-ignition temperature

| | |
|---|---|
| Solid: | No data available |
| Gas: | No data available |

Oxidizing properties

Oxidizing

**Other safety characteristics**

| | |
|---|---|
| Evaporation rate: | No data available |
| Solvent separation test: | No data available |
| Solvent content: | No data available |
| Solid content: | 100% |
| Sublimation point: | No data available |
| Softening point: | No data available |
| Pour point: | No data available |

No data available:

Viscosity / dynamic: No data available

Flow time: No data available

**Further Information**

No data available

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Strong acid
Hydrogen peroxide
Ethylene oxide
Carbide
Hydrazine
Alkali metals
Oxidising agent, strong

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

In case of fire may be liberated:
SECTION 5: Firefighting measures

**Further information**

No data available

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicocinetics, metabolism and distribution**

No data available

**Acute toxicity**

Harmful if swallowed.
Harmful if inhaled.
If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

| CAS No | Chemical name | | | | |
|---|---|---|---|---|---|
| | Exposure route | Dose | Species | Source | Method |
| 10025-69-1 | Tin(II) chloride dihydrate | | | | |
| | oral | ATE 500 mg/kg | | | |
| | inhalation vapour | ATE 11 mg/l | | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes severe skin burns and eye damage.
Serious eye damage/eye irritation: Causes serious eye damage.
Risk of serious damage to eyes.

**Sensitising effects**

May cause an allergic skin reaction. (Tin(II) chloride dihydrate)

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause respiratory irritation. (Tin(II) chloride dihydrate)

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure. (Tin(II) chloride dihydrate)

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

Causes burns.
Irritant
Cough
Dyspnoea
Allergic reactions
Vomiting
Risk of serious damage to eyes.

## SECTION 12: Ecological information

**12.1. Toxicity**

Harmful to aquatic life with long lasting effects.

**12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**Further information**

Do not allow to enter into surface water or drains.
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Send to a physico-chemical treatment facility under observation of official regulations.
Do not empty into drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

## SECTION 14: Transport information

**Land transport (ADR/RID)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3260 |
| **14.2. UN proper shipping name:** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | III |
| Hazard label: | 8 |
| Classification code: | C2 |
| Special Provisions: | 274 |
| Limited quantity: | 5 kg |
| Excepted quantity: | E1 |
| Transport category: | 3 |
| Hazard No: | 80 |
| Tunnel restriction code: | E |

**Inland waterways transport (ADN)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3260 |
| **14.2. UN proper shipping name:** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | III |
| Hazard label: | 8 |
| Classification code: | C2 |
| Special Provisions: | 274 |
| Limited quantity: | 5 kg |
| Excepted quantity: | E1 |

**Marine transport (IMDG)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3260 |
| **14.2. UN proper shipping name:** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | III |
| Hazard label: | 8 |

| | |
|---|---|
| Special Provisions: | 223, 274 |
| Limited quantity: | 5 kg |
| Excepted quantity: | E1 |
| EmS: | F-A, S-B |

**Air transport (ICAO-TI/IATA-DGR)**

| | |
|---|---|
| **14.1. UN number or ID number:** | UN 3260 |
| **14.2. UN proper shipping name:** | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate) |
| **14.3. Transport hazard class(es):** | 8 |
| **14.4. Packing group:** | III |
| Hazard label: | 8 |
| Special Provisions: | A3 A803 |
| Limited quantity Passenger: | 5 kg |
| Passenger LQ: | Y845 |
| Excepted quantity: | E1 |
| IATA-packing instructions - Passenger: | 860 |
| IATA-max. quantity - Passenger: | 25 kg |
| IATA-packing instructions - Cargo: | 864 |
| IATA-max. quantity - Cargo: | 100 kg |

**14.5. Environmental hazards**

| | |
|---|---|
| ENVIRONMENTALLY HAZARDOUS: | Yes |
| Danger releasing substance: | Tin(II) chloride dihydrate |

## SECTION 15: Regulatory information

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

**EU regulatory information**

| | |
|---|---|
| Information according to Directive 2012/18/EU (SEVESO III): | E1 Hazardous to the Aquatic Environment |

**National regulatory information**

| | |
|---|---|
| Employment restrictions: | Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. |
| Water hazard class (D): | 3 - highly hazardous to water |

## SECTION 16: Other information

**Changes**

This data sheet contains changes from the previous version in section(s): 12,14.

**Abbreviations and acronyms**

Met. Corr: Substance or mixture corrosive to metals
Acute Tox: Acute toxicity
Skin Corr: Skin corrosion
Eye Dam: Eye damage
Skin Sens: Skin sensitisation
STOT SE: Specific target organ toxicity - single exposure
STOT RE: Specific target organ toxicity - repeated exposure
Aquatic Chronic: Chronic aquatic hazard

**Relevant H and EUH statements (number and full text)**

| | |
|---|---|
| H290 | May be corrosive to metals. |
| H302 | Harmful if swallowed. |
| H302+H332 | Harmful if swallowed or if inhaled. |

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs (heart/blood circulation) through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Further Information**

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.