

Safety data sheet
according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

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

- **1.1 Product identifier**
- **Trade name:** Tin(II) chloride dihydrate
- **Article number:** 133
- **CAS Number:**
10025-69-1
- **EC number:**
231-868-0
- **Registration number** 01-2119971277-28-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Reagent for analysis
Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6
D-71272 Renningen

Tel.: +49(0)7159-1637-0, Fax:+49 (0)7159/18417
www.thgeyer.de
sicherheitsdatenblaetter@thgeyer.de
- **Further information obtainable from:** Product management department
- **1.4 Emergency telephone number:**
National Poisons Information Service
(Birmingham Centre)
City Hospital
Dudley Road
Birmingham B18 7QH
Tel.:Emergency: (00 44) 87 06 00 62 66

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
-----

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.

(Contd. on page 2)

E

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 1)

Hazard pictograms


GHS05 GHS07

Signal word Danger

Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances
CAS No. Description

10025-69-1 Tin(II) chloride dihydrate

Identification number(s)
EC number: 231-868-0

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:

First aider needs to protect himself.

Immediately remove any clothing soiled by the product.

After inhalation:

Remove person from danger area.

Supply fresh air.

Call a doctor immediately.

After skin contact:

Flush contaminated skin with soap and plenty of water.

After prolonged contact or any signs of skin changes (redness or other signs of inflammation) seek medical attention.

take care of a Possibility of inhalation at the same time

After eye contact:

Protect unharmed eye.

Rinse out opened eye for several minutes under running water.

Call a doctor immediately.

After swallowing:

Rinse mouth thoroughly with water.

A person vomiting while laying on their back should be turned onto their side.

Seek medical treatment.

Information for doctor: Please observe safety data sheet/label.

4.2 Most important symptoms and effects, both acute and delayed

Cramp

Gastric or intestinal disorders

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 2)

Nausea

Risk of aspiration

- **Hazards**

- Danger of pulmonary oedema.

- Danger of gastric perforation.

- **4.3 Indication of any immediate medical attention and special treatment needed**

- Give Glucocorticoid-Aerosol in case of lung irritation.

- If necessary oxygen respiration treatment.

- Monitor circulation.

- If swallowed, gastric irrigation.

- Symptomatic treatment.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet.

- **5.2 Special hazards arising from the substance or mixture**

- Formation of toxic gases is possible during heating or in case of fire.

- In case of fire, the following can be released:

- Hydrogen chloride (HCl)

- Under certain fire conditions, traces of other toxic gases cannot be excluded.

- Ambient fire may liberate hazardous vapours.

- **5.3 Advice for firefighters**

- **Protective equipment:**

- Wear fully protective suit.

- Wear self-contained respiratory protective device.

- Do not inhale explosion gases or combustion gases.

- **Additional information**

- Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

- Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

- Ensure adequate ventilation.

- Avoid formation of dust.

- Use respiratory protective device against the effects of fumes/dust/aerosol.

- Do not inhale dust.

- Avoid contact with eyes and skin.

- **6.2 Environmental precautions:** Do not allow to enter sewers/surface or ground water.

- **6.3 Methods and material for containment and cleaning up:**

- Dispose of the material collected according to regulations.

- **6.4 Reference to other sections**

- See Section 7 for information on safe handling.

- See Section 8 for information on personal protection equipment.

- See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

- Store in cool, dry place in tightly closed receptacles.

- Keep away from heat and direct sunlight.

- Apply the general protection and hygiene measures for the handling with chemicals.

- **Information about fire - and explosion protection:**

- Substance itself does not burn, tuning measures to environment

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
 - Store away from oxidising agents.
 - Store away from water.
- **Further information about storage conditions:**
 - Protect from humidity and water.
 - Store in dry conditions.
- **Storage class:** 8 B
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

CAS: 10025-69-1 Tin(II) chloride dihydrate

WEL	Short-term value: 4 mg/m ³ Long-term value: 2 mg/m ³ as Sn
-----	--

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:**
 - Not necessary if room is well-ventilated.



Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

We do not currently have any information on suitable gloves.

However, according to experience, suitable materials are polychloroprene, nitrile rubber, butyl rubber, fluororubber and polyvinyl chloride suitable for protection against non-dissolved solids.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Safety glasses

(Contd. on page 5)

E

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 4)

· **Body protection:**

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

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form: Solid material

Colour: Colourless

· **Odour:** Characteristic

· **pH-value:** ~2 (100 g/l)

· **Change in condition**

Melting point/freezing point: 38 °C

Initial boiling point and boiling range: 623 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 2.71 g/cm³
Not determined.

· **Bulk density:** 1,250 kg/m³

· **Relative density:** Not determined.

· **Vapour density:** Not applicable.

· **Evaporation rate:** Not applicable.

· **Solubility in / Miscibility with water at 20 °C:** 2700 g/l

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability** Stable with proper storage and handling.

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** Reacts with oxidising agents.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 5)

- **10.4 Conditions to avoid** Protect from humidity.
- **10.5 Incompatible materials:** Avoid contact with other chemicals.
- **10.6 Hazardous decomposition products:**
Chlorine
Hydrogen chloride (HCl)

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

- **Acute toxicity**
Harmful if swallowed.

· LD/LC50 values relevant for classification:

Oral	LD50	700 mg/kg (rat)
------	------	-----------------

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes severe skin burns and eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity 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** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
Observe local (country-specific) regulations and laws
This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Chemicals must be disposed of in compliance with the respective national regulations.

(Contd. on page 7)

E

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017


Trade name: Tin(II) chloride dihydrate

(Contd. of page 6)

· European waste catalogue	
06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 03 00	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 99	wastes not otherwise specified
HP6	Acute Toxicity
HP8	Corrosive

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3260
· 14.2 UN proper shipping name · ADR · IMDG, IATA	3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate) CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) chloride dihydrate)
· 14.3 Transport hazard class(es) · ADR, IMDG, IATA	<div style="text-align: center;">  </div> · Class · Label
· 14.4 Packing group · ADR, IMDG, IATA	8 Corrosive substances. 8 III
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category	Warning: Corrosive substances. 30 F-A,S-B Acids A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (TIN(II) CHLORIDE DIHYDRATE), 8, III

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

revised on: 06.05.2021

Version number 4

Creation Date: 17.07.2017

Trade name: Tin(II) chloride dihydrate

(Contd. of page 7)

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Application, use and handling of our products take place out of our control and are solely your responsibility.

- **Department issuing SDS:** Product management
- **Contact:** Product management
- **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity - oral – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- *** Data compared to the previous version altered.**

E