SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

Tin(II) sulfate

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

1.1. Product identifier
   - Tin(II) sulfate

1.2. Relevant identified uses of the substance or mixture and uses advised against
   - Substances intended use: Chemical production, analytical chemistry, laboratory synthesis, industrial applications.
   - Substance uses advised against: The product should not be used in ways other than those referred to in Section 1.

1.3. Details of the supplier of the safety data sheet
   - Supplier: Ing. Petr Švec - PENTA s.r.o.
     - Address: Radiová 1122/1, Praha 10, 102 00 Czech Republic
     - Identification number (CRN): 02096013
     - VAT Reg No: CZ02096013
     - Phone: +420 226 060 681
     - E-mail: info@pentachemicals.eu
     - Web address: www.pentachemicals.eu

1.4. Emergency telephone number
   - European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
   - Classification of the substance in accordance with Regulation (EC) No 1272/2008
     - The substance is classified as dangerous.

     Skin Corr. 1, H314
     Skin Sens. 1, H317
     Acute Tox. 4, H332
     STOT SE 3, H335
     STOT RE 2, H373 (cardiovascular system)
     Aquatic Chronic 3, H412

   - Full text of all classifications and hazard statements is given in the section 16.

2.2. Most serious adverse effects on human health and the environment
   - May cause respiratory irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause damage to the cardiovascular system through prolonged or repeated exposure. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.
2.2. Label elements

Hazard pictogram

Signal word
Danger

Dangerous substance
Tin(II) sulphate
(EC: 231-302-2; CAS: 7488-55-3)

Hazard statements
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to cardiovascular system 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.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 doctor.

2.3. Other hazards
The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization
The substance specified below.

<table>
<thead>
<tr>
<th>Identification numbers</th>
<th>Substance name</th>
<th>Content in % weight</th>
<th>Classification according to Regulation (EC) No 1272/2008</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 7488-55-3</td>
<td><strong>substance main component</strong></td>
<td>&gt;96</td>
<td>Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319</td>
<td></td>
</tr>
<tr>
<td>EC: 231-302-2</td>
<td>Tin(II) sulphate</td>
<td></td>
<td>Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373 (cardiovascular system) Aquatic Chronic 3, H412</td>
<td></td>
</tr>
</tbody>
</table>

Full text of all classifications and hazard statements is given in the section 16.
SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse cautiously with water for several minutes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

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

If inhaled

Inhaling dust can cause corrosion of the breathing system. Cough, headache. May cause respiratory irritation.

If on skin

Causes severe skin burns. May cause an allergic skin reaction.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

- Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

- Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended
Tin(II) sulfate

5.3. Advice for firefighters
Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

6.2. Environmental precautions
Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up
Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

6.4. Reference to other sections
See the Section 7, 8 and 13.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Do not inhale dust. Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

7.3. Specific end use(s)
not available

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
8.2. Exposure controls
Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection
Protective goggles or face shield (based on the nature of the work performed).

Skin protection
Hand protection: Protective gloves resistant to the product (nitrile rubber). When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection
Half-mask with anti-dust filter when the exposition limits of substances are exceeded or in the location with insufficient ventilation.

Thermal hazard
Not available.

Environmental exposure controls
Observe usual measures for protection of the environment, see Section 6.2.
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
- Physical state: solid
- Colour: white
- Odour: without fragrance
- Melting point/freezing point: 378 °C
- Boiling point or initial boiling point and boiling range: data not available
- Flammability: data not available
- Lower and upper explosion limit: data not available
- Flash point: data not available
- Auto-ignition temperature: data not available
- Decomposition temperature: data not available
- pH: data not available
- Kinematic viscosity: data not available
- Solubility in water: soluble
- Partition coefficient n-octanol/water (log value): data not available
- Vapour pressure: data not available
- Density and/or relative density: 1.35 g/cm³

9.2. Other information
- not available

SECTION 10: Stability and reactivity

10.1. Reactivity
The substance is non-flammable.

10.2. Chemical stability
The product is stable under normal conditions.

10.3. Possibility of hazardous reactions
Unknown.

10.4. Conditions to avoid
The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials
Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products
Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
No toxicological data is available for the substance.

Acute toxicity
Harmful if inhaled.

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
May cause an allergic skin reaction.
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

Tin(II) sulfate

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.

Toxicity for specific target organ - single exposure
May cause respiratory irritation.

Toxicity for specific target organ - repeated exposure
May cause damage to cardiovascular system through prolonged or repeated exposure.

Aspiration hazard
Based on available data the classification criteria are not met.

11.2. Information on other hazards
Not available

SECTION 12: Ecological information

12.1. Toxicity
Acute toxicity
Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability
Not available

12.3. Bioaccumulative potential
Not available.

12.4. Mobility in soil
Not available.

12.5. Results of PBT and vPvB assessment
Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties
This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100. The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects
Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended

Tin(II) sulfate

SECTION 14: Transport information

14.1. UN number or ID number
UN 3260

14.2. UN proper shipping name
CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Tin(II) sulfate)

14.3. Transport hazard class(es)
8 Corrosive substances

14.4. Packing group
III - substances presenting low danger

14.5. Environmental hazards
not relevant

14.6. Special precautions for user
not available

14.7. Maritime transport in bulk according to IMO instruments
not relevant

Additional information

Hazard identification No.
80
UN number
3260
Classification code
C2
Safety signs
8

Air transport - ICAO/IATA
Packaging instructions passenger
860
Cargo packaging instructions
864

Marine transport - IMDG
EmS (emergency plan)
F-A, S-B

SECTION 15: Regulatory information

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

15.2. Chemical safety assessment
No chemical safety assessment has been performed for this substance.
No chemical safety assessment has been performed for this substance.
SAFETY DATA SHEET
according to Regulation (EC) No 1907/2006 (REACH) as amended
Tin(II) sulfate

Creation date 30th September 2019
Revision date 05th May 2022
Version 2.0

No chemical safety assessment has been performed for this substance.

SECTION 16: Other information
A list of standard risk phrases used in the safety data sheet
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to cardiovascular system through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves.
P301+P330+P31 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 doctor.

Other important information about human health protection
The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1.
The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet
ADR European agreement concerning the international carriage of dangerous goods by road
BCF Bioconcentration Factor
CAS Chemical Abstracts Service
CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EINECS European Inventory of Existing Commercial Chemical Substances
EmS Emergency plan
ES Identification code for each substance listed in EINECS
EU European Union
<table>
<thead>
<tr>
<th><strong>SAFETY DATA SHEET</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>according to Regulation (EC) No 1907/2006 (REACH) as amended</td>
</tr>
<tr>
<td><strong>Tin(II) sulfate</strong></td>
</tr>
<tr>
<td><strong>Creation date</strong></td>
</tr>
<tr>
<td><strong>Revision date</strong></td>
</tr>
<tr>
<td><strong>Version</strong></td>
</tr>
</tbody>
</table>

**EuPCS**
- European Product Categorisation System

**IATA**
- International Air Transport Association

**IBC**
- International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals

**ICAO**
- International Civil Aviation Organization

**IMDG**
- International Maritime Dangerous Goods

**INCI**
- International Nomenclature of Cosmetic Ingredients

**ISO**
- International Organization for Standardization

**IUPAC**
- International Union of Pure and Applied Chemistry

**log Kow**
- Octanol-water partition coefficient

**MARPOL**
- International Convention for the Prevention of Pollution from Ships

**OEL**
- Occupational Exposure Limits

**PBT**
- Persistent, Bioaccumulative and Toxic

**ppm**
- Parts per million

**REACH**
- Registration, Evaluation, Authorisation and Restriction of Chemicals

**RID**
- Agreement on the transport of dangerous goods by rail

**UN**
- Four-figure identification number of the substance or article taken from the UN Model Regulations

**UVCB**
- Substances of unknown or variable composition, complex reaction products or biological materials

**VOC**
- Volatile organic compounds

**vPvB**
- Very Persistent and very Bioaccumulative

Acute Tox.
- Acute toxicity

Aquatic Chronic
- Hazardous to the aquatic environment (chronic)

Eye Irrit.
- Eye irritation

Skin Corr.
- Skin corrosion

Skin Irrit.
- Skin irritation

Skin Sens.
- Skin sensitization

STOT RE
- Specific target organ toxicity - repeated exposure

STOT SE
- Specific target organ toxicity - single exposure

**Training guidelines**

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

**Recommended restrictions of use**

not available

**Information about data sources used to compile the Safety Data Sheet**


**More information**

Classification procedure - calculation method.

**Statement**

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.