

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

Printing date 11.01.2024

Revision: 11.01.2024

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

- **Product identifier**
- **Trade name:** SUR TIN Part 3
- **Article number:** 74130-3
- **CAS Number:**
62-56-6
- **EINECS Number:**
200-543-5
- **Index number:**
612-082-00-0
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Basic chemical (without special defined application)
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bungard Elektronik GmbH & Co. KG
Rilkestraße 1
D - 51570 Windeck Tel.: +49/2292/92828-0

- E-mail: info@bungard.de
- **Emergency telephone number:**
Poison Control Center, Mainz
Tel. 00 49 / 61 31 / 19 240

* 2 Hazards identification

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

Carc. 2	H351	Suspected of causing cancer.
Repr. 2	H361d	Suspected of damaging the unborn child.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.
Acute Tox. 4	H302	Harmful if swallowed.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Xn; Harmful	R63-22-40: Possible risk of harm to the unborn child. Harmful if swallowed. Limited evidence of a carcinogenic effect.	
N; Dangerous for the environment	R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Carc. Cat. 3, Repr. Cat. 3		
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**

GHS07 GHS08 GHS09
- **Signal word** Warning
- **Hazard statements**
H302 Harmful if swallowed.

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*H351 Suspected of causing cancer.**H361d Suspected of damaging the unborn child.**H411 Toxic to aquatic life with long lasting effects.***- Precautionary statements***P281 Use personal protective equipment as required.**P273 Avoid release to the environment.**P264 Wash thoroughly after handling.**P270 Do not eat, drink or smoke when using this product.**P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.**P308+P313 IF exposed or concerned: Get medical advice/attention.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***- Other hazards****- Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Substances**- CAS No. Designation:**

62-56-6 thiourea

- Identification no(s):**- EINECS no.:** 200-543-5**- Index number:** 612-082-00-0

4 First aid measures

- Description of first aid measures**- General advice:** Instantly remove any clothing soiled by the product.**- After inhalation**

Provide fresh-air circulation. If symptoms continue, consult a doctor. In case of respiratory failure or breathing irregularities, commence resuscitation or oxygen inhalation and immediately consult a doctor. In case of unconsciousness, place and transport the patient in a recovery position.

After inhaling the product-dust, breathe in plenty of fresh air.

Consult a doctor.

- After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, seek medical advice.

- After eye contact Rinse immediately opened eye for several minutes under running water. Then consult doctor.**- After swallowing**

Immediately induce vomiting. If possible, give plenty of water (if the patient is fully conscious)

- Information for doctor

After swallowing, remove material as far as possible by vomiting, if necessary gastric lavage under the usual safety rules. In case of suspicion of chronic exposure, observe the thyroid function and the blood count.

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- Most important symptoms and effects, both acute and delayed

The chronic uptake leads to the disorder of thyroid function with the inhibition of thyroxine formation. In addition, damage to the bone marrow with anemia, leukopenia and thrombocytopenia are described. Thiourea can also cause allergic skin symptoms.

5 Firefighting measures

- Extinguishing media

- **Suitable extinguishing agents** Pulverlöscher oder Wasser im Sprühstrahl.

- Special hazards arising from the substance or mixture

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

Can be released in case of fire:

Nitrogen oxides (NOx)

Sulphur dioxide (SO₂)

- Advice for firefighters

- **Protective equipment:** Wear full protective suit with self-contained breathing apparatus.

- **Additional information** Endangered containers in the surrounding area should be cooled with a water-hose.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Avoid causing dust.

- Environmental precautions:

Damp down dust with water spray jet.

If large amounts are released, the authorities must be informed.

- Methods and material for containment and cleaning up:

Pick up mechanically and rinse the remainder with water. Avoid dust development. Place in suitable container and send to be recycled or disposed (taking item 13 into account).

- Reference to other sections

See Section 8 for information on personal protection equipment.

7 Handling and storage

- Handling

- **Precautions for safe handling** Prevent formation of dust.

- Information about protection against explosions and fires:

Organic solids: dust can form an explosive mixture with air.

- Conditions for safe storage, including any incompatibilities

- **Storage** Keep containers tightly closed. Store in cool, dry conditions.

- Requirements to be met by storerooms and containers:

Keep container tightly closed and dry

Observe official regulations on storage and handling of water hazardous substances

- **Information about storage in one common storage facility:** Avoid contact with oxidizing materials

vermeiden - **Further information about storage conditions:** Protect from humidity and keep away from water.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** In case of dust development, suction is needed.

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- **Control parameters**
- **Components with critical values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 Keep away from food, beverages and fodder.
 Wash hands during breaks and at the end of the work.
 Avoid contact with the eyes and skin.
 Do not inhale dust. Prevent formation of dust.
- **Breathing equipment:**
 Bei kurzzeitiger oder geringer Belastung Atemfiltergerät (Feinstaubfilter ST/Schutzstufe II b) verwenden, bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.
- **Protection of hands:**
 Protective gloves.
 Preventive skin protection required. After work, clean hands with a lot of water and soap, then use skin protection cream.
- **Material of gloves**
 Butyl rubber, BR
 Natural rubber, NR
 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:** Tightly sealed goggles
- **Body protection:**
 Standard protective working clothes
 Use a neck protection and a head cover for larger dust.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Crystalline
Colour:	Colourless
Smell:	Odourless
- **Change in condition**

Melting point/Melting range:	ca. 173 - 177°C
Boiling point/Boiling range:	Not determined
- **Flash point:** Product is non-flammable nor potentially explosive
- **Inflammability (solid, gaseous)** Product is not inflammable.
- **Ignition temperature:** 440°C
- **Decomposition temperature:** bei Schmelztem. °C

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- Danger of explosion:	Product is not approx. potentially explosive. Organic solids: dust can form an explosive mixture with air.
- Density at 20°C	1.405 g/cm ³
- Settled apparent density at 20°C	ca. 670 kg/m ³
- Solubility in / Miscibility with Water at 20°C:	136 g/l

10 Stability and reactivity

- Reactivity

- Chemical stability

- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

On heating above the melting point and on contact with strong oxidizing agents (oxidizing agents), decomposition occurs under sulfur and sulfur dioxide deposition. On heating to about 150-160 ° C., partial conversion to ammonium rhodanide takes place. Upon contact with acrylaldehyde, it spontaneously initiates its violent, exothermic polymerization. The peroxide produced with hydrogen peroxide in acidic solution can decompose explosively during the drying process.

- Possibility of hazardous reactions s.o.

- Incompatible materials: Oxidizing substances -

Hazardous decomposition products: s.o.

11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

Oral	LD50	1750 mg/kg (rat)
Dermal	LD50	2800 mg/kg (rbt)

- Primary irritant effect:

- **on the skin:** No irritant effect.

- **on the eye:** No irritant effect.

- **Sensitization:** No sensitizing effect known.

- **Subacute to chronic toxicity:** Thiourea inhibits thyroid function in humans and animals -

Additional toxicological information:

Suspected of carcinogenic and fetus damaging effect:

Legal classification: carcinogenic Category 3, fatal (developmental) Category 3

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carc. Cat. 3, Repr. Cat. 3

12 Ecological information

- Toxicity

- Aquatic toxicity:

EC 50 / 24 h	110 mg/l (Daphnia magna)
EC 50 / 96 h	6.8 mg/l (Scenedesmus subspicatus)

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LC 50 / 48 h > 10 mg/l (*Leuciscus idus*)

- **Persistence and degradability** Heavily biodegradable
- **Ecotoxic effects:**
- **Respiratory inhibition of communal activated sludge EC 20 (mg/l according to ISO 8192 B):**
EC 10 (*Pseudomonas putida*) 1265 mg/l
- **Additional ecological information:**
- **General notes:**
Also poisonous for fish and plankton in water bodies.
Danger to drinking water if even small quantities leak into soil.
Water hazard class 2 (Assessment by list): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

13 Disposal considerations

- **Waste treatment methods**
The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Must be specially treated under adherence to official regulations.
- **Uncleaned packagings:** Disposal must be made according to official regulations.
- **Recommendation:** Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

*14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
- **ADR/RID-GGVS/E Class:** 9 (M7) Miscellaneous dangerous substances and articles.
- **Kemler Number:** 90
- **UN-Number:** 3077
- **Packaging group:** III
- **Label** 9
- **Special marking:** Symbol (fish and tree)
- **UN proper shipping name:** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)
- **Maritime transport IMDG/GGVSea:**
- **IMDG/GGVSea Class:** 9
- **UN Number:** 3077
- **Label** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** Symbol (fish and tree)
- **Correct technical name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3077
- **Label** 9

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- **Special marking:** Symbol (fish and tree)
- **Packaging group:** III
- **Correct technical name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (thiourea)
- **UN "Model Regulation":** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III
- **Special precautions for user** Warning: Miscellaneous dangerous substances and articles.

*15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
I	50-100

- **Water hazard class:** Water hazard class 2 (Assessment by list): hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** see item 1: Informing departement
- **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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

ISO: International Organization for Standardization

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

- *** Data compared to the previous version altered.**