Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

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SECTION 1: Identification of the article and of the company:

· **1.1 Product identifier**

· **Trade name: Tin Bronzes**

· **UFI:** Y110-801U-X00K-S53Y

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **Use of the substance / mixture:** Production of castings

· **1.3 Supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Wieland Recycling GmbH
Daimlerstraße 20
89079 Ulm (Germany)
Phone.:+49 731 944 1700
Email: info@wieland-recycling.com

· **Further information obtainable from:**
Wieland-Werke AG
ESG Affairs
Dr. Stefan Priggemeyer
Graf-Arco-Str. 36
89079 Ulm (Germany)
Email: stefan.priggemeyer@wieland.com

· **1.4 Emergency number** Phone:+49 731 944 2794 (Monday - Friday from 8 a.m. to 4 p.m.)

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008:**

health hazard

Carc. 2	H351	Suspected of causing cancer. Route of exposure: Inhalation.
Repr. 1A	H360FD-H362	May damage fertility. May damage the unborn child. May cause harm to breast-fed children.
STOT RE 2	H373	May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

Skin Sens. 1	H317	May cause an allergic skin reaction.

(Contd. on page 2)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 1)

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008:**
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms:** GHS07, GHS08
· **Signal word:** Danger

· **Hazard-determining components of labelling:**
nickel
lead

· **Hazard statements:**

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer. Route of exposure: Inhalation.
H360FD-H362	May damage fertility. May damage the unborn child. May cause harm to breast-fed children.
H373	May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

· **Precautionary statements**

P260	Do not breathe dusts or mists.
P263	Avoid contact during pregnancy and while nursing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable to metals
· **vPvB:** Not applicable to metals.

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SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· **Description:** Metal in compact form.

· **Hazardous ingredients:**

CAS: 7439-92-1 lead max. 2.5%
EINECS: 231-100-4 Repr. 1A, H360FD-H362

CAS: 7440-02-0 nickel max. 2.5%
EINECS: 231-111-4 Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317

· **Non-hazardous components:**

CAS: 7440-50-8 copper Balance%
EINECS: 231-159-6

(Contd. on page 3)

Safety Data Sheet
based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 2)

CAS: 7440-31-5 tin max. 13%
EINECS: 231-141-8
CAS: 7440-66-6 zinc max. 2%
EINECS: 231-175-3
CAS: 7440-36-0 antimony max. 0.2%
EINECS: 231-146-5
· **SVHC**
7439-92-1 lead

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**
First Aid information refer to any dust which is generated.
The mixture in solid form does not pose any health hazard. However, melting or activities which produce metal dust, smoke or fumes can cause that metal dust enter the body in harmful amounts.

· **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** Rinse out mouth and then drink plenty of water.

· **4.2 Most important symptoms and effects, both acute and delayed:**
No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture:**
No further relevant information available.

· **5.3 Advice for firefighters:** No special measures required.
· **Protective equipment:**
No special measures required.
Mouth respiratory protective device.

(Contd. on page 4)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 3)

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures:** Not required.

· **6.2 Environmental precautions:** No special requirements.

· **6.3 Methods and material for containment and cleaning up:**
Collect the material and if necessary dispose it as waste according to section 13.

· **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:** No special requirements.
· **Information about fire - and explosion protection:** No special requirements.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Further information about storage conditions:** Store in dry conditions.

· **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:**

7440-31-5 tin

MAK (Germany)	vgl.Abschn.IIb

7439-92-1 lead

MAK (Germany)	vgl.Abschn.XII
BOELV (EU)	Long-term value: 0.15 mg/m³ as Pb

7440-02-0 nickel

AGW (Germany)	Long-term value: 0.006A; 0.030E* mg/m³ 8(II);AGS, 24, Sh, Y, 10*, 31*

· **Regulatory information**
MAK (Germany): MAK- und BAT-Liste
BOELV (EU): EU 2022/431
AGW (Germany): TRGS 900

(Contd. on page 5)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 4)

· **Ingredients with biological limit values:**

7439-92-1 lead

BLV (Germany) 150 µg/l
Test material: Blood
Parameter: Lead
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· **Additional information:**
The lists valid during the making were used as basis. Compare measures in TRGS 505 (lead).

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale dust / smoke / mist.
· **Respiratory protection:** Use a suitable industrial gas mask when work-place-limits are exceeded.
· **Protection of hands:**

Protective gloves

· **Material of gloves:** Neoprene or leather gloves
· **Eye protection:** Tightly sealed goggles (EN 166)
· **Body protection:** Protective clothing

SECTION 9: Physical and chemical properties

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

Form:	Solid
Colour:	Copper red
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.

· **Change in condition**

Melting point/freezing point:	>840 °C
Initial boiling point and boiling range:	Undetermined.
· **Flash point:**	Not applicable.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Density at 20 °C:**	8.8 g/cm³

(Contd. on page 6)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 5)

· **Solubility in / Miscibility with water:**	Not soluble.
· **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:**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions:** No dangerous reactions known.

· **10.4 Conditions to avoid:** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **Primary irritant effect**
· **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation:**
May cause an allergic skin reaction.

· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):**
· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:**
Suspected of causing cancer. Route of exposure: Inhalation.

· **Reproductive toxicity:**
May damage fertility. May damage the unborn child. May cause harm to breast-fed children.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:**
May cause damage to the respiratory system through prolonged or repeated exposure. Route of exposure: Inhalation.

(Contd. on page 7)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 6)

· **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.
· **General notes:** Castings are not soluble in water

· **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**
· **Recommendation:** Contact manufacturer for recycling information.

SECTION 14: Transport information

· **14.1 UN-Number** · **ADR, ADN, IMDG, IATA**	Void
· **14.2 UN proper shipping name** · **ADR, ADN, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)** · **ADR, ADN, IMDG, IATA** · **Class**	Void
· **14.4 Packing group** · **ADR, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	Not applicable.
· **14.6 Special precautions for user:**	Not applicable.
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**	Not applicable.

(Contd. on page 8)

Safety Data Sheet

based upon Regulation (EC) No. 1907/2006, article 31

Printing date 04.12.2023 Version - No. 6 Revision: 04.12.2023

Trade name: Tin Bronzes

(Contd. of page 7)

· **UN "Model Regulation":** Void

SECTION 15: Regulatory information

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

· **Chemical safety assessment:** A chemical safety assessment was not carried out.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Waterhazard class:** Generally not hazardous for water

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**
7439-92-1 lead

SECTION 16: Other information

· **Contact:**
Dr. Stefan Priggemeyer
Phone: +49 731 944 2794
Email: stefan.priggemeyer@wieland.com

· **Abbreviations and acronyms:**
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
Repr. 1A: Reproductive toxicity – Category 1A
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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