

Trade name: Tin Bronze Ingots

Current version : 4.0.0, issued: 21.03.2024

Replaced version: 3.0.0, issued: 27.07.2018

Region: GB

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

1.1 Product identifier

Trade name

Tin Bronze Ingots

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

Relevant identified uses of the substance or mixture

Metal working

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

F.W. Hempel Legierungsmetall GmbH

Erlenstraße 71

D-46149 Oberhausen

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Advice on Safety Data Sheet

o.mai@legierungsmetall.de

1.4 Emergency telephone number

+49 (0) 208 66 70 16 (from 7 am to 5.30 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Carc. 2; H351

Lact.; H362

Repr. 1A; H360

Skin Sens. 1; H317

STOT RE 2; H373

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label:

nickel

lead massive [particle diameter \geq 1 mm]

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Hazard statement(s)

H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H360 May damage fertility or the unborn child
 H362 May cause harm to breast-fed children.
 H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P201 Obtain special instructions before use.
 P260 Do not breathe dust.
 P263 Avoid contact during pregnancy and while nursing.
 P280 Wear protective gloves/protective clothing/eye protection.
 P308+P313 IF exposed or concerned: Get medical advice/attention.

Supplemental label elements

"Restricted to professional users"

Labelling information

In the form in which it is marketed, the product causes no danger to health for humans through inhalation, swallowing or contact with the skin. There is therefore no obligation to label the product in accordance with:

- regulation 1272/2008 (CLP: annex I; 1.3.4.: "Metals in massive form, alloys, mixtures containing polymers, mixtures containing elastomers).

2.3 Other hazards

PBT assessment

The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

vPvB assessment

The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name	Classification (EC) 1272/2008 (CLP)	Additional information Concentration	%
1	nickel			
	7440-02-0 231-111-4 028-002-00-7 -	Carc. 2; H351 Skin Sens. 1; H317 STOT RE 1; H372**	< 2.50	wt%
2	lead massive [particle diameter ≥ 1 mm]			
	7439-92-1 231-100-4 082-014-00-7 -	Lact.; H362 Repr. 1A; H360FD	< 2.50	wt%
3	copper			
	7440-50-8 231-159-6 - -	-	>= 70.00 - < 90.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(* , ** , *** , ****) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	S, 7	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

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3.3 Other information

The substance or substances in this product meets / meet the criteria for the exemption from registration according to REACH Art. 2 No. 7d (substances recovered in the community)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

No particular safety measures required because of the compact product form. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation

Not relevant due to the compact form of the product.

After skin contact

Consult a doctor if skin irritation persists.

After eye contact

No special measures necessary.

After ingestion

Unlikely, due to the compact form of the product.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

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

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

No special measures necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No special measures necessary.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

No special measures necessary.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations".

6.4 Reference to other sections

Information regarding waste disposal, see section 13. Information regarding personal protective measures, see section 8. Information regarding safe handling, see section 7.

SECTION 7: Handling and storage

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7.1 Precautions for safe handling

Advice on safe handling

During thermal processing and/or machining exhaust ventilation at processing machines is necessary.

General protective and hygiene measures

Do not inhale vapours or dust. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Keep away from foodstuffs and beverages. Avoid contact with skin.

Advice on protection against fire and explosion

No special measures necessary.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in a dry place.

Requirements for storage rooms and vessels

No special measures required.

Incompatible products

Do not store together with: Acids

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	copper	7440-50-8	231-159-6
List of approved workplace exposure limits (WELs) / EH40			
Copper			
fume			
	WEL long-term (8-hr TWA reference period)	0.2	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
Copper			
dusts and mists			
Cu			
	WEL short-term (15 min reference period)	2	mg/m ³
	WEL long-term (8-hr TWA reference period)	1	mg/m ³
2	nickel	7440-02-0	231-111-4
List of approved workplace exposure limits (WELs) / EH40			
Nickel & its inorganic compounds (except nickel tetracarbonyl): water soluble nickel compounds (as Ni)			
	WEL long-term (8-hr TWA reference period)	0.1	mg/m ³
	Comments	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)	
List of approved workplace exposure limits (WELs) / EH40			
Nickel & water insoluble compounds nickel compounds (as Ni)			
	WEL long-term (8-hr TWA reference period)	0.5	mg/m ³
	Comments	Sk, Carc (nickel oxides and sulphides) Sen (nickel sulphate)	
3	lead massive [particle diameter ≥ 1 mm]	7439-92-1	231-100-4
98/24/EG			
Inorganic lead and its compounds			
	WEL long-term (8-hr TWA reference period)	0.15	mg/m ³
2022/431/EC			
Inorganic lead and its compounds			
	WEL long-term (8-hr TWA reference period)	0.15	mg/m ³

8.2 Exposure controls

Appropriate engineering controls

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No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Use protective gloves (DIN EN 374).

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
solid	
Form	
solid	
Colour	
red-brown; golden yellow	
Odour	
odourless	
pH value	
No data available	
Boiling point / boiling range	
Value	> 2000 °C
Melting point/freezing point	
Value	800 - 1050 °C
Decomposition temperature	
No data available	
Flash point	
Not applicable	
Ignition temperature	
No data available	
Explosive properties	
Not applicable	
Flammability	
No data available	
Lower explosion limit	
No data available	
Upper explosion limit	
No data available	
Vapour pressure	
Not applicable	
Relative vapour density	
No data available	

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Relative density			
No data available			
Density			
Value	8.7	-	8.9 g/cm ³
Reference temperature			20 °C
Bulk density			
Value	2500	-	3000 kg/m ³
Reference temperature			20 °C
Solubility in water			
Comments	essentially insoluble		
Solubility			
No data available			
Partition coefficient n-octanol/water (log value)			
No data available			
Kinematic viscosity			
No data available			
Particle characteristics			
No data available			

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable up to melting point.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

None, if handled according to intended use.

10.5 Incompatible materials

strong acids

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

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

Acute oral toxicity
No data available
Acute dermal toxicity
No data available
Acute inhalational toxicity
No data available
Skin corrosion/irritation
No data available
Serious eye damage/irritation

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No data available
Respiratory or skin sensitisation
No data available
Germ cell mutagenicity
No data available
Reproduction toxicity
No data available
Carcinogenicity
No data available
STOT - single exposure
No data available
STOT - repeated exposure
No data available
Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available
Toxicity to fish (chronic)
No data available
Toxicity to Daphnia (acute)
No data available
Toxicity to Daphnia (chronic)
No data available
Toxicity to algae (acute)
No data available
Toxicity to algae (chronic)
No data available
Bacteria toxicity
No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

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vPvB assessment

The study does not need to be conducted according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2 UN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3 Transport hazard class(es)

Not classified as dangerous in the meaning of transport regulations.

14.4 Packing group

Not classified as dangerous in the meaning of transport regulations.

14.5 Environmental hazards

Not classified as dangerous in the meaning of transport regulations.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

The product contains following substance(s) meeting the criteria in Article 57 in association with Article 59 of the REACH regulation ((EC) 1907/2006) that are placed on the list of candidates considered for inclusion in annex XIV (substances subject to Authorisation).

No	Substance name	CAS no.	EC no.
1	lead massive [particle diameter ≥ 1 mm]	7439-92-1	231-100-4

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Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	copper	7440-50-8	231-159-6	75
2	lead massive [particle diameter ≥ 1 mm]	7439-92-1	231-100-4	30, 63, 72, 75
3	nickel	7440-02-0	231-111-4	27, 75
4	tin	7440-31-5	231-141-8	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H360FD

May damage fertility. May damage the unborn child.

H372

Causes damage to organs through prolonged or repeated exposure.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

S

This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1). This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).

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Alloys containing nickel are classified for skin sensitisation when the release rate of 0.5 μg Ni/cm²/week, as measured by the European Standard reference test method EN 1811, is exceeded.

Creation of the safety data sheet

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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.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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