

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

**1 Identification**

- **1.1 Product identifier**
- Trade name: **Wieland-ZB4**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- Application of the article: Semi-finished product
- **1.3 Details of the supplier of the safety data sheet**
- Manufacturer/Supplier:  
Wieland-Werke AG  
Graf-Arco-Str. 36  
89079 Ulm
- Information department:  
Associations & Management Systems  
stefan.priggemeyer@wieland.com
- **1.4 Emergency telephone number:** +49 731 944 2794 (Monday - Friday from 9 a.m. to 4 p.m.)

**2 Hazard(s) identification**

- **2.1 Classification of the substance or mixture**
- Classification according to Regulation (EC) No 1272/2008 (CLP-Regulation):  
The product is not classified, according to the CLP regulation.
- **2.2 Label elements**
- Labelling according to Regulation (EC) No 1272/2008: Void
- Hazard pictograms: Void
- Signal word: Void
- Hazard-determining components of labeling: Void
- Hazard statements: Void
- **2.3 Other hazards**
- Semi-finished products from copper or copper-alloys, as offered for sale as manufactured present no health hazard to man or for the aquatic environment.
- Results of PBT and vPvB assessment
- PBT: Not applicable to metals.
- vPvB: Not applicable to metals.

**3 Composition/information on ingredients**

- Description: Metal in compact form.
- Material Code (CEN/TS 13388): CuZn36Pb3
- Material number (CEN/TS 13388): CW603N
- UNS-number: C36000
- Information:  
The classifications listed below reflect the classification of the relevant alloying constituents and are only for information.  
Mentioned percentages are references values.
- Components:

CAS: 7440-50-8	copper	60.0-62.0%
EINECS: 231-159-6		
RTECS: GL 5325000		

(Contd. on page 2)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

Trade name: **Wieland-ZB4**

		(Contd. of page 1)
CAS: 7440-66-6 EINECS: 231-175-3 RTECS: ZG 8600000	zinc	Balance%
CAS: 7439-92-1 EINECS: 231-100-4 RTECS: OF 7525000	lead ☠ Carc. 2, H351; Repr. 1A, H360	2.5-3.5%
CAS: 7440-02-0 EINECS: 231-111-4	nickel ☠ Carc. 2, H351; STOT RE 1, H372; ☠ Skin Sens. 1, H317	max.0,3%

**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 significant 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.

**5 Fire-fighting measures**

· **5.1 Extinguishing media**

· Suitable extinguishing agents: Non-flammable. Use fire fighting measures that suit the environment.

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

· **5.3 Advice for firefighters**

· Protective equipment: No special measures required.

**6 Accidental release measures**

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

· **6.2 Environmental precautions:** Not required

(Contd. on page 3)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

Trade name: **Wieland-ZB4**

(Contd. of page 2)

- **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.

**7 Handling and storage**

- **7.1 Precautions for safe handling:** No special measures required.
- **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.

**8 Exposure controls/personal protection**

- Additional information about design of technical systems: No further data; see item 7.
- **8.1 Control parameters**
- Components with limit values that require monitoring at the workplace:  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

**7439-92-1 lead**

PEL	Long-term value: 0.05* mg/m <sup>3</sup> *see 29 CFR 1910.1025
REL	Long-term value: 0.05* mg/m <sup>3</sup> *8-hr TWA ;See PocketGuide App.C
TLV	Long-term value: 0.05* mg/m <sup>3</sup> *and inorganic compounds, as Pb; BEI

- Ingredients with biological limit values:

**7439-92-1 lead**

BEI	30 µg/100 ml Medium: blood Time: not critical Parameter: Lead
	10 µg/100 ml Medium: blood Time: not critical Parameter: Lead (women of child bearing potential)

- Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 4)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

**Trade name: Wieland-ZB4**

(Contd. of page 3)

**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.
- Breathing equipment: Use a suitable industrial gas mask when work-place-limits are exceeded.
- Protection of hands:  
Protective gloves are recommended, depending upon how the semis are further processed.
- Material of gloves neoprene or leather
- Eye protection:  
Protective goggles are recommended, depending upon how the semis are further processed.
- Body protection:  
Wear suitable protective clothing, depending upon how the semis are further processed.

**9 Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

- General Information
- Appearance:
 

Form:	Solid
Color:	Brass yellow
Odor:	Odorless
Odor threshold:	Not determined.
- Change in condition
 

Melting point/Melting range:	885-900 °C (1625-1652 °F) (Lit.)
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20 °C (68 °F):	8.5 g/cm <sup>3</sup> (70.9325 lbs/gal) (Lit.)
Solvent content:	
VOC content:	0.00 %

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

**10 Stability and reactivity**

- **10.1 Reactivity:** Not applicable.
- **10.2 Chemical stability:** Not applicable.
- 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.

(Contd. on page 5)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

**Trade name: Wieland-ZB4**

(Contd. of page 4)

- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

- **General information:**  
The solid product does not pose a health hazard if handled properly.
- Effect on the skin: No effects.
- Effect on eyes: No effects.
- Sensitization: Due to the nickel content avoid direct and prolonged skin contact.

**12 Ecological information**

- **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:** Semi-finished articles from copper and copper-alloys are not soluble in water.
- **12.5 Results of PBT and vPvB assessment**
- PBT: Not applicable to metals.
- vPvB: Not applicable to metals.
- **12.6 Other adverse effects:** No further relevant information available.

**13 Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation:**  
Contact manufacturer for recycling information.
- **Waste disposal key:**  
12 01 03: Non-ferrous metal fillings and turnings  
16 01 18: Non-ferrous metal  
for non-contaminated waste

**14 Transport information**

- |                                       |      |
|---------------------------------------|------|
| · <b>14.1 UN-Number</b>               | Void |
| · DOT, ADR, ADN, IMDG, IATA           |      |
| · <b>14.2 UN proper shipping name</b> | Void |
| · DOT, ADR, ADN, IMDG, IATA           |      |

(Contd. on page 6)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

**Trade name: Wieland-ZB4**

(Contd. of page 5)

· **14.3 Transport hazard class(es)**

· DOT, ADR, ADN, IMDG, IATA  
· Class Void

· **14.4 Packing group**

· DOT, ADR, IMDG, IATA Void

· **14.5 Environmental hazards:**

· Marine pollutant: No

· **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.

**15 Regulatory information**

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

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· TSCA (Toxic Substances Control Act):

7440-50-8	copper	ACTIVE
7440-66-6	zinc	ACTIVE
7439-92-1	lead	ACTIVE
7440-02-0	nickel	ACTIVE

· Hazardous Air Pollutants:

7439-92-1	lead
-----------	------

· Proposition 65

· Chemicals known to cause cancer:

7439-92-1	lead
7440-02-0	nickel

· Chemicals known to cause reproductive toxicity for females:

7439-92-1	lead
-----------	------

· Chemicals known to cause reproductive toxicity for males:

7439-92-1	lead
-----------	------

· Chemicals known to cause developmental toxicity:

7439-92-1	lead
-----------	------

(Contd. on page 7)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 06/23/2021

Version - No. 9

Reviewed on 06/16/2021

**Trade name: Wieland-ZB4**

(Contd. of page 6)

· Cancerogenity categories

· EPA (Environmental Protection Agency):

7440-50-8	copper	D
7440-66-6	zinc	D, I, II
7439-92-1	lead	B2

· TLV (Threshold Limit Value established by ACGIH):

7439-92-1	lead	A3
7440-02-0	nickel	A5

· NIOSH-Ca (National Institute for Occupational Safety and Health):

7440-02-0	nickel	
-----------	--------	--

· Chemical safety assessment: Void.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific article features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Associations & Management Systems

· Contact:

Dr. Stefan Priggemeyer

Phone +49 731 944 2794

· \* Data compared to the previous version altered.