

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

· Product identifier

- Trade name: **Wieland S23**
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation: Semi-finished product

· Details of the supplier of the safety data sheet

- Manufacturer/Supplier:
Wieland-Werke AG
Graf-Arco-Straße 36
89079 Ulm (Germany)
Tel.: +49 (0)731/944-0
Fax: +49 (0)731/944-2799
- Information department:
Department testing laboratories
michael.ebner@wieland.de
- Emergency telephone number:
Factory security offices
Phone: +49 (0) 731-944-3706

2 Hazards identification

· Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008 (CLP-Regulation):
For products there is no obligation to classify acc. to CLP -Regulation.
The product is not classified according to the CLP regulation.

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- Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable.
 - Information concerning particular hazards for human and environment:
The product does not have to be labelled due to the calculation procedure of international guidelines.
 - Classification system: Not applicable

· Label elements

- Labelling according to Regulation (EC) No 1272/2008: Void
- Hazard pictograms: Void
- Signal word: Void

- Hazard-determining components of labelling: Void
- Hazard statements: Void

· 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

· Chemical characterization: Mixtures

- Description: Metal in compact form.
- UNS-number: C68800
- Information:

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The classifications mentioned below reflect the respective pure substance and are for information only.

Copper alloys are special preparations according to Regulation (EC) 1907/2006 (REACH Regulation).

The classification of a pure substance is not applicable to its use as element of a copper alloy.

· Components:		
CAS: 7440-50-8 EINECS: 231-159-6 RTECS: GL 5325000	copper	72.0-75.0%
CAS: 7429-90-5 EINECS: 231-072-3 RTECS: BD 0330000	aluminium	3.0-3.8%
CAS: 7440-48-4 EINECS: 231-158-0 RTECS: GF 8750000	cobalt ⚠ Resp. Sens. 1, H334; ⚠ Skin Sens. 1, H317; Aquatic Chronic 4, H413	0.25-0.55%
· CAS: 7440-66-6 EINECS: 231-175-3 RTECS: ZG 8600000	zinc	balance%

4 First aid measures

· Description of first aid measures

· General information:

No special measures required.

First Aid information refer to any dust which is generated.

· 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.

· Information for doctor:

· Most important symptoms and effects, both acute and delayed:

No further relevant information available.

· Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Firefighting measures

· Extinguishing media

· Suitable extinguishing agents:

Non-flammable. Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture

No further relevant information available.

· Advice for firefighters

· Protective equipment: No special measures required.

6 Accidental release measures

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

· **Environmental precautions:** Not required

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- **Methods and material for containment and cleaning up:**
Dispose of the collected material according to regulations.
- **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

- **Handling:**
 - Precautions for safe handling: No special measures required.
 - Information about protection against explosions and fires: No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - Storage:
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Further information about storage conditions: None.
 - **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.
- **Control parameters**

- Components with limit values that require monitoring at the workplace:

7440-50-8 copper

PEL	1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL	1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV	1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu

7429-90-5 aluminium

PEL	15* 5** mg/m ³ *total dust **respirable fraction
REL	10* 5** mg/m ³ Metal *total dust **respirable fraction
TLV	1* mg/m ³ *as respirable fraction

- Additional Occupational Exposure Limit Values for possible hazards during processing:

1314-13-2 zinc oxide

PEL	15* 5** 5*** mg/m ³ *total dust **respirable dust ***fume
REL	Short-term value: C 15* 10** mg/m ³ Long-term value: 5* 5** mg/m ³ *dust only **fume
TLV	Short-term value: 10* mg/m ³ Long-term value: 2* mg/m ³ *as respirable fraction

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

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- **Exposure controls**
- Personal protective equipment:
- General protective and hygienic measures:
Wash hands before breaks and at the end of work.
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.
- 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

· Information on basic physical and chemical properties

- General Information
- Appearance:

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

Melting point/Melting range:	950-965°C (1742-1769 °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): 8.11 g/cm³ (67.678 lbs/ga l) (Lit.)
- Solubility in / Miscibility with

Water:	Not soluble.
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- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity:** Not applicable.
- Chemical stability: Not applicable.
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

- **Information on toxicological effects**

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

7440-48-4 cobalt		
Oral	LD50	6170 mg/kg (rat)

- Primary irritant effect:

- on the skin: No irritant effect.

- on the eye: No irritating effect.

- Sensitization: No sensitizing effects known.

- Additional toxicological information:

When used and handled according to specifications, the article does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- **Toxicity**

- Aquatic toxicity: No further relevant information available.

- **Persistence and degradability:** No further relevant information available.

- **Behavior in environmental systems**

- Bioaccumulative potential: No further relevant information available.

- Mobility in soil: No further relevant information available.

- **Additional ecological information**

- General notes:

For semi-finished products in copper or copper-alloys no information regarding ecology is suitable, as it is not soluble in water.

- **Results of PBT and vPvB assessment**

- PBT: Not applicable to metals.

- vPvB: Not applicable to metals.

- **Other adverse effects:** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- Recommendation: Contact manufacturer for recycling information.

14 Transport information

- **UN-Number**

- DOT, ADR, ADN, IMDG, IATA

Void

- **UN proper shipping name**

- ADR, ADN

Void

- **Transport hazard class(es)**

- DOT, ADR, ADN, IMDG, IATA
- Class

Void

- **Packing group**

- DOT, ADR, IMDG, IATA

Void

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|---|-----------------|
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user: | |
| | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | |
| | Not applicable. |

15 Regulatory information

- **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):

All ingredients are listed.

- Proposition 65

- Chemicals known to cause cancer:

7440-48-4 | cobalt

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Cancerogenity categories

- EPA (Environmental Protection Agency)

7440-50-8 | copper

D

7440-66-6 | zinc

II

- IARC (International Agency for Research on Cancer)

7440-48-4 | cobalt

2B, 2A

- NTP (National Toxicology Program)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

7429-90-5 | aluminium

A4

7440-48-4 | cobalt

A3

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

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- Chemical safety assessment void.

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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 MSDS:** Department testing laboratories
- **Contact:**
Dr. Michael Ebner
Phone (+)49 (0)731/944-3706
- * Data compared to the previous version altered.

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