

## 1 Identification

- **1.1 Product identifier**
  - Trade name: **Wieland K57**
  - **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
  - Application of the substance / the preparation: Semi-finished product
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- **1.3 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
  - **1.4 Emergency telephone number:**  
Factory security offices  
Phone: +49 (0) 731-944-3706

## 2 Hazard(s) identification

- **2.1 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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- **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

- **3.2 Chemical characterization: Mixtures**
- Description: Metal in compact form.
- UNS-number: C70350
- Information:  
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.

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· Components:		
CAS: 7440-50-8 EINECS: 231-159-6 RTECS: GL 5325000	copper	balance%
CAS: 7440-02-0 EINECS: 231-111-4	nickel ☠ Carc. 2, H351; STOT RE 1, H372; ⚠ Skin Sens. 1, H317	1.0-2.5%
CAS: 7440-48-4 EINECS: 231-158-0 RTECS: GF 8750000	cobalt ☠ Resp. Sens. 1, H334; Carc. 2, H351; ⚠ Skin Sens. 1, H317; Aquatic Chronic 4, H413	1.0-2.0%
CAS: 7440-21-3 EINECS: 231-130-8 RTECS: VW 0400000	silicon	0.5-1.2%

#### 4 First-aid measures

##### · 4.1 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.

##### · 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

##### · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 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.

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## 7 Handling and storage

- **7.1 Precautions for safe handling:**  
No special measures required.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of dust.
- Information about protection against explosions and fires: 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: None.
- **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:

#### 7440-50-8 copper

PEL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m <sup>3</sup> *dusts and mists; **fume; as Cu

#### 7440-02-0 nickel

PEL	Long-term value: 1 mg/m <sup>3</sup>
REL	Long-term value: 0.015 mg/m <sup>3</sup> as Ni; See Pocket Guide App. A
TLV	Long-term value: 1.5* mg/m <sup>3</sup> elemental, *inhalable fraction

#### 7440-48-4 cobalt

PEL	Long-term value: 0.1* mg/m <sup>3</sup> as Co; *for metal dust and fume
REL	Long-term value: 0.05 mg/m <sup>3</sup> as Co; metal dust & fume
TLV	Long-term value: 0.02 mg/m <sup>3</sup> BEI

#### 7440-21-3 silicon

PEL	Long-term value: 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV	TLV withdrawn

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- Ingredients with biological limit values:

**7440-48-4 cobalt**

BEI	15 µg/L Medium: urine Time: end of shift at end of workweek Parameter: Cobalt (background)
	1 µg/L Medium: blood Time: end of shift at end of workweek Parameter: Cobalt (background, semi-quantitative)

- Additional information: The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- Personal protective equipment:
- General protective and hygienic measures:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
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

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

- General Information
- Appearance:
 

Form:	Solid
Color:	copper red
- Odor: Odorless
- Odor threshold: Not determined.
- Change in condition
 

Melting point/Melting range:	1076-1111 °C (1969-2032 °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): 8.9 g/cm<sup>3</sup> (74.271 lbs/gal) (Lit.)
- Solubility in / Miscibility with
 

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

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

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- Acute toxicity: Based on available data, the classification criteria are not met.

- LD/LC50 values that are relevant for classification:

### 7440-48-4 cobalt

Oral	LD50	6170 mg/kg (rat)
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- Primary irritant effect:
- on the skin: Based on available data, the classification criteria are not met.
- on the eye: Based on available data, the classification criteria are not met.
- Sensitization: Based on available data, the classification criteria are not met.
- 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.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

7440-02-0	nickel	2B
7440-48-4	cobalt	2B

- NTP (National Toxicology Program)

7440-02-0	nickel	R
7440-48-4	cobalt	R

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 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.
- 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.
- **12.5 Results of PBT and vPvB assessment**
- PBT: Not applicable to metals.
- vPvB: Not applicable to metals.

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

### 13 Disposal considerations

- **13.1 Waste treatment methods**
- Recommendation: Contact manufacturer for recycling information.

### 14 Transport information

- **14.1 UN-Number**
- DOT, ADR, ADN, IMDG, IATA
- Void
- **14.2 UN proper shipping name**
- DOT, ADR, ADN, IMDG, IATA
- Void
- **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):

7440-50-8 | copper

7440-02-0 | nickel

7440-48-4 | cobalt

- TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65

- Chemicals known to cause cancer:

7440-02-0 | nickel

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.

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- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogen categories

- EPA (Environmental Protection Agency)

7440-50-8	copper	D
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- TLV (Threshold Limit Value established by ACGIH)

7440-02-0	nickel	A5
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7440-48-4	cobalt	A3
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- NIOSH-Ca (National Institute for Occupational Safety and Health)

7440-02-0	nickel	
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- 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: Department testing laboratories
- Contact:
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- \* Data compared to the previous version altered.