



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

Printing date 06/03/2017

Reviewed on 06/03/2017

## 1 Identification

· **Product identifier**

· **Trade name:** Training metal

· **Application of the substance / the mixture** Training alloy (non-precious metals)

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Kulzer GmbH

Leipziger Straße 2, 63450 Hanau (Germany)

Tel.: +49 (0)800 4372522

· **Information department:**

Tel. +1 (800) 431-1785 Fax: +1 (800) 522-1545

e-mail: [customer.servicehkna@kulzer-dental.com](mailto:customer.servicehkna@kulzer-dental.com)

· **Emergency telephone number:**

Emergency CONTACT (24-Hour-Number)

GBK/Infotrac ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500

## 2 Hazard(s) identification

· **Classification of the substance or mixture**

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

Carc. 2 H351 Suspected of causing cancer.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

cobalt

· **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

· **Precautionary statements**

[In case of inadequate ventilation] wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

Store locked up.

(Contd. on page 2)

USA



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 1)

- **Classification system**
- **NFPA ratings for USA (scale 0-4)**



- **HMIS-Ratings (Scale 0-4)**



- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**3 Composition/information on ingredients**

- **Chemical characterization: Mixtures**
- **Description: -**

- **Dangerous components:**

7440-50-8	copper		75-90%
7440-31-5	tin		5-10%
7440-48-4	cobalt	Resp. Sens. 1, H334; Carc. 2, H351; Skin Sens. 1, H317	0-5%

- **Additional information**

The informations as to risks and precautions given in the chapters 4 to 8, 10 to 12 do not apply to the product itself, but only to dust and vapours generated on working with it.  
For the wording of the listed hazard phrases refer to section 16.

**4 First-aid measures**

- **Description of first aid measures**

- **General information** No special measures required.
- **After inhalation** After inhalation of smoke, vapors and dust get fresh air and see a doctor.
- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing**

Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.

- **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.

USA

(Contd. on page 3)



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 2)

**5 Fire-fighting measures**

- **Extinguishing media**
  - **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
  - **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** -

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
See Section 8 for information on personal protection equipment.
- 

**7 Handling and storage**

- **Handling**
  - **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
  - **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.
    - **Information about storage in one common storage facility:** Not required.
    - **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 ()	0.1*;1** mg/m <sup>3</sup> *fume **dusts & mists
--------	---

(Contd. on page 4)



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 3)

REL ()	Short-term value: 11 (2)* mg/m <sup>3</sup> Long-term value: 0.1 R*, 1** mg/m <sup>3</sup> *Copper fume, as Cu **Copper dusts & mists, as Cu
TLV ()	Short-term value: 0.1* ppm Long-term value: (0.2)*, (1)** mg/m <sup>3</sup> *fume; ** dusts&mists, as Cu
<b>7440-31-5 tin</b>	
PEL ()	2 mg/m <sup>3</sup> Metal
REL ()	2 mg/m <sup>3</sup> Tin, Metal
TLV ()	2 mg/m <sup>3</sup>
<b>7440-48-4 cobalt</b>	
PEL ()	0.1* mg/m <sup>3</sup> *for metal dust & fume, as Co
REL ()	0.05* mg/m <sup>3</sup> *For metal dust & fume, as Co
TLV ()	0.02 mg/m <sup>3</sup> as Co; BEI

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

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures** Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not required.

· **Protection of hands:**

Check protective gloves prior to each use for their proper condition.  
recommended

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Butyl rubber, BR  
Nitrile rubber, NBR

· **Eye protection:** Not absolutely necessary.

· **Body protection:** Light weight protective clothing

USA

(Contd. on page 5)



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 4)

**9 Physical and chemical properties**

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

· **General Information**

· **Appearance:**

· **Form:** Solid.

· **Color:** Yellow

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

· **Melting point/Melting range:** 1380 °C

· **Boiling point/Boiling range:** > 999 °C (> 1830 °F)

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Not determined.

· **Ignition temperature:**

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

· **Lower:** Not determined.

· **Upper:** Not determined.

· **Vapor pressure:** Not applicable.

· **Density at 20 °C (68 °F):** 8.800 g/cm<sup>3</sup> (73.436 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

· **Water:** Insoluble

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· **dynamic:** Not applicable.

· **kinematic:** Not applicable.

· **Solvent content:**

· **Solids content:** 100.0 %

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

**10 Stability and reactivity**

· **Reactivity** No further relevant information available.

· **Possibility of hazardous reactions** No dangerous reactions known

(Contd. on page 6)



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 5)

- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** none

**11 Toxicological information**

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7440-48-4 cobalt

2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**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.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

· **Waste treatment methods**

· **Recommendation** Smaller quantities can be disposed of with household waste.

(Contd. on page 7)



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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 6)

- **Uncleaned packagings:**
- **Recommendation:** Packaging can be reused or recycled after cleaning.

**14 Transport information**

· <b>UN-Number</b>	Void
· DOT, ADR, ADN, IMDG, IATA	
· <b>UN proper shipping name</b>	Void
· DOT, ADR, ADN, IMDG, IATA	
· <b>Transport hazard class(es)</b>	Void
· DOT, ADR, ADN, IMDG, IATA	
· Class	
· <b>Packing group</b>	Void
· DOT, ADR, IMDG, IATA	
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	-
· <b>UN "Model Regulation":</b>	Void

**15 Regulatory information**

· <b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
· <b>SARA Section 355 (extremely hazardous substances)</b>	
None of the ingredients is listed.	
· <b>Carcinogenicity categories</b>	
· <b>TLV (Threshold Limit Value established by ACGIH)</b>	
7440-48-4 cobalt	A3

- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger

(Contd. on page 8)





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

Printing date 06/03/2017

Reviewed on 06/03/2017

**Trade name: Training metal**

(Contd. of page 7)

- **Hazard-determining components of labeling:**  
cobalt
- **Hazard statements**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.
- **Precautionary statements**  
[In case of inadequate ventilation] wear respiratory protection.  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Wear protective gloves.  
Specific treatment (see on this label).  
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
Store locked up.
- **National regulations**
  - **Water hazard class:** Generally not hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

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.

- **Relevant phrases**  
H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H351 Suspected of causing cancer.
- **Date of preparation / last revision** 06/03/2017 / 2
- **Abbreviations and acronyms:**  
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Resp. Sens. 1: Respiratory sensitisation – Category 1  
Skin Sens. 1: Skin sensitisation – Category 1  
Carc. 2: Carcinogenicity – Category 2  
Carc. 2: Carcinogenicity – Category 2
- **\* Data compared to the previous version altered.**