Safety Data Sheet
according to WHS Regulations

Printing date 14.03.2024 Version number 4 Revision: 14.03.2024

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

· **Product identifier**

· **Trade name:** **Training metal**

· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

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

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

· **Manufacturer/Supplier:**
Kulzer Australia Pty Ltd
Unit 20, 53 Lorraine St
PEAKHURST NSW 2210
Australia Tel: +61 (02) 9153 0311

· **Informing department:** see above

· **Emergency telephone number:**
Poison Information Number: Australia 13 11 26 & New Zealand 0800 764 766

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.
Muta. 2	H341	Suspected of causing genetic defects.
Carc. 1B	H350	May cause cancer.
Repr. 1B	H360F	May damage fertility.

· **Label elements**

· **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**

GHS08

· **Signal word** Danger

· **Hazard-determining components of labelling:**
cobalt

· **Hazard statements**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
May cause cancer.
May damage fertility.

· **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapours/spray.

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Wear protective gloves / eye protection.
Wear protective clothing.
In case of inadequate ventilation wear respiratory protection.
Specific treatment (see on this label).
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**
· **Description:** -

· **Dangerous components:**

7440-50-8	copper		75-90%
7440-31-5	tin		5-10%
7440-48-4	cobalt	Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1B, H350; Repr. 1B, H360F Acute Tox. 4, H302; Skin Sens. 1, H317	≥1-<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

· **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**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
· **After swallowing** Do not induce vomiting; instantly call for medical help.
· **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 Fire Fighting Measures

· **Suitable extinguishing agents**
Sand. Do not use water.
Limestone powder

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· **For safety reasons unsuitable extinguishing agents** Water.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Protective equipment:** Do not inhale explosion gases or combustion gases.
· **Additional information** -

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**
Use breathing protection against the effects of fumes/dust/aerosol.
· **Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
· **Methods and material for containment and cleaning up:** Collect 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.
· **Storage**
· **Requirements to be met by storerooms and containers:** 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 and personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Components with critical values that require monitoring at the workplace:**	
7440-50-8 copper	
WES	Long-term value: 1* 0.2** mg/m³ *dust & mists (as Cu) **fume
7440-31-5 tin	
WES	Long-term value: 2 mg/m³
7440-48-4 cobalt	
WES	Long-term value: 0.05 mg/m³ Sen

· **DNELs**		
7440-50-8 copper		
Oral	general population, long term, systemic	0.041 mg/Kg (not defined)
Dermal	worker industrial, acute, systemic	273 mg/Kg/d (not defined)
	worker industrial, long term, systemic	137 mg/Kg/d (not defined)
	general population, acute, systemic	273 mg/Kg/d (not defined)

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	general population, long term, systemic	137 mg/Kg/d (not defined)
Inhalative	worker industrial, acute, local	1 mg/m3 (not defined)
	worker industrial, long term, local	1 mg/m3 (not defined)

· **PNECs**

7440-50-8 copper

freshwater	0.0078 mg/l (not defined)
marine water	0.0052 mg/l (not defined)
sewage treatment plant	0.23 mg/l (not defined)
sediment, dry weight, freshwater	87 mg/Kg (not defined)
sediment, dry weight, marine water	676 mg/Kg (not defined)
soil, dry weight	65 mg/Kg (not defined)

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

· **Personal protective equipment**

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

· **Breathing equipment:**
Use breathing protection against the effects of fumes/dust/aerosol.
ABEK-P3 (EN14387)
Filter P1.

· **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 trough 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:**
eye protection (EN 166)
Tightly sealed safety glasses.

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

9 Physical and Chemical Properties

· **General Information**

· **Appearance:**

· **Form:**	Solid.
· **Colour:**	Yellow
· **Smell:**	Odourless
· **Odour threshold:**	Not determined.

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· **pH-value:**	Mixture is non-soluble (in water).
· **Change in condition**	
· **Melting point/freezing point:**	1380 °C
· **Initial boiling point and boiling range:**	> 999 °C
· **Flash point:**	Not applicable
· **Inflammability (solid, gaseous)**	Not determined.
· **Decomposition temperature:**	Not determined.
· **Self-inflammability:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. Not determined.
· **Critical values for explosion:**	
· **Lower:**	Not determined.
· **Upper:**	Not determined.
· **Steam pressure:**	Not applicable.
· **Density at 20 °C**	8.800 g/cm³
· **Relative density**	Not determined.
· **Vapour 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.
· **Conditions to be avoided:** No decomposition if used and stored 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:** None

11 Toxicological Information

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

· **LD/LC50 values that are relevant for classification:**		
7440-50-8 copper		
Oral	LD50	>2,500 mg/kg (rat) (OECD 423)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
	LD0	>2,000 mg/kg (rat) (OECD 402)

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Inhalative	LC50/4 h	>5.11 mg/l (rat) (OECD 436)
	LC0/4h	≥5.11 mg/L (rat) (OECD 436)
7440-31-5 tin		
Oral	LD50	>2,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
7440-48-4 cobalt		
Oral	LD50	550 mg/kg (rat) (OECD 425)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
· **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
· **Germ cell mutagenicity**
Suspected of causing genetic defects.
· **Carcinogenicity**
May cause cancer.
· **Reproductive toxicity**
May damage fertility.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.
· **Additional toxicological information:**
· **Acute effects (acute toxicity, irritation and corrosivity)**
Inhalation of fumes and smoke generated during welding/brazing may cause metal fume fever. Symptoms may appear after 4 - 12 hours. (Headache, dizziness, dryness, cough, nausea and fever).
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
Muta. 2, Carc. 1B, Repr. 1B

12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:**	
7440-50-8 copper	
LC50/96h	0.193 mg/l (fish)

· **Persistence and degradability** No further relevant information available.
· **Behaviour 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.

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13 Disposal considerations

· **Waste treatment methods**
· **Recommendation** Smaller quantities can be disposed with household garbage.

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

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14 Transport information

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

*

15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **National regulations**

The product is subject to classification in accordance with the prevailing version of the regulations on hazardous materials.

· **Water hazard class:** Generally not hazardous for water.

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· **Other regulations, limitations and prohibitive regulations**

· AICS - Australian Inventory of Chemical Substances	
7440-31-5	tin
7440-48-4	cobalt

· **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**
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H360F May damage fertility.

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 2: Germ cell mutagenicity – Category 2
Carc. 1B: Carcinogenicity – Category 1B
Repr. 1B: Reproductive toxicity – Category 1B

· *** Data compared to the previous version altered.**