

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.01.2023

Version: 7 (replaces version 6)

Revision: 09.01.2023

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

- **1.1 Product identifier**
- **Trade name:** Microlit isi
- **Article number:** 622124, 622125, 622198
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** see point 3)
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Schütz Dental GmbH, Dieselstrasse 5-6, D-61191 Rosbach v.d.H. (Germany)
Tel.: +49 (0)6003/814-0 Fax: +49 (0)6003/814-906
www.schuetz-dental.de; e-mail: info@schuetz-dental.de
- **Further information obtainable from:** Tel.: +49 (0)6003/814-630
- **1.4 Emergency telephone number:**
+49 (0) 6003 8140 Schütz Dental (8:00 - 17:00 Uhr) or
+49 (0) 6131 19240 Poison Information Center, University Mainz (24 h)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**

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.
Aquatic Chronic 4	H413	May cause long lasting harmful effects to aquatic life.

- **Additional information:**
In its quality as a compact metal, this product is not subject to any labelling obligation due to the calculation method of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version.
The following labelling does not apply to the alloy, but to possible vapors, fumes and gases that may be produced during processing.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
- GHS label elements
The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**
cobalt
- **Hazard statements**

H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360F	May damage fertility.
H413	May cause long lasting harmful effects to aquatic life.

- **Precautionary statements**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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*P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.**P308+P313 IF exposed or concerned: Get medical advice/attention.**P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.**P405 Store locked up.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

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

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:**

*Metal alloy**Co Cr W Si Fe Mn**61,1 27,8 8,5 1,7 0,5 0,3 (%)*

· **Dangerous components:**

<i>CAS: 7440-48-4</i>	<i>cobalt</i>	<i>50-75%</i>
<i>EINECS: 231-158-0</i>	 <i>Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1B, H350; Repr. 1B, H360F;</i>  <i>Skin Sens. 1, H317; Aquatic Chronic 4, H413</i>	
<i>CAS: 7440-47-3</i>	<i>chromium</i>	<i>25-50%</i>
<i>EINECS: 231-157-5</i>	<i>substance with a Community workplace exposure limit</i>	
<i>CAS: 7440-33-7</i>	<i>tungsten</i>	<i>2.5-10%</i>
<i>EINECS: 231-143-9</i>	<i>substance with a Community workplace exposure limit</i>	
<i>CAS: 7440-21-3</i>	<i>silicon</i>	<i><2.5%</i>
<i>EINECS: 231-130-8</i>	 <i>Flam. Sol. 2, H228</i>	

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information** No special measures required.

· **After inhalation**

*Rinse nose and throat thoroughly with water.**Supply fresh air; consult doctor in case of complaints.*

· **After skin contact** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **After swallowing**

*Seek medical treatment.**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.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents** Special powder for metal fires. Do not use water.

· **For safety reasons unsuitable extinguishing agents** Water.

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

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- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Use respiratory protective device against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Extractors are required on all machines used for thermal processing or splinter removal processes.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
The packages are to be secured against sliding, tilting, rolling, and falling.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
Dust MAK 6 mg/m³
1317-35-7 Manganese oxide
MAK: 1 mg/m³
Cobalt oxide
MAK: 0,1 mg/m³ (TRK)

7440-48-4 cobalt

WEL	Long-term value: 0.1 mg/m ³ as Co; Carc, Sen
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7440-47-3 chromium

WEL	Long-term value: 0.5 mg/m ³
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7440-33-7 tungsten

WEL	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as W
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7440-21-3 silicon

WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.

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- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures are to be adhered to when handling chemicals.
Do not inhale dust / smoke / mist.
- **Respiratory protection:**
Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Dust protective mask
Filter P2.
- **Hand protection** Protective gloves.
- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
- **Penetration time of glove material**
0,3 mm
Penetration time 60 min.
0,11 mm
Penetration time 10 min.
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection** Tightly sealed goggles.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Solid.
- **Colour:** shiny metallic
- **Odour:** Odourless
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** ~1,320 °C
- **Boiling point or initial boiling point and boiling range** undetermined
- **Flammability** Not determined.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** Not applicable
- **Decomposition temperature:** Not determined.
- **pH** Not applicable.
- **Viscosity:**
- **Kinematic viscosity** Not applicable.
- **dynamic:** Not applicable.
- **Solubility**
- **Water:** Insoluble
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure:** Not applicable.
- **Density and/or relative density**
- **Density at 20 °C:** 8.6 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not applicable.

- **9.2 Other information**
- **Appearance:**
- **Form:** tubes

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- **Important information on protection of health and environment, and on safety.**
- **Auto-ignition temperature:** *Product is not selfigniting.*
- **Explosive properties:** *Product does not present an explosion hazard.*
- **Solvent content:**
- **Solids content:** *100.0 %*
- **Change in condition**
- **Evaporation rate** *Not applicable.*

- **Information with regard to physical hazard classes**
- **Explosives** *Void*
- **Flammable gases** *Void*
- **Aerosols** *Void*
- **Oxidising gases** *Void*
- **Gases under pressure** *Void*
- **Flammable liquids** *Void*
- **Flammable solids** *Void*
- **Self-reactive substances and mixtures** *Void*
- **Pyrophoric liquids** *Void*
- **Pyrophoric solids** *Void*
- **Self-heating substances and mixtures** *Void*
- **Substances and mixtures, which emit flammable gases in contact with water** *Void*
- **Oxidising liquids** *Void*
- **Oxidising solids** *Void*
- **Organic peroxides** *Void*
- **Corrosive to metals** *Void*
- **Desensitised explosives** *Void*

SECTION 10: Stability and reactivity

- **10.1 Reactivity** *No further relevant information available.*
- **10.2 Chemical stability**
- **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*

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** *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.*
- **Additional toxicological information:**
When grinding the material dust is developed, the composition of which is dependant on the chemical analysis. These oxides are non-toxic, but put stress on the lungs. Mostly oxides, which are set free:
Si
Mo
W
Co

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Furthermore, manganese compounds, cobalt oxides and chromium oxides are developed.

Avoid inhalation of grinding dust.

· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 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.

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

· 12.7 Other adverse effects

· Additional ecological information:

· General notes:

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Contact waste processors for recycling information.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number

· ADR, ADN, IMDG, IATA Void

· 14.2 UN proper shipping name

· ADR, ADN, IMDG, IATA Void

· 14.3 Transport hazard class(es)

· ADR, ADN, IMDG, IATA

· Class Void

· 14.4 Packing group

· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user

Not applicable.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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· UN "Model Regulation":

Void

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
II	50-75
III	25-50

· **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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

· **Relevant phrases**

H228 Flammable solid.

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.

H413 May cause long lasting harmful effects to aquatic life.

· **Department issuing SDS:** Schütz Dental GmbH

· **Contact:** Dr. U. Krichbaum

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Sol. 2: Flammable solids – Category 2

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

Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

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