

Safety data sheet according to Annex II of Regulation (EC) 1907/2006 (REACH)			EUKAMED
Date: 03.04.2023	Document: cocr 056 e-05	Revision: 05	replaces version 04 from 15.11.2022

Updated taking in to account the Regulation (EU) No 2020/878 of 06.2020.

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

### 1.1. Product identifier / trade name

Laser welding wire CoCr  
Article no. / REF: 151002, 151005, 151008, 151011, 152250, 152350,  
152500, 153500.

No UFI has been assigned to this mixture

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the mixture  
Dental alloys containing cobalt that can be as additional material  
in the manufacture of fixed or mobile dental prostheses in the dental  
laboratory.

**User:** trained specialist (dental technician, dentist)

### No further information

### 1.3. Details of the supplier of the safety data sheet

EUKAMED OHG  
Cranachstr. 44D-42549 Velbert  
Phone: +49 (0)2051 319404 Telefax : +49 (0)2051 319406  
email: [info@eukamed.de](mailto:info@eukamed.de) Internet: [www.eukamed.de](http://www.eukamed.de)  
EUKAMED OHG, D-42549 Velbert: +49 2051 319405

### 1.4. Emergency phone number:

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

Hazard categories: Classification according to Regulation (EU) No 2020/217

Carcinogenicity:	Carc.1B	H350	May cause cancer by inhalation
Genetic Toxicity	Muta 2	H341	May cause genetic defects
Reproductive toxicity	Repr 1B	H360F	May impair fertility.
Respiratory sensitization	Resp. Sens.1	H334	Inhalation may cause allergy, asthma-like symptoms or Cause breathing difficulties
Skin sensitization	Skin.Sens1	H317	Can cause allergic skin reactions
Hazardous to the aquatic envir.t	Aquatic Chronic 4	H413	May be harmful to aquatic organisms, with long-term effect.

### 2.2. Label elements according to Regulation (EU) No 2020/217

Hazard pictogram



GHS08

**Signal word:** Danger

Hazard-determining component(s) for labelling:

Cobalt

The following hazard statements do not refer directly to the product, but to the dusts or vapors that may be generated during use and processing.

### 2.3. Other hazards and notes on labelling.

The product, as a cobalt-chromium alloy, in the form in which it is placed on the market, does not present any risk to human health. A label is not required for this product according to Regulation (EC) 1272/2008 (CLP), Annex I section 1.3.4. (Metals in compact form, alloys...).

## 3. Composition/information on ingredients

### 3.1. Substances

The product is not a substance but a mixture.

### 3.2 This alloy is a mixture of

Ingredients	Part %.	CAS-No	EG/ Index	Hazard category	H-phrases
Cobalt	50-70	7440-48-4	231-158-0	Carc. 1B Muta. 2	H350 H341

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				Repr. 1B	H360F
				Resp. Sens. 1	H334
				Skin. Sens.1	H317
				Aquatic Chronic 4	H413
Chrome	19-30	7440-47-3	231-157-5		
Mo	4-7	7439-98-7			
Mn	1	7439-96-5			

#### 4. First aid measures

##### 4.1 Description of first aid measures

General information	Do not inhale gas/fume/vapor/aerosol In case of allergic symptoms, especially in the respiratory tract, seek medical advice immediately.
After inhalation	Provide fresh air, remove the patient from the danger zone, in case of intensive inhalation of vapors consult a doctor immediately
After skin contact	Wash off dusts with soap and water. After contact with melted product, quickly cool the affected skin area with water.
After eye contact	remove contact lenses, keep eyelids open, rinse dust with water, if necessary consult an ophthalmologist.
After ingestion:	Seek medical attention immediately.

##### 4.2 Most important symptoms and effects, both acute and delayed

no information available.

##### 4.3. Indications of any immediate medical attention and special treatment needed

no information available

#### 5. Firefighting measures

##### 5.1 Extinguishing media

Suitable extinguishing media	the product itself does not burn, adapt extinguishing measures to the surroundings, metal burning powder, sand.
Unsuitable extinguishing media	Water, foam, carbon dioxide, dry extinguishing media

##### 5.2 Special hazards arising from the substance or mixture:

No information available.

##### 5.3 Advice for firefighting

Adapt self-contained breathing apparatus, extinguishing agents and fire-fighting measures to the environment of the fire.

#### 6. Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure sufficient fresh air, avoid dust formation, observe the protective regulations in sections 7), 8).

##### Task forces

no information available

##### 6.2. Environmental precautions:

Retain extinguishing water, do not allow to enter sewage system. Do not allow to enter the subsoil / soil.

##### 6.3. Methods and material for containment and cleaning up.

Pick up mechanically, avoid dust formation, treat the picked up material according to section "Disposal".

##### 6.4. Reference to other sections

Safe handling: see section 7

Personal protective equipment, see section 8

Disposal: see section 13

#### 7. Handling and storage

##### 7.1 Precautions for safe handling

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#### Information for safe handling

Ensure sufficient room ventilation and use dust extraction at the workplace.  
Observe general protection and hygiene measures at the workplace,  
wash hands before breaks and at the end of work.  
Do not smoke, eat or drink while working.

Keep away from food. Do not inhale vapors and dust.

#### 7.2 Conditions for safe storage including any incompatibilities.

Requirements for storage rooms and containers

Keep container tightly closed, ventilate room well.

No special measures,

do not store near explosive substances

#### 7.3 Specific end uses

no information.

### 8. Exposure controls / personal protection

#### 8.1. Control Parameters

No special requirements.

Occupationnel exposure limit values (TRGS 900)

Chromium

2E mg/m<sup>3</sup>

Cobalt, acceptance concentration

0.0005 mg/m<sup>3</sup>

#### 8.2. Exposure controls:

##### Exposer and monitoring measures:

Inhalation of grinding and polishing dusts and fumes from melting and welding.  
avoid, ensure sufficient ventilation/extraction at the workplace

##### Technical measures:

Use suitable dust extraction during grinding work

##### Personal protective equipment:

Use suitable dust extraction during grinding work, resp.

Wear dust masks

Protective gloves

Safety goggles

Protective gloves, suitable protective clothing.

Skin protection:

Eye protection:

Body protection:

Observe general protection and hygiene measures at the workplace,

wash hands before breaks and at the end of work.

Do not smoke, eat or drink while working.

Keep away from food. Do not inhale vapors and dust.

### 9. Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

##### State of aggregation:

Solid

Color:

Silver grey

Odor:

Odorless

pH

No data.

##### Changes of state

Boiling point

no data available

Melting point/range

1250 -1400 °C

Flash point:

no data

Flammability:

non-flammable

Self-flammability:

non-flammable

Explosion hazard:

no information

Vapor pressure:

no data

Relative density:

8.4 g/cm<sup>3</sup>

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Water solubility

No test required,  
as the substance is known to be insoluble in water.

Viscosity

No data

#### 9.2. Other information

No information available

### 10. Stability and reactivity

#### 10.1. Reactivity

no reactions are to be expected when used as intended

#### 10.2. Chemical stability

no reactions are to be expected if the storage and handling instructions are followed

#### 10.3. Possibility of hazardous reactions

in contact with acids, the formation of gases is possible.

#### 10.4. Conditions to be avoided

no information.

#### 10.5. Incompatible materials

Acids

#### 10.6. Hazardous decomposition products

Hazardous decomposition products in contact with acids

### 11. Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### oral toxicity

No data available

##### Acute dermal toxicity

No data available

##### Corrosive/irritant effect on the skin

No data available

#### 11.2 Information on other hazards

**Delayed and immediate effects and chronic effects after short or prolonged exposure** Inhalation of product vapors at high  
The product, as a cobalt-chromium alloy, in the form in which it is placed on the market, does not present any risk to human health.

### 12. Ecological information

#### 12.1. Toxicity

Fish toxicity

No data available

Fish toxicity chronic

No data available

Total no data available

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

no information available

#### 12.4. Mobility in soil

no information available

#### 12.5. Results of the PBT and vPvB assessment

No data available

#### 12.6. Endocrine disrupting properties

No data available

#### 12.7 Other adverse effects      no information available

Do not allow products to enter the environment in an uncontrolled manner.

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### 13. Disposal considerations

#### 13.1 Waste treatment methods

##### Product:

The assignment of a waste code number in accordance with the European Waste Catalogue (AVV) is to be carried out in consultation with the local / regional waste disposal company

##### Packing

the packaging must be emptied of all residues and must be disposed of properly in accordance with the statutory regulations. Packaging that cannot be emptied must be disposed of in consultation with the local / regional waste disposal company.

### 14. Transport information

#### 14.1 UN Number or ID number

No dangerous goods in the sense of the known regulations

#### 14.5 Environmental hazards

Hazardous to the environment? No

#### 14.6 Special precautions for the user?: no special measures required

#### 14.7. Other relevant information

No dangerous goods in the sense of the known regulations

### 15. Regulatory information

#### 15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture

Specific regulatory action for the substance or mixture related to cobalt (main constituent of cobalt alloy)

EU regulations

The alloy complies with ISO 22674, it has been used for many years without any particular problems as a raw-material for the manufacture of fixed and removable dentures.

##### Additional hints

A special label is not required for the product according to section 1.3.4 of Annex I of the CLP Regulation.

##### National regulations

Water hazard class: not hazardous to water

##### Substances that are carcinogenic, mutagenic or toxic to reproduction (TRGS905)

Cobalt metal (in the form of inhalable dusts / aerosols) 1B, M-, RF-, RD

The product, as a cobalt-chromium alloy, in the form in which it is placed on the market, does not present any risk to human health.

#### 15.2 Chemical Safety Assessment

No chemical safety assessment is required for this mixture.

### 16. other information

Data sources used to create the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) and Regulation (EU) 2020/878 (REACH), as amended.

The alloy complies with DIN EN ISO 22674, it has been used for many years without any particular problems as a pre-material for the production of fixed or removable dentures.

The product, as a cobalt-chromium alloy, in the form in which it is placed on the market, does not present a hazard to human health.

#### Wording of H-phrases (number and full text) NOT ALL phrases are relevant for this product!

H302	Harmful if swallowed.
H317	May cause allergic skin reactions.
H319	Causes severe eye irritation.

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H334	May cause allergy, asthma-like symptoms or breathing difficulties if inhaled.
H341	May cause genetic defects.
H350i	May cause cancer by inhalation.
H360F	May impair fertility.
H361f	Suspected to impair fertility.
H413	May be harmful to aquatic life with long lasting effects.

**Changes to the previous version:**

Adaptation of the section description to Regulation (EU) 2020/878, minor insignificant text adjustments.

**Further information**

The information is based on the current state of our knowledge and refers to the product as delivered. They are intended to describe our products with regard to safety requirements and therefore do not have the meaning of guaranteeing specific properties.

The information is intended to give you guidance on the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and disposal.

The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials or undergoes treatment, the information in this safety data sheet cannot be transferred to the new material thus produced, unless expressly stated otherwise.