

Safety Data Sheet

according to Regulation (EC) No 1907/2006

CoCrMo-Sold I, CoCr Welding Wire

Revision date: 20.03.2023

Product code: 102-306

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

CoCrMo-Sold I, CoCr Welding Wire

Further trade names

Article No.: 102-306-00, 528-200-10, 528-210-10, 528-215-10

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Health services.

1.3. Details of the supplier of the safety data sheet

Company name:	DENTAURUM GmbH & Co. KG	
Street:	Turnstr. 31	
Place:	D-75228 Ispringen	
Telephone:	+49 7231 803 0	Telefax: +49 7231 803 295
e-mail:	info@dentaurum.de	
Contact person:	Chemie	
Internet:	www.dentaurum.com	

1.4. Emergency telephone number: +497231803-184 7:00-16:15 (Mo-Do) 7:00-13:15 (Fr)
+497231803-0 16:15-18:00 (Mo-Do) 13:15-18:00 (Fr)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

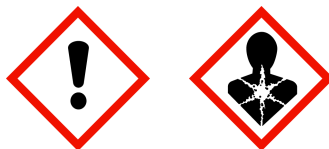
Acute Tox. 4; H302
Eye Irrit. 2; H319
Resp. Sens. 1; H334
Skin Sens. 1; H317
Carc. 1B; H350i
Repr. 2; H361f
Aquatic Chronic 4; H413

Full text of hazard statements: see SECTION 16.

Compact metal/alloy without hazards for human health or environment

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

none

Pictograms:**Additional advice on labelling**

For this product, a hazard label is not required according to section 1.3.4 of Annex I of the CLP regulation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Chemical characterization

REF 102-306-00: Co 69,8 %, Cr 19,0 %, Mo 5,0 %, Si 5,0 %, B 1,2 %

REF 528-200-10, 528-210-10, 528-215-10: Co 65,0 %, Cr 28,0 %, Mo 5,5 %, Mn/Si/N < 1 %

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7440-48-4	Cobalt			65,0-69,8 %
	231-158-0			
	Carc. 1B, Muta. 2, Repr. 2, Acute Tox. 4, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, Aquatic Chronic 4; H350i H341 H361f H302 H319 H334 H317 H413			
7440-47-3	Chromium			19,0-28,0 %

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7440-48-4	231-158-0	Cobalt	65,0-69,8 %
	oral: LD50 = 6171 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Do not breathe gas/fumes/vapour/spray.

After inhalation

Provide fresh air. Inhalation of dust/particles: Remove casualty to fresh air and keep warm and at rest.

After contact with skin

After contact with molten product, cool skin area rapidly with cold water.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of water.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

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SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General advice

No special measures are necessary.

6.2. Environmental precautions

No special measures are necessary.

6.3. Methods and material for containment and cleaning up
Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Advice on safe handling

Provide adequate ventilation.

Advice on protection against fire and explosion

No special measures are necessary.

Advice on general occupational hygiene

Caution! Hot molten mass. Conditions to avoid: Skin contact

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

No special measures are necessary.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Health services.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
7440-47-3	Chromium metal	-	2		TWA (8 h)	
7440-48-4	Cobalt	-	0.02		TWA (8 h)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
7440-48-4	Cobalt	Cobalt	1 µg/L	Blood	End of shift at end of workweek
7440-47-3	Chromium	Total chromium	25 µg/L	Urine	End of shift at end of workweek

8.2. Exposure controls

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Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Recommendation:

Dermatril 740 Single-use gloves. NBR (Nitrile rubber). 0,11 mm

penetration time (maximum wearing period): 480 min.

REF 162-907-00 (7/S), REF 162-908-00 (8/M), REF 162-909-00 (9/L)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing

Respiratory protection

Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

No special measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	silver grey
Odour:	odourless
Odour threshold:	not applicable

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	not determined

Flammability

Solid/liquid:	not determined
Gas:	not determined

Explosive properties

Not dust explosive

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

Self-ignition temperature

Solid:	not determined
Gas:	not determined
Decomposition temperature:	not determined
pH-Value:	not determined

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Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Vapour pressure:	not determined
Density:	not determined
Bulk density:	not determined
Relative vapour density:	not determined

9.2. Other information

Sustaining combustion:	No data available
Oxidizing properties	
Not oxidising.	

Further Information

REF 102-306-00 Solidus: 1110°C, Liquidus: 1162°C

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No risks worthy of mention.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

none

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Harmful if swallowed.

ATEmix calculated

ATE (oral) 657,9 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7440-48-4	Cobalt				
	oral	LD50 mg/kg	6171	Rat	

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Cobalt)

May cause an allergic skin reaction. (Cobalt)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer by inhalation. (Cobalt)

Suspected of damaging fertility. (Cobalt)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Further information

Toxicological data are not available.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Not a hazardous material with respect to transportation regulations.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 28

Additional information

For this product, a hazard label is not required according to section 1.3.4 of Annex I of the CLP regulation.

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment is not required.

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SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15.

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Eye Irrit. 2; H319	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Carc. 1B; H350i	Calculation method
Repr. 2; H361f	Calculation method
Aquatic Chronic 4; H413	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H361f	Suspected of damaging fertility.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)