



Safety Data Sheet
Regulation (EC) No 1907/2006 Annex II
Compliance Article 31

LASER WIRE AR CRCO

1. Substance or mixture and society identificaion

1.1. Product identifier

Alloy designation: Laser Wire AR CrCo

Description: laser wire alloy Cr-Co

colour: white

Group of product: not precious wire

gmdn number: 35857

Field of application: wire laser welding Cr-Co

shape: wire

Contraindications: do not use in case of known allergy to any of the components.

Do not use in combination with the flame or oven welding methods

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

Description / use wire to Cr-Co laser welding. All other uses are not recommended

1.3. Supplier safety data sheet information

Business name: Aurotre S.r.l.

Address: Via Rieti, 5 - 25125 Brescia (BS) ITALY

Tel. +39 030-3544806

E-mail of the competent person responsible for the safety data sheet: aurotre@aurotre.com

1.4. Emergency contact:

For any urgent matter call at +39 030-3544806

2. Hazard identification

2.1. Substance or mixture classification

The product is not classified as hazardous pursuant to the provisions of directives 67 /548 / cee and 1999/ 45 / ec and / or regulation (ec) 1272/2008 (clp) (and subsequent amendments)

2.2. Label elements

Danger labeling under directives 67 /548 / cee and 1999/ 45 / ce and following amendments and adjustments.

Warning symbols: none.

Risk phrases (r): none.

Safety advice (s): none.

2.3. Other hazards

Eyes: contact with eyes may cause severe irritation.

Skin: may cause severe irritation and possible burns. Possible dermatitis.

Ingestion: may cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: may cause irritation and burns of the respiratory tract (fumes).

Note: exposure levels for elements in this alloy are listed in section 2. The following health data refer to the individual elements.



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Chrome: may cause histological fibrosis of the lungs. According to some studies, chromium can cause lung cancer and / or nasal. The chromium metal, also, cause tumors in laboratory animals by grafting and intravenous.

Manganese: inhalation of dust can cause chest pain and tightness, coughing and wheezing. Inhalation of dust can cause headache, nausea, vomiting, shortness of breath, or blurred vision. Dust may be irritating to skin and eyes. Ingestion may cause malfunctions of the central nervous system. Prolonged inhalation of manganese as an inorganic compound can cause manganism. Organs respiratory system, central nervous system, blood, kidneys. The exposure generally aggravates the following medical conditions: chronic respiratory disease, liver and kidney disease, psychiatric disorders, alcoholism and neuropathies.

Molybdenum: chronic inhalation of molybdenum compounds in laboratory animals resulted in reduction of appetite and weight, diarrhea, muscle incoordination, loss of hair and gout. Excessive intake of molybdenum may interfere with copper metabolism.

3. Composition / information on ingredients

3.1. Substance

Non relevant information.

3.2. Mixture

Dangerous substance	Cas.	Ce	Conc. % (by mass)	Classification ce (clp n. 1272/2008)	Classification ce (dir. 67/548)
Cobalt	7440-48-4	231-158-0	64,20–66,8%	H334 may cause allergy or asthma symptoms or breathing difficulties if inhaled H317 may cause an allergic skin reaction. H413 may be harmful to aquatic life with long lasting effects	R42/43 r53
Chromium	7440-47-3	231-157-5	27,45-28,60%	Not classified	Not classified
Molybdenum	7439-98-7	231-107-2	5,4-5,6%	Not classified	Not classified
Mn-si-c			<1,0%	Not classified	Not classified

4. First aid measures

4.1. First aid measures description

Eyes --- rinse immediately with plenty of water for at least 15 minutes, occasionally lifting the upper and



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lower eyelids. In case of persistent discomfort, consult an ophthalmologist.

Skin --- wash skin thoroughly with soap and water

Inhalation --- bring the subjects in the open air and if necessary to administer oxygen. Any appreciable additional symptoms apply first and measures. Consult a doctor.

Ingestion --- if the subject is conscious and alert give 2 or 4 cups of milk or water. Induce vomiting. do not give anything by mouth if the person is unconscious. Consult a doctor

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

For symptoms and effects caused by the contained substances see chap. 11

4.3. Indication of any immediate medical attention and special treatment

Follow your doctor's instructions

5. Fire-fighting measures

5.1. Extinguishing

Suitable extinguishing media

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulized water.

Extinguishing media not suitable

No one in particular.

5.2. Special hazards arising from the substance or mixture

Hazards caused by exposure in case of fire

The material is fire-proof and explosion-proof. Heating above the melting range may generate not flammable fumes.

5.3. Advice for firefighting employee

General informations

Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer.

Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

Equipment

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a mask with overpressure with facemask covering the whole of the operator's face or the self (self-protector) in the event of large quantity of fume.

6. Measures in case of accidental release

6.1. Personal precautions, protective equipment and procedures in case of emergency devices

Avoid dust formation. If powders are released into the respiratory protection.



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6.2. Environmental precautions

Prevent the product from entering sewers, surface water, ground water and neighboring areas.

6.3. Methods and materials for containment and cleaning up

Pick up mechanically the product. The disposal of the material should be in accordance with point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.7.

7. Handling and storage

7.1. Precautions for safe handling

Handle the product after consultation with all other sections of this sds. Do not eat, drink or smoke while handling it.

Avoid inhaling fumes while melting and dust while grinding. To avoid accidental ingestion, wash hands thoroughly before eating or smoking.

7.2. Conditions for safe storage, including any incompatibilities

Normal storage conditions without particular incompatibilities.

7.3. Specific end uses

Information not available.

8. Exposure control and individual protection

8.1. Control parameters

Components whom threshold limit values must be under control in the job environment

7440-48-4 cobalt

Twa () 0,02 mg/m³

A3, ipe (as co)

7440-47-3 chromium

Twa () 0,5 *0,01 **0,05 mg/m³

As cr iii:a4; *chromium vi(insoluble):a1; **chromium

7439-98-7 molybdenum

Twa () 10* 3** 0,5*** mg/m³

(come mo); * insoluble and metal compounds: (i),

General information: it must be used a general and local ventilation system and an exhaust fume filtration system.



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Breathing: dust mask p1

Eye protection: safety glasses with blinders on. In the event of fumes or dust: wear goggles rounded shape.

Skin protection: wear protective clothing and gloves.

Hygiene measures: wash face and / or hands before break and after work. If workplace limits are exceeded and / or if there is leakage of large amounts (loss, spill, dust) you must use the protective equipment mentioned for the respiratory system.

Do not eat, drink or smoke in the workplace

9. Physical and chemical

9.1. Information on basic physical and chemical properties

Color white
Physical status solid
Odor odorless
Odor threshold. Na (not available).
Ph. Na (not available).
Melting point 1240°C
Solubility insoluble in water: insoluble

9.2. Other information

Relative density: 8.3 g / cm³
89,350 psi yield strength rp0.2
Tensile strength rm 124.000psi
Elongation (%) 4.5
Vickers hardness 428 hv5
Melting range 1240-1350 ° c.

10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

Under normal use and storage conditions are not predictable hazardous reactions.

10.4. Conditions to avoid

Corrosive environment.



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10.5. Incompatible materials

To avoid: strong acids and oxidizing agents

10.6. Hazardous decomposition products

At temperatures > 400 ° c the alloy oxidizes, but is stable.: at temperatures > 1800 ° c the alloy may produce (hazardous) fumes.

11. Toxicological information

No episodes of damage to health due to exposure to the product. In any case it must be handled in accordance with good industrial practices.

11.1. Information on toxicological effects

Information not available

12. Ecological information

Adopt good working practices, avoiding release of the product in the environment. The material is compatible with the environment. Using the appropriate device for the collection of the powders, it is possible to recycle 100 % of the alloy.

12.1. Toxicity

Information not available.

12.2. Persistence and degradability

Information not available.

12.3. Potential for bioaccumulation

Information not available.

12.4. Mobility in soil

Information not available.

12.5. Results of pbt and vpvb

Information not available.

12.6. Other adverse effects

Information not available.



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13. Disposal considerations

13.1. Methods of waste treatment

Whenever possible, recover dust because they have economic value.
Disposal in accordance with local authority regulations. It can be used after reconditioning.

14. Transport information

The product is not dangerous under current provisions governing the transport of dangerous goods by road (a.d.r.) and by rail (rid), by sea (imdg code) and by air (iata)

15. Regulatory information

15.1. Safety, health and environmental regulations, legislation specific for the substance or mixture

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to annex xvii to regulation (ce) 1907/2006. None

Substances in candidate list (art. 59 reach). None.

Substances subject to authorization (annex xiv reach). None.

Sanitary checks.

Workers exposed to this chemical agent to health must undergo health checks according to the provisions of article. 41 of legislative decree no. 81 of april 9, 2008 unless the risk for the safety and health of the worker has been assessed irrelevant, according to art. 224 paragraph 2.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the substances contained therein.

16. Other information

Note for the user:

The information contained in this sheet are based on our own knowledge on the date of the last version. The user must verify the suitability and thoroughness of provided information according to each specific use of the product.

It should not be construed as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility follow the laws and regulations on hygiene and safety. Wedo not assume responsibility for improper use.



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Relevant phrases

R42 / 43 may cause sensitization by inhalation and skin contact.
R53 may cause long- term adverse effects in the aquatic

General bibliography

1. Directive 1999/45 / ce as amended
2. Directive 67/ 548 / cee and following amendments and adjustments
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10. Inrs - fiche toxicologique
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