



## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date: 21.02.2019

Revision: 21.02.2019

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

#### 1.1 Product identifier

**Trade name: Girosolder**

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

No further relevant information available.

**Application of the substance / the preparation:** Auxiliary for dental technology

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

**Manufacturer/Supplier:**

Firmenbezeichnung  
Amann Girrbach AG  
Herrschaftswiesen 1  
A-6842 Koblach  
Telefon: 0043 5523 623330  
Fax: 0043 5523 55990  
Email: austria@amanngirrbach.com  
Internet: www.amanngirrbach.com

Inverkehrbringer  
Amann Girrbach GmbH  
Duerrenweg 40  
D-75177 Pforzheim  
Telefon: 0049 7231 957100  
Fax: 0049 7231 957129  
Email: germany@amanngirrbach.com  
Internet: www.amanngirrbach.com

**Further information obtainable from:** Amann Girrbach GmbH

#### 1.4 Emergency telephone number:

Giftinformationszentrum-Nord / GIZ-Nord Poisons Centre  
Telefon / Phone +49 (0) 551/19240  
24h / 7d

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture:

**Classification according to Regulation (EC) No 1272/2008:**

GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Carc. 1B H350i May cause cancer by inhalation.  
Repr. 2 H361f Suspected of damaging fertility.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements:

**Labelling according to Regulation (EC) No 1272/2008:** Void**Hazard pictograms:** Void

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**Signal word:** Void**Hazard statements:** Void**Precautionary statements:** Void**Additional information:**

Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex, if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex. (Regulation (EC) No 1272/2008, Annex I, 1.3.4.1.)

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

### SECTION 3: Composition/information on ingredients

#### 3.2 Chemical characterisation: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 7440-48-4	cobalt	>50-≤100%
EINECS: 231-158-0	⚠ Resp. Sens. 1B, H334; Carc. 1B, H350i; Repr. 2, H361f; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
CAS: 7440-47-3	chromium	>10-≤30%
EINECS: 231-157-5	substance with a Community workplace exposure limit	
CAS: 7440-21-3	silicon	≤2.5%
EINECS: 231-130-8	substance with a Community workplace exposure limit	
CAS: 7439-96-5	manganese	≤2.5%
EINECS: 231-105-1	substance with a Community workplace exposure limit	

**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:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product off the skin.

**After eye contact:**

Rinse opened eye for several minutes under running water.

Call a doctor immediately.

**After swallowing:** Call a doctor immediately.

#### 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.

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### SECTION 5: Firefighting measures

**5.1 Extinguishing media:****Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.**For safety reasons unsuitable extinguishing agents:** Water**5.2 Special hazards arising from the substance or mixture:**

Formation of toxic gases is possible during heating or in case of fire.

**5.3 Advice for firefighters:****Protective equipment:**

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

**Additional information:**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

**6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.**6.3 Methods and material for containment and cleaning up:**

Pick up mechanically.

Ensure adequate ventilation.

**6.4 Reference to other sections:**

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:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Provide suction extractors if dust is formed.

**Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.**7.2 Conditions for safe storage, including any incompatibilities:****Storage:****Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.**Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with acids.

**Further information about storage conditions:** Keep container tightly sealed.**7.3 Specific end use(s):** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

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**8.1 Control parameters:****Ingredients with limit values that require monitoring at the workplace:****7440-48-4 cobalt**WEL Long-term value: 0.1 mg/m<sup>3</sup>  
as Co; Carc, Sen**7440-47-3 chromium**WEL Long-term value: 0.5 mg/m<sup>3</sup>**7440-21-3 silicon**WEL Long-term value: 10\* 4\*\* mg/m<sup>3</sup>  
\*inhalable dust \*\*respirable dust**7439-96-5 manganese**WEL Long-term value: 0.2\* 0.05\*\* mg/m<sup>3</sup>  
as Mn \*inhalable fraction \*\*respirable fraction**8.2 Exposure controls:****Personal protective equipment:****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

**Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Short term filter device:

Filter P3

**Protection of hands:** Protective gloves**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.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Tightly sealed goggles**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties:****General Information:****Appearance:**

<b>Form:</b>	Solid
<b>Colour:</b>	Silver grey
<b>Odour:</b>	Odourless
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not applicable.**Change in condition:**

<b>Melting point/freezing point:</b>	1112 – 1138 °C
<b>Initial boiling point and boiling range:</b>	Undetermined.

**Flash point:** Not applicable.**Flammability (solid, gas):** Not applicable.

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<b>Decomposition temperature:</b>	Not determined.
<b>Auto-ignition temperature:</b>	Product is not selfigniting.
<b>Explosive properties:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not determined.
<b>Density at 20 °C:</b>	8.5 g/cm <sup>3</sup>
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.
<b>Evaporation rate:</b>	Not applicable.
<b>Solubility in / Miscibility with water:</b>	Insoluble.
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>9.2 Other information:</b>	No further relevant information available.

### 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:**

Toxic metal oxide smoke

Poisonous gases/vapours

### SECTION 11: Toxicological information

**11.1 Information on toxicological effects:**

**Acute toxicity**

Harmful if swallowed.

**Primary irritant effect:**

**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.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

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

**Carcinogenicity**

May cause cancer by inhalation.

**Reproductive toxicity**

Suspected of damaging fertility.

**STOT-single exposure** Based on available data, the classification criteria are not met.

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**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.**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.**Additional ecological information:****General notes:**

The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**12.5 Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects:** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods:****European waste catalogue:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN-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 Transport in bulk according to Annex II of****Marpol and the IBC Code** Not applicable.**UN "Model Regulation":** Void**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

No further relevant information available.

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**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:**

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350i May cause cancer by inhalation.

H361f Suspected of damaging fertility.

H412 Harmful to aquatic life with long lasting effects.

**Department issuing SDS:**

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**Contact:** Dr. Axel Deeg**Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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

Acute Tox. 4: Acute toxicity – Category 4

Resp. Sens. 1: Respiratory sensitisation – Category 1

Resp. Sens. 1B: Respiratory sensitisation – Category 1B

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 1B: Carcinogenicity – Category 1B

Repr. 2: Reproductive toxicity – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3