

Date of issue: 04.09.2014 Replaces Data Sheet of:

"*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

**Section 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 **Product identifier:** n.ap.
Commercial Product Name: AG 125, AG 130, AG 134, AG 140, AG 145, AG 155, AG 156
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against:** None.
Use: Brazing alloy
Chemical nature of the preparation: Metal alloy – silver – copper - zinc
- 1.3 **Details of the supplier of the safety data sheet:**
Address: Manufacturer, supplier:
 H.P.Wirth GmbH, Weberstr. 46, 75239 Eisingen, Germany
 Telephone: + 497232 80978 12, Telefax: + 497232 80978 15
Contact person: Mr. Jan Wirth, eMail: j.wirth@hpwirth.com
Responsible:
 CHEMCO123® – Chemical Consultancy, graduate chemist, R. Fechner, ☎ + 49 5254 9575 05
 eMail: info@chemco123.de
- 1.4 **Emergency telephone number:**
 Information Centre Specialising in Symptoms of Poisoning: +49 30 19 240 (with costs)
 Emergency - Telephone of Company / Undertaking + 497232 80978 12

Section 2: Hazards identification

- 2.1 **Classification of the substance or mixture:** :
Classification according to Directive 1999/45 and Regulation (EC) 1272/2008:
 None.
- 2.2 **Label elements:**
Label elements according to Directive 1999/45 and Regulation (EC) 1272/2008:
 None.
- 2.3 **Other hazards:**
For Humans:
 Vapour during processing may be irritating to the respiratory tract and to the eyes.
For the Environment:
 None.
 Persistent, bioaccumulative and toxic substances (PBT-substances): None.
 Very persistent and very bioaccumulative substances (vPvB-substances): None.

Section 3: Composition/information on ingredients3.1 **Dangerous Ingredients:**

CAS - No.	Index - No.	EC - No.	Material	m% - range	Symbol / pictogram (e)	R - / H - phrases
7440-22-4	None.	231-131-3	Silver	24 - 57 %	n.ap.	n.ap.
7440-50-8	None.	231-159-6	Copper	20 - 41 %	n.ap.	n.ap.
7440-66-6	None.	231-175-3	Zinc	15 - 35%	n.ap.	n.ap.
7440-31-5	None.	231-141-8	Tin	1,5 - 4,6 %	n.ap.	n.ap.

Section 4: First aid measures

- 4.1 **Description of first aid measures:**
General advice:
 Show this safety data sheet to the doctor in attendance.
Inhalation:
 No hazards resulting from the material as supplied.
Skin Contact:
 Wash off with soap and water.
Eye Contact:
 No hazards resulting from the material as supplied.
Ingestion:
 No hazards resulting from the material as supplied.

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4.2 **Most important symptoms and effects, both acute and delayed:**

None.

4.3 **Indication of any immediate medical attention and special treatment needed:**

None.

Section 5: Firefighting measures

5.1 **Extinguishing media:**

Suitable Extinguishing Media: The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: None.

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

In the event of fire the following can be released: Vapours and decomposition products with irritating effects.

5.3 **Advice for firefighters:** None.

Special Protective Equipment:

None. Wear positive pressure self-contained breathing apparatus.

Wear full protective clothing.

Section 6: Accidental release measures

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

No hazards resulting from the material as supplied.

6.1.1 *For non-emergency personnel:*

Use personal protective equipment.

6.1.2 *For emergency responders:*

Use personal protective equipment.

6.2 **Environmental Precautions:**

No special environmental precautions required. Take up mechanically and collect in suitable container for disposal.

6.3 **Methods and material for containment and cleaning up:**

6.3.1. *Methods and material for containment:*

Take up mechanically and collect in suitable container for disposal.

6.3.2. *Methods and material for cleaning up:*

Take up mechanically

6.3.3 **Inappropriate containment or clean-up techniques:**

None.

6.4 **Reference to other sections:**

See Section 8 / 13.

Section 7: Handling and storage

7.1 **Precautions for safe handling:**

7.1.1 **Recommendations shall be specified to:**

No hazards resulting from the material as supplied.

During processing: Provide sufficient air exchange and/or exhaust in work rooms.

7.1.2 **Advice on general occupational hygiene shall be provided:**

Do not breathe vapour. When using do not eat or drink.

7.2 **Conditions for safe storage, including any incompatibilities:**

No special storage conditions required.

Precautions in Case of Fire and Explosion:

Normal measures for preventive fire protection.

7.3 **Specific end use(s):**

Brazing alloy.

Section 8: Exposure controls/personal protection

8.1 **Control parameters:** None.

Exposure Limits:

CAS / Material

Limit Value according to TRGS 900/ EC Guideline 2000/39:

7440-22-4 / Silver

0,1 E (respirable dust), 8(II)

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- 8.2 **Exposure controls:**
 Ingredient, named under 8.1.
- 8.2.1 **Appropriate engineering controls:**
 During processing: Provide sufficient air exchange and/or exhaust in work rooms.
- 8.2.2 **Personal Protective Equipment**
- Respiratory Protection:** No hazards resulting from the material as supplied.
 During processing: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator with filter P2.
- Hand Protection:** No hazards resulting from the material as supplied.
 During processing: Leather gloves
- Eye Protection:** No hazards resulting from the material as supplied.
 During processing: Safety glasses
- Skin Protection:** Not required.
- Further Information:** Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Thermal hazards:** None.
- 8.2.3 **Environmental exposure controls:** None.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: solid
Colour: silver
Odour: None
Odour threshold: n.ap.

Safety Relevant Data

pH-value, undiluted: not applicable
 Boiling point / Boiling - range (°C): not applicable

	~ melting temperature: Solidus °C / Liquidus °C
AG 156	620/655
AG 155	630/660
AG 145	640/680
AG 140	650/710
AG 134	630/730
AG 130	665/755
AG 125	680/760

Flash point (°C): not applicable
 Flammability: not applicable
 Ignition temperature (°C): not applicable
 Autoflammability (EC A16): not applicable
 Oxidising properties: not applicable
 Explosion hazard: not applicable
 Explosion limits (Vol.%) lower: not applicable, upper: not applicable
 Vapour pressure: not applicable
 Density (g/ml): no data available
 Solubility (in Water): insoluble
 Partition coefficient, n-Octanol/Water: no data available
 Viscosity: no data available
 Solvent content (m %): not applicable
 Fat solubility: not applicable

- 9.2 **Other information:**
- Thermal decomposition (°C): no data available
 Vapour density (Air = 1): no data available
 Evaporation rate: no data available

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Section 10: Stability and reactivity

- 10.1 **Reactivity:**
No hazards resulting from the material as supplied.
- 10.2 **Chemical stability:**
Stable at normal conditions
- 10.3 **Possibility of hazardous reactions:**
None.
- 10.4 **Conditions to avoid:**
None.
- 10.5 **Incompatible materials:**
Keep away from oxidising agents, strongly alkaline and strongly acid materials.
- 10.6 **Hazardous decomposition :**
None.

Section 11: Toxicological information

- 11.1 **Information on toxicological effects**
- 11.1.1 **Mixtures** - No hazards resulting from the material as supplied.
- Acute toxicity**
- | | |
|--|-------------------|
| Inhalation, LC ₅₀ rat, (mg/l/4h): | None. |
| Ingestion, LD ₅₀ rat, (mg/kg): | None. |
| Skin - contact, LD ₅₀ rat, (mg/kg): | None. |
| Irritation (eye): | None. |
| Corrosivity: | None. |
| Sensitisation: | None. |
| Repeated dose toxicity: | no data available |
| Carcinogenicity: | no data available |
| Mutagenicity: | no data available |
| Toxicity for reproduction | None.. |
- 11.1.2 **Substances:** No hazards resulting from the material as supplied.
- Acute Health Effects:**
- | | |
|---|----------------|
| Ingestion, LD ₅₀ rat, (g/kg): | not applicable |
| Skin - contact, LD ₅₀ rabbit, (mg/kg): | None |
| Inhalation, LC ₅₀ rat, (mg / m ³ , 30 min): | None |
| Skin corrosion/irritation: | None |
| Serious eye damage/irritation: | None |
| Respiratory or skin sensitisation | None. |
| Germ cell mutagenicity: | None |
| Carcinogenicity: | None |
| Reproductive toxicity: | None |
| STOT-single exposure: | None |
| STOT-repeated exposure: | None |
| Aspiration hazard: | None. |

Section 12: Ecological information

- 12.1 **Ecotoxic Effects, Aquatic Toxicity:**
Not water endangering.
- 12.2 **Persistence and degradability:**
May be separated mechanically in waste water plants.
- 12.3 **Bioaccumulative potential:**
Does not bioaccumulate.
- 12.4 **Mobility in sol:**
Does not bioaccumulate.
- 12.5 **Results of PBT and vPvB assessment:**
Persistent, bioaccumulative and toxic substances (PBT-substances): None.
Very persistent and very bioaccumulative substances (vPvB-substances): None.
- 12.6 **Other adverse effects:**
None.

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Section 13: Disposal considerations

- 13.1 **Waste treatment methods:**
Methods of waste treatment of both the substance or mixture and any contaminated packaging
Recommendation: R3 / D1
Waste - Code - No.: 17 04 - metals (including their alloys). 17 04 07 – blended metals

Section 14: Transport information

Transportation by Road or Railway according to ADR/GGVS and RID/GGVE
Transportation by Vessels according to IMDG/GGVSee
Transportation by Aeroplane according to IATA-DGR/ICAO-TI
Remarks: Not dangerous goods

Section 15: Regulatory information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
TRGS 528 (Germany)
- 15.2 **Chemical safety assessment:** None.

Section 16: Other information

R phrases / H phrases:

None.

Further information to work out the Data sheet:

Data of the producer.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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