



Safety Data Sheet

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Reference : 31038 - 96208
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1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name : Cadmium containing Silver brazing alloys

Product code : C 84

Recommended Use : For metal joining under controlled atmosphere or fluxed brazing operations

Supplier : Thessco Agi CLAL
ZA de l'Esplanade BP 30210
4 rue Enrico Fermi
77463 Saint Thibault des vignes, France

Telephone number : 01 60 94 20 30 **Fax :** 01 60 07 08 18

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical name</u> <u>Weight %</u>	<u>CAS-No</u>	<u>EC-No</u>	<u>Label / Risk phrases</u>
Silver	7440-22-4	231-131-3	- 11.0 – 51.0
Copper	7440-50-8	231-159-6	- 12.5 – 51.0
Zinc	7440-66-6	231-175-3	+N 7.0 – 32.0 R 50/53 S2, 43, 46, 60, 61
Cadmium	7440-43-9	231-152-8	+T, +N 5.65 – 28.0 R45, 26, 48/23/25, 62, R63, 68, 50/53 S53, 45, 60, 61

3. HAZARDS IDENTIFICATION

Most important hazards & classification :

Carcinogenic , category 2; May cause cancer.

Mutagenic, category 3; Possible risk of irreversible effects.

Toxic for reproduction, category 3; Possible risk of impaired fertility & possible risk of harm to the unborn child.

Toxic; Danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

Very toxic; Very toxic by inhalation.

Dangerous for the environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Specific hazards:

Material can emit toxic fumes when heated.
Thermal burns from molten metal.

4. FIRST-AID MEASURES

General advice :

Show this data sheet to the doctor in attendance.

Inhalation :

Remove patient to fresh air. Urgently seek medical attention if respiratory symptoms develop. Keep warm and at rest.

Skin contact :

If reddening occurs, wash affected area with soap and water. Seek medical attention if symptoms persist.

Eye contact :

If redness or watering occurs, irrigate with copious amounts of water or isotonic saline. Seek medical attention.

Ingestion :

Do not induce vomiting. Keep warm and at rest. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Extinguish with dry powder, carbon dioxide or water spray.

Unsuitable extinguishing media : Water jets.

Specific hazards :

This product may give rise to toxic fumes in a fire.

Special protective equipment for fire fighting :

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :

Wear personal protective equipment.

Environmental precautions : Avoid release to the environment. Do not release to drain or water courses

Spillages :

Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Handling : Avoid contact with eyes, skin and clothing. Avoid breathing metal fumes from heated material. When using do not eat , drink or smoke.

Storage : Store in original containers in cool, dry conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure limits :		<u>TWA 8 hours</u>	<u>STEL 15 min.</u>
EH40	Silver	0.1 mg.m ⁻³	-
	Copper fume	0.2 mg.m ⁻³	-
	Cadmium	0.025 mg.m ⁻³	-
	Cadmium oxide fume	0.025 mg.m ⁻³	0.05 mg.m ⁻³
	Nickel	0.5 mg.m ⁻³	
	Tin	2 mg.m ⁻³	4 mg.m ⁻³
	Silicon	10 mg.m ⁻³	
	Manganese	0.5 mg.m ⁻³	-

Wear suitable protective clothing, PVC gloves for handling and heat resistant gloves and goggles during brazing. Inhalation of fume evolved during brazing may be harmful. Controlled atmosphere or fluxed brazing operations should be utilised. Local exhaust ventilation is recommended, as engineering controls are preferred to personal protective equipment. If PPE is required, a chemical cartridge respirator should be used. Workplace atmospheric monitoring may be required.

Medical surveillance may be required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Metal wire & strip.
Colour : Metallic. Silver / brown
Odour : None.
pH : Not applicable.
Melting point / Range : 595 – 800°C
Relative density : 8.8 – 9.6 at 20°C
Water solubility : Insoluble.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Conditions to avoid : Not applicable.

Materials to avoid : Not applicable.

Hazardous decomposition

products : Metal fume and metal oxide fume.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : Toxic. Possible systemic effects. Possible long term effects.

May cause harm to the unborn child. May impair fertility.

Irritancy - Skin : Unlikely to cause a problem.

Eyes : Unlikely to cause a problem.

Skin sensitisation : No.

Carcinogenicity : Yes.

Chronic toxicity : A cumulative poison.

Other :

12. ECOLOGICAL INFORMATION

Mobility : The product is non-volatile and insoluble and will accumulate in the ground.

Persistence / Degradability : The product is expected to be resistant to biodegradation.

Bio-accumulation : A potential for bio-accumulation is indicated.

Ecotoxicity : The product is rated as hazardous to aquatic species.

13. DISPOSAL CONSIDERATIONS

Waste from residues and

Unused product : Return to supplier.

Regulations: Wastes are classed as hazardous and should be disposed of in accordance with

The Waste Framework Directive (75/442/EEC) and the Hazardous Waste Directive (91/689/EEC).

EWC (LOW) : 17-04-09*

14. TRANSPORT INFORMATION

UN Class : Not classified.

ADR/RID – Class : Not classified.

IMDG – Class : Not classified.

IMDG – Marine pollutant : Yes

IATA – Class : Not restricted

15. REGULATORY INFORMATION

Personal Protective Equipment at Work Regulations 1992.

Chemicals (Hazard Information and Packing for Supply) Regulations 2005.

Control of Substances Hazardous to Health (Amendment) Regulations 2004.

Labels: Health – **T**, Environment – **N**.

16. OTHER INFORMATION

Classification according to Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, CHIP3



Hazard symbol : Very toxic, Toxic, Carcinogen category 2, Mutagen category 3



Dangerous for the environment

R Phrases :

R45 – May cause cancer .

R26 – Very toxic by inhalation.

R48/23/25 – Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed

R62 – Possible risk of impaired fertility.

R63 – Possible risk of harm to the unborn child.

R68 – Possible risk of irreversible effects

R50/53 – Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

R48 – May cause sensitisation by skin contact.

S Phrases :

S2 – Keep out of the reach of children.

S22 – Do not breathe dust .

S36 – Wear suitable protective clothing.

S43 – In case of fire use ... (indicate in the space the precise type of fire-fighting equipment. If water increase the risk add – Never use water).

S45 – In case of accident or if you feel unwell, seek medical advice. Immediately (show label where possible).

S46 – If swallowed, seek medical advice immediately and show this container or label.

S53 – Avoid exposure - obtain special instructions before use

S60 – This material and its container must be disposed of as hazardous waste.

S61 – Avoid release to the environment. Refer to special instructions / safety data sheet

Recommended Restrictions : Not to be used on products for the food industry, water supply industry or items covered by RoSH and WEEE regulations.

Further information : Contact the Technical Department, Thessco Agi CLAL.

Telephone number : 01 60 94 20 30

Fax Number : 01 60 07 08 18

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