

Safety Data Sheet
Amalgam Capsule

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

1.1 Product identifier

Product category: Dental amalgam capsules.

Product name: solaloy

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

Dental filling material.

Applications of the substance/mixture: For dental restorations.

1.3 Details of the supplier of the safety data sheet

Manufacturer /supplier:

Trent dent Products Limited Unit 3C, 88 Peterborough Road London SW6 3HH, United Kingdom

Tel: +44 20 3091 6068

www.trentdent.co.uk

E-mail: info@trentdent.co.uk

1.4 Emergency telephone number:

Tel: +44 20 3091 6068 (office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction.

Hazard pictogram



Acute Toxicity



Health Hazard



Environmental warning



Corrosive

Signal Word

Danger

Hazard determining components of labelling:

Mercury

Hazard statements

H290 May be corrosive to metals

H301 Toxic if swallowed

H311 Toxic in contact with the skin

Rev date: Apr 2023

Rev no: 01

H330	Fatal if inhaled
H360D	May damage the unborn child
H372	Causes damage to organs through prolonged and repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Precautionary statements

P010	If medical advice is needed, have product container to hand.
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breath dust / fume / gas / mist / vapours/ spray.
P273	Avoid release to the environment
P281	Use personal protective equipment as required
P310	Immediately call a poison centre / Doctor
P405	Store locked up
P501	Dispose of contents / container in accordance with local / regional / national / international regulations.

SECTION 3: Composition/information on ingredients

Description: Alloy powder contained in a plastic capsule with a Mercury pillow
Mixture of substances listed below.

Solaloy world class (including Fast Set variant), Alloy powder consists of: 45% Ag, 24% Cu, 31% Sn

- 1 Spill Mercury 400 mg: Alloy powder 400 mg
- 2 Spill Mercury 600 mg: Alloy powder 600 mg
- 3 Spill Mercury 800 mg: Alloy powder 800 mg

Solaloy super 68, Alloy powder consists of: 68.4% Ag, 4.7% Cu, 26.3% Sn, 0.6% Zn

- 1 Spill Mercury 400 mg: Alloy powder 368 mg
- 2 Spill Mercury 600 mg: Alloy powder 551 mg
- 3 Spill Mercury 800 mg: Alloy powder 740 mg

For commercial reasons, the above data may not be a complete alloy composition. However, all elements of a significant content are reported.

CAS numbers: Ag: 7440-22-4, Cu: 7440-50-8, Sn: 7440-31-5, Zn: 7440-66-6, Hg: 7439-97-6

SECTION 4: First aid measures

4.1 Description of first aid measures:

Though the alloy powder itself provides a very low risk of danger, the product in capsule form includes Mercury so extra safety measures and concerns must be taken into consideration.

4.2 General information:

Rev date: Apr 2023

Rev no: 01

Immediately remove any clothing contaminated by the product. Remove breathing equipment only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest, provide artificial respiration.

Inhalation:

Remove from exposure and rest in fresh air. Seek medical advice. In case of unconsciousness, place the patient stably in the recovery position ready for transportation.

Ingestion:

Rinse mouth with water. Seek immediate medical advice.

Eyes:

Irrigate with clean water or isotonic saline solution for 5 minutes. Seek medical advice.

Skin:

Wash with soap and water and rinse thoroughly. Most important symptoms and effects, both acute and delayed: Headache – Dizziness – Gastric or intestinal disorders - Unconsciousness

Indication of any immediate medical attention and special treatment needed:

If swallowed or in case of vomiting, there is danger of Mercury entering the lungs. Medical supervision would be required for at least 48 hours.

SECTION 5: Fire fighting measures

5.1 Extinguishing media:

Not flammable. Use any extinguishing medium for surrounding fire.

5.2 Special hazards arising from the substance or mixture:

In case of fire, toxic Mercury vapour / gas would likely be released.

Special equipment for fire fighters dictated by the risk assessment for the surrounding area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Mount respiratory protective device.

6.2 Environmental precautions:

Do not allow the product to reach sewage system or water course. Inform respective authorities if seepage may have occurred.

6.3 Methods and material for containment and clean up:

Absorb with liquid binding materials. For example: sand, diatomite, acid binders, universal binders, sawdust. Mercury spillage kits are also available. Disposal of any contaminated material waste as advised in section 13. Ensure there is adequate ventilation.

6.4 Reference to other sections:

See sections 7, 8 and 13.

SECTION 7: Handling and storage

7.1 Handling

Precautions for safe handling:

Work in a well-ventilated area, avoiding inhalation of Mercury vapour. Avoid contact with skin and eyes and handle receptacle with care. Keep repertory protection equipment available.

7.2 Storage

Rev date: Apr 2023

Rev no: 01

In the form supplied, product should only be stored in the original labelled container supplied and not mixed with other materials. Keep container tightly sealed. The area chosen for storage should be of low humidity and secure. The product should not be stored near oxidising materials, acids or halogens.

SECTION 8: Exposure controls/Personal protection

8.1 Exposure controls

The following standards have been established for the following components. Health and Safety Executive Occupational Exposure Standard (8hr TWA)

Element	Fume	Dust
Silver	0.1 mg/m ³	
Copper	0.2 mg/m ³	1.0 mg/m ³
Tin	0.02 mg/m ³	
Mercury (Long term value)		0.02 mg/m ³

8.2 Additional information.

The most current valid list was used in the production of this document.

Exposure controls.

Personal protection

8.3 Ventilation and Respiratory Protection: To meet T.L.V requirements, efficient local exhaust ventilation or approved respirator protection must be provided where-ever heating, grinding or any operation which may cause exposure to dust or fume.

8.4 Other Protective Equipment: Gloves and / or suitable protective clothing is required to prevent contact between skin and capsule contents. Face and / or eye protection is recommended to prevent possible exposure. Remove any contaminated clothing.

8.5 Work / Hygiene Practices: Avoid inhalation or ingestion. Practice good housekeeping. Avoid eating and smoking in the work area. Wash thoroughly before eating and smoking.



Protective work clothing



Suitable protective gloves



Suitable eye protection

SECTION 9: Physical and chemical properties

Appearance	Silver semi hard paste when mixed
Odour	No odour
pH	Not determined
Boiling Point	No data
Melting Range N	Not known
Flash Point	Not applicable
Flammability	Not flammable
Auto-flammability	Not applicable
Explosive properties	None explosive
Vapour pressure	Not known
Relative density, vapour density, evaporation rate.	Not known / not applicable
Solubility in / miscibility with water	Insoluble
Partition coefficient (n-octanol / water)	Not determined
Viscosity: Dynamic / Kinematic	Not applicable
Solvent content (VOC)	0%. No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity:

No further information available

10.2 Chemical stability:

Stable under normal conditions. However, Mercury can be corrosive to some metals.

10.3 Possibility of hazardous reaction:

None specified.

10.4 Conditions to avoid:

Avoid premature release of Mercury content.

10.5 Incompatible materials:

Mercury can be corrosive to some metals.

10.6 Hazardous decomposition products:

Mercury vapour could be released in case of fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Fatal if inhaled.

11.2 Skin corrosion / irritation:

Avoid contact with the skin due to toxic Mercury content.

11.3 Possible respiratory or skin sensitization:

Avoid breathing in toxic Mercury vapour.

11.4 CMR effects: Germ cell mutagenicity: Insufficient data available

Carcinogenicity: Insufficient data available

Rev date: Apr 2023

Rev no: 01

11.5 Reproductive Toxicity: May damage the unborn child.

11.6 STOT – Single exposure: Insufficient data available

11.7 STOT – Repeated exposure: Causes damage to organs through prolonged or repeated exposure. (Mercury).

11.8 Aspiration hazard: Insufficient data available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Mercury is toxic to marine life.

12.2 Persistence and degradability: Persistence is likely, not biodegradable.

12.3 Bioaccumulative potential: No available data

12.4 Mobility in soil: No information available.

12.5 Ecotoxicological effects: Very toxic to marine life

12.6 Additional ecological information. General notes: Do not allow product (Mercury content) to reach water course, ground water or sewage systems. If suspected contact local authorities for advice. Mercury is very toxic to both Humans and aquatic life.

12.7 Results of PBT and vPvB assessments: No information available.

12.8 Other adverse effects: None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods.

Recommendation

Any waste containing or suspected of containing mercury should be handled with caution, clearly marked and sent for recovery to a company specialising in this type of material. European waste codes are application specific not product specific.

13.2 Contaminated packaging:

Recommendation

Disposal must be made according to official regulations.

SECTION 14: Transport information

UN3506: Mercury contained in manufactured articles, 6.1 (8) II, Environmentally hazardous. Transport Hazard class 8 Corrosive to other metals, toxic, hazard to the environment and marine life. (Mercury)



Rev date: Apr 2023

Rev no: 01