

# SAFETY DATA SHEET

**Product name:** **ANA 70 POWDER**

SDS Drawn up: 1995-03-27      SDS Revised: 2010-03-25

## 1. Identification of the substance / preparation and of the company

**Trade name:** ANA 70 POWDER  
**Chemical name:** Metal powder (alloy)  
**Field of application:** Metallic powder to produce amalgam for dental fillings  
**Supplier:** Nordiska Dental AB  
**Postal address:** Box 1082      Telephone no: +46 431 443 360  
**Postcode and town:** S-262 21 Ängelholm      Fax no: +46 431 443 399  
**Country:** Sweden      E-mail: mail@nordiskadental.se  
**Emergency telephone:** +46 431 443 360      Contact: Ewa-Lotte Pedersen

## 2. Composition / information on ingredients

Component	CAS-no	Einecs-no	Content (%)	Symbol letters*	R-phrases**
Silver, Ag	7440-22-4	231-131-3	69,3		
Tin, Sn	7440-31-5	231-141-8	19,4		
Copper, Cu	7440-50-8	231-159-6	10,9		
Zinc, Zn	7440-66-6	231-175-3	0,4	F	R15-17

\*Symbol letters and categories of danger: T+=Very toxic, T=Toxic, C=Corrosive, Xn=Harmful, Xi=Irritant, E=Explosive, O=Oxidising, F+=Extremely flammable, F=Very flammable, N=Dangerous for the environment

\*\* The full text of the phrase is listed under heading 16.

## 3. Hazards identification

**Classification:-**

**Adverse physicochemical effects:-**

**Adverse human health effects:-**

**Adverse environmental effects:-**

## 4. First aid measures

**Inhalation:** Get fresh air. Rest and keep warm.

**Skin contact:** Wash off with soap and water.

**Eye contact:** Keep the eyelids wide apart and flush with plenty of water for at least 15 minutes. Get medical attention in case of discomfort, e.g. redness/irritation.

**Ingestion:** Rinse the mouth with water. Get medical attention in case of discomfort.

**Further information:** Never give any food and/or drink to an unconscious person. Please show this safety data sheet to the doctor on duty. Get medical attention in case of uncertainty.

## 5. Fire-fighting measures

**Suitable extinguishing media:** Use any means suitable for extinguishing surrounding fire, the presence of other products or chemicals taken into consideration.

**Extinguishing media which must not be used:** Do not use extinguishing media inappropriate to surrounding fire conditions, the presence of other products or chemicals taken into consideration.

**Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:-**

**Special protective equipment:** Protective equipment in compliance with national regulations.

## 6. Accidental release measures

**Personal precautions:** Personnel should wear suitable protective clothing and gloves, in order to avoid skin-contact.

**Environmental precautions:** Prevent the spillage from reaching the outlets.

**Methods for cleaning up:** Spillage and waste from the cleaning-up procedure should be disposed of according to local regulations and national legislation.

## 7. Handling and storage

**Handling:** The product should be handled with care and in accordance with strict hygiene practises. Avoid inflicting damage on the packaging.

**Storage:** Keep in a tightly closed container, stored in a dry, well ventilated area. Recommended storage temperature not > 25°C.

## 8. Exposure controls / personal protection

**Exposure limit values:** Silver: OSHA Permissible Exposure Limit (PEL): Time Weighted Average (TWA) 0,01 mg/m<sup>3</sup>. NIOSH Recommended Exposure Limit (REL): TWA 0,01 mg/m<sup>3</sup>. NIOSH Immediately Dangerous to Life or Health (IDLH): 10 mg/m<sup>3</sup> (as Ag). Tin: OSHA PEL: TWA 2 mg/m<sup>3</sup>. NIOSH REL: TWA 2 mg/m<sup>3</sup>. NIOSH IDLH: 100 mg/m<sup>3</sup> (as Sn). Copper: OSHA PEL: TWA 1 mg/m<sup>3</sup>. NIOSH REL: TWA 1 mg/m<sup>3</sup>. NIOSH IDLH: 100 mg/m<sup>3</sup> (as Cu). Zinc: OSHA PEL: TWA 5 mg/m<sup>3</sup> (fume), TWA 15 mg/m<sup>3</sup> (total dust), TWA 5 mg/m<sup>3</sup> (resp dust). NIOSH REL: Dust: TWA 5 mg/m<sup>3</sup>, C 15 mg/m<sup>3</sup>. Fume: TWA 5 mg/m<sup>3</sup>, ST 10 mg/m<sup>3</sup>. NIOSH IDLH: 500 mg/m<sup>3</sup> (as ZnO).

**Exposure controls:** All work should be carried out in accordance with strict hygiene practises. All work should take place in suitable premises, in accordance with the existing legislation and regulations. See also heading 7. Handling and storage.

### Occupational exposure controls:

- **respiratory protection:** Protective measures, e.g. a mask, could be needed.
- **hand protection:** Protective gloves should be used in order to avoid exposure.
- **eye protection:** Eye protectors should be used in order to avoid exposure.
- **skin protection:** : Protective clothing should be used in order to avoid exposure.

### Environmental exposure controls:-

## 9. Physical and chemical properties

### General information:

- Appearance: Fine silver-grey metal powder.
- Odour: No odour.

### Important health, safety and environmental information:

- |   |               |                                   |                         |
|---|---------------|-----------------------------------|-------------------------|
| · pH:                                     | -             | · Boiling point/interval:         | -                       |
| · Flash point:                            | Incombustible | · Flammability (solid, gas):      | Incombustible           |
| · Explosive properties:                   | Incombustible | · Oxidising properties:           | -                       |
| · Vapour pressure:                        | -             | · Density:                        | 3,3 g/cm <sup>3</sup> . |
| · Water solubility:                       | Insoluble.    | · Solubility in organic solvents: | Insoluble.              |
| · Vapour density:                         | -             | · Evaporation rate:               | -                       |
| · Partition coefficient: n-octanol/water: | -             | · Viscosity:                      | -                       |

## 10. Stability and reactivity

### Conditions to avoid:-

### Materials to avoid:-

### Hazardous decomposition products:-

**Further information:** The metal powder (alloy) reacts with mercury, forming amalgam.

## 11. Toxicological information

### Dangerous-to-health effects and symptoms related to:

- **inhalation:** May be irritating to the respiratory organ.
- **ingestion:** Consuming high amounts may produce nausea, vomiting, fever, reduced muscular strength, circulatory disturbance.
- **skin contact:** May be irritating to the skin. Some persons may be more susceptible to the effects of the substance. In these cases, the substance may have an allergy-forming effect.
- **eye contact:** May cause e.g. redness and/or irritation.

## 12. Ecological information

**Ecotoxicity:** Zinc: Fish, toxicity: LC > 0,1 mg/L. Inorganic zinc: Aquatic organisms, toxic effects when ≥ 0,3 mg/L.

### Mobility:-

### Persistence and degradability:-

### Bioaccumulative potential:-

### Other adverse effects:-

### 13. Disposal considerations

**Product:** Should be disposed of in accordance with local regulations and national legislation.

**Contaminated packaging:** Should be disposed of in accordance with local regulations and national legislation.

### 14. Transport information

Not regulated.

### 15. Regulatory information

**Health, safety and environmental information shown on the label:**

- **Symbol:** None.
- **Categories of danger:** None.
- **Risk phrases:** None.
- **Safety phrases:** None.

**Further information:** This product meets the demands of ISO 24234 (mercury and alloys for dental amalgam) and MDD 93/42/EEC. The product is CE-marked.

### 16. Other information

**R-phrases referred to under heading 2:**

R15 Contact with water liberates extremely flammable gases.

R17 Spontaneously flammable in air.

**Sources of key data:** Swedish National Chemicals Inspectorate, Swedish Work Environment Authority, Eur-Lex European Union law. National Institute for Occupational Safety and Health (NIOSH). Occupational Safety and Health Administration (OSHA).

**The safety data sheet is revised in order to:** meet the demands of the directive in REACH 1907/2006/EC.

The information in this safety data sheet is based upon our present knowledge. The information is presented with the intention of describing the safest way of handling the product. The safety data sheet is therefore not to be regarded as a complete chemical description of the product. Consequently, the user is responsible for making sure that the product is meant to be used in the actual field of application and that it serves the purpose intended.