

1. Identification of the substance

- 1.1 *Name of the product:* Solder bars
 1.1.1 Available bars: 0.4 kg, 1.0 kg, 3.5 kg
 1.2 *Application:* Automatic soldering

2. Composition and information of ingredients

Component	Number CAS	Contents %	Hazard identification R
Tin	7440-31-5	62,5-63,5	-
Lead	7439-92-1	Rest	20/22-33-62

3. Hazard identification

- 3.1 *Fire hazard:* Nonflammable materials
 3.2 *Toxic hazard:* Does not cause any hazards
 3.3 *Ecotoxic hazard:* Does not cause any ecotoxic hazards

4. First-aid measures

- 4.1 *After inhalation:* Supply fresh air; consult doctor in case of complaints
 4.2 *After swallowing:* Induce vomiting, if person is conscious. Seek medical help
 4.3 *After eye contact:* Rinse opened eye for several minutes under running water
 4.4 *After skin contact:* Immediately wash with water and soap and rinse thoroughly

5. Fire-fighting measures

- 5.1 *Special hazards:* In case of fire, the following can be released: Carbon monoxide (CO), Carbon dioxide (CO₂), aliphatic aldehydes, melted solder above 1000°F will liberate toxic lead
 5.2 *Suitable extinguishing agents:* CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam
 5.3 *General measures:* Inform appropriate authorities in case of environmental contamination. Evacuate a population who are not involved in desposing of damage. Call for a fire-brigade and police
 5.4 *Special measures:* Wear protective outfit

6. Accidental release

- 6.1 *General measures:* Inform appropriate authorities in case of environmental contamination. Evacuate a population who are not involved in disposing of damage. Call for a fire-brigade and police
 6.2 *Protective equipment:* Wear self-contained respiratory protective device, protective glasses
 6.3 *Special measures:* Do not allow product to reach sewage system or any water course. Dispose of toxic dust with water spray. Apply a respiratory device
 6.4 *Environmental protection:* Scoop up paste and deposit in appropriate containers. Remove residual

7. Handling and storage

- 7.1 *Handling:*
 7.1.1 Information for safe handling: Ensure good ventilation/exhaustion at the workplace
 7.1.2 Information about fire – and explosion protection: No special measures required
 7.2 *Storage:*
 7.2.1 Requirements to be met by storerooms and receptacles: No special requirements
 7.2.2 Information about storage in one common storage facility: Not required
 7.2.3 Further information about storage conditions: Store in dry conditions

8. Exposure controls/personal protection

8.1 Ingredients with limit Values that require monitoring at the workplace:

Metal	OES – short term	OES – long term
Tin	2,0 mg/m ³	4,0 mg/m ³
Lead	0,05 mg/m ³	N/A

8.2 *Personal protective equipment:* Keep away from foodstuffs, beverages and feed

8.3 *General protective and hygienic measures:* Wash hands before breaks and at the end of work. Store protective clothing separately

8.4 *Respiratory protection:* When ventilation is not sufficient to remove fumes from the breathing zone, a safety approved respirator or self-contained breathing apparatus should be worn

8.5 *Protection of hands:* Protective gloves (material of gloves – nitril rubber, natural rubber)

8.6 *Eye protection:* Safety glasses

9. Physical and chemical properties

9.1 *Form:* Solid

9.2 *Colour:* Silver grey

9.3 *Odour:* Mild

9.4 *Melting point:* 183°C

9.5 *Boiling point:* Undetermined

9.6 *Flash point:* Not applicable

9.7 *Danger of explosion:* Product does not present an explosion hazard

9.8 *Density at 20°C:* 8,4 g/cm³

9.9 *Solubility in water:* Insoluble

10. Stability and reactivity

10.1 *Thermal decomposition/conditions to be avoided:* No decomposition if used according to specifications

10.2 *Materials to be avoided:* Strong acids, strong oxidizer

10.3 *Dangerous reactions:* No dangerous reactions known

10.4 *Dangerous decomposition products:* No dangerous decomposition products known

11. Toxicological information

11.1 *Primary irritant effect:* No irritant effect

11.2 *On the eye:* Smoke during soldering can cause eye irritation

11.3 *Sensitization:* No sensitizing effects known

12. Ecological information

12.1 *General notes:* Do not allow product to reach ground water, water course or sewage system

13. Disposal considerations

13.1 *Product recommendation:* Must not be disposed together with household garbage. Do not allow product to reach sewage system

13.2 *European waste catalogue:* Disposal must be made according to official regulations

13.3 *Uncleaned packaging:* 10 10 03 – dross and skimmings after casting processes

13.4 *Recommendation:* Disposal must be made according to official regulations

14. Transport information

14.1 *ADR/RID class (land):* Not regulated

14.2 *IMDG class (marine):* Not regulated

14.3 *IATA-DGR (air transport):* Not regulated

15. Regulatory information

15.1 *Special labelling of certain preparations:* Safety data sheet available for professional user on request

15.2 *Waterhazard class:* Water hazard class 3 (Self-assessment); extremely hazardous for water

15.3 *Risk phrases:*

15.3.1 R20/22 - harmful by inhalation and if swallowed

15.3.2 R33 - danger of cumulative effects

15.3.3 R62 - possible risk of impaired fertility

15.4 *Safety phrases:*

15.4.1 53 - avoid exposure - obtain special instructions before use

15.4.2 1/2 - keep locked up and out of the reach of children

15.4.4 29/56 - do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

15.4.5 37/39 - wear suitable gloves and eye/face protection