



Material Safety Data Sheet (MSDS)

Tin Metal

Section 1: Identification of the Substance and Company

Product Name: Tin Metal

Synonyms: Metallic Tin

Recommended Use: Alloy production (bronze, solder), coatings, plating, and industrial applications.

Supplier/Manufacturer:

Basekim Kimyasal Ürünler LTD

Turan Gunes Blv. Ilkbahar Mah. Sinpas Altinoran Tower 2, Floor 1, Unit 146

Ankara, Turkey

Transportation Emergency Response: Logistics: 88552948

Health Emergency Contact: +90 312 514 7055 / +90 312 514 7081

MSDS Requests: +90 312 514 7055 / +90 312 514 7081

Section 2: Composition/Information on Ingredients

- **Substance:** Tin (Sn)
- **CAS Number:** 7440-31-5
- **Impurities:** Trace amounts of lead, copper, or antimony may be present depending on source.



Section 3: Hazard Identification

GHS Classification: Not classified as hazardous under GHS criteria for bulk metal.

Possible Hazards:

- Dust or fumes generated during processing may cause mild respiratory irritation.
- Prolonged exposure to high concentrations of fumes can cause "stannosis," a benign form of pneumoconiosis.

Signal Word: *None required*

Precautionary Statements:

- Avoid breathing dust or fumes.
- Use adequate ventilation when melting, cutting, or grinding.

Section 4: First Aid Measures

- **Inhalation:** Move person to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Wash with soap and water. Remove contaminated clothing.
- **Eye Contact:** Rinse immediately with water for at least 15 minutes. Get medical help if irritation develops.
- **Ingestion:** Rinse mouth with water. If large amounts are swallowed, seek medical advice.

Section 5: Firefighting Measures

- **Suitable Extinguishing Media:** Dry chemical, dry sand, CO₂.
- **Unsuitable Media:** Do not use water on molten metal.
- **Specific Hazards:** Fine tin dust may form explosive mixtures with air.
- **Protective Equipment:** Firefighters should wear SCBA and protective gear.



Section 6: Accidental Release Measures

- **Personal Precautions:** Avoid dust formation. Wear protective equipment.
- **Environmental Precautions:** Prevent entry into drains or water systems.
- **Cleanup:** Collect mechanically and place in sealed containers. Avoid dry sweeping; use industrial vacuum systems.

Section 7: Handling and Storage

- **Handling:** Use with adequate ventilation. Avoid dust and fumes.
- **Storage:** Store in a dry, cool, well-ventilated area. Keep container tightly closed.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

- OSHA PEL: 2 mg/m³ (as Sn, TWA)
- ACGIH TLV: 2 mg/m³ (as Sn, TWA)

Engineering Controls:

- Local exhaust ventilation recommended when processing.

PPE:

- **Respiratory:** Use respirator if airborne concentrations exceed limits.
- **Eye Protection:** Safety glasses or goggles.



- **Skin Protection:** Protective gloves and clothing.
- **Hygiene:** Wash hands after handling.

Section 9: Physical and Chemical Properties

- **Appearance:** Silver-white, soft metallic solid
- **Molecular Weight:** 118.71 g/mol
- **Melting Point:** 231.9 °C
- **Boiling Point:** 2602 °C
- **Density:** 7.3 g/cm³
- **Solubility:** Insoluble in water
- **Odor:** Odorless

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions.
- **Reactivity:** Reacts with strong oxidizers and acids.
- **Hazardous Decomposition Products:** Tin oxides may form under fire conditions.

Section 11: Toxicological Information

- **Acute Toxicity:** Low toxicity for metallic tin.
- **Inhalation of Dust/Fumes:** May cause irritation. Chronic exposure may cause benign stannosis.
- **Skin/Eye Contact:** May cause mild mechanical irritation.
- **Carcinogenicity:** Metallic tin is not classified as carcinogenic.



Section 12: Ecological Information

- **Ecotoxicity:** Not expected to be acutely toxic to aquatic organisms.
- **Persistence:** Stable in the environment.
- **Bioaccumulation:** Not expected to bioaccumulate in significant amounts.
- **Environmental Note:** Prevent uncontrolled release of dust.

Section 13: Disposal Considerations

- Dispose in accordance with local and national regulations.
- Recycling of tin scrap is strongly encouraged.

Section 14: Transport Information

- **UN Number:** Not regulated as hazardous for transport.
- **Proper Shipping Name:** Tin Metal
- **Hazard Class:** Non-hazardous
- **Packing Group:** Not applicable

Section 15: Regulatory Information

- Metallic tin is regulated under EU REACH and OSHA standards for workplace exposure.
- Exposure monitoring may be required in occupational settings.



Section 16: Other Information

Disclaimer:

This MSDS is prepared using the latest technical data and is compliant with international standards. The information is believed to be accurate as of the issue date but is provided without warranty.

Users must ensure safe handling, proper use, and compliance with applicable laws and regulations.