Kurt J. Lesker Company

HMIS

Tin Metal, pieces

Manufacturer MSDS Number: Sn

HEALTH	1
FIRE	0
REACTIVITY	0
PPE	В



SECTION 1: Chemical Product and Company Identification

MSDS Name: Tin Metal, pieces

Manufacturer Name: Kurt J. Lesker Company

Address:

1925 Worthington Ave Clairton, PA 15205

For emergencies in the US, call CHEMTREC: 800-424-9300 Other Phone: US National Poison Hotline: (800)222-1222

Manufacturer MSDS Creation Date:

06/30/2006

Manufacturer MSDS Revision Date:

06/30/2006

Synonyms:

Tin, silver matt powder, tin powder.

Chemical Family: Metal Chemical Formula: Sn Molecular Weight: 118.71 DOT HAZARD LABEL

No data. Product Codes:

Sn





SECTION 2: Hazardous Ingredients/Identity Information

Chemical Name Tin metal	CAS# 7440-31-5	% Weight 100.0 %	
Chemical Name See SECTION IX-ADDITIONAL COMMENTS FOR COSHH Regulations	CAS# NA	% Weight 0.0 -100.0 %	

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               SECTION 3: Physical And Chemical Characteristics
Physical State/Appearance:
    Silver-white, lustrous, soft pieces, no odor .
Physical State:
    [ ] Gas , [ ] Liquid , [ X ] Solid
:Ha
    No data.
Vapor Pressure:
    1 mm at 1492.0 C (2717.6 F) (VS. AIR OR MM HG)
Vapor Density:
    NA (VS. AIR = 1)
Boiling Point:
    2507.00 deg C (4544.6 deg F)
Melting Point:
    231.80 deg C (449.2 deg F)
Solubility In Water:
    insoluble
Specific Gravity:
    7.28 \text{ (WATER} = 1)
Density:
    No data.
Evaporation Point:
    NA (VS BUTYL ACETATE=1)
Percent Volatile:
    N.A.
FlashPoint:
    N.A.
Upper Flammable Explosive Limit:
Lower Flammable Explosive Limit:
    NA
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                     SECTION 4: Fire And Explosion Hazards
Flash Point:
    N.A.
Flash Point Method:
    NON-FLAMMABLE
Upper Flammable or Explosive Limit: NA
Lower Flammable or Explosive Limit: NA
Extinguishing Media:
    Not applicable. Use suitable extinguishing agent for surrounding materials and type
    of fire. .
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Fire Fighting Instructions:

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution. .

Unusual Fire Hazards:

Combustible in the form of dust when exposed to heat or by spontaneous chemical reaction with Br2, BrF3, Cl2, ClF3, Cu(NO3), K2O2 and S. Powder oxidizes, especially in the presence of moisture.



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SECTION 5 : Health Hazards

Applies to All Ingredients:

Route of Exposure:

Inhalation? Yes , Skin? Yes , Eyes? Yes , Ingestion? Yes , Other: N

Potential Health Effects:

Eye Contact:

May cause irritation.

Skin Contact:

May cause irritation.

Inhalation:

May cause irritation of the upper respiratory system, metal fume fever, thirst, metallic taste, coughing, fever, chills, muscular pain, headache, nausea, vomiting, profuse sweating, excessive urination and diarrhea.

Ingestion:

Poor absorption makes it relatively non-toxic.

Chronic Eye Contact:a

May cause conjunctivitis.

Chronic Skin Contact:

May cause dermatitis.

Chronic Inhalation:

May cause pneumonoconiosis and tin poisoning.

Chronic Ingestion:

Repeated or high levels may cause abdominal pain, nausea, constipation or diarrhea, gastric irritation and loss of weight.

Carcinogenicity:

NTP? No , IARC Monographs? No , OSHA Regulated? No

Target Organs:

May affect the respiratory system, skin and eyes. .

Signs/Symptoms:

INHALATION: May cause throat dryness, cough, headache, vomiting, chest pain, irritability, depression, loss of weight and pneumonitis. Tin poisoning may cause: bronchiopneumonia, testicular degeneration and pancreatic atrophy. INGESTION: May cause nausea, vomiting, abdominal pain. constipation or diarrhea. SKIN: May cause redness and itching. EYE: May cause redness, itching, burning sensation and watering.

Aggravation of Pre-Existing Conditions:

Pre-existing respiratory and skin disorders. . See "Section II" LD 50/LC 50: imp-rat TDLO: 395 g/kg: ETA





SECTION 6 : Emergency And First Aid Procedures

Physical Health Hazard:

HEALTH HAZARDS (ACUTE AND CHRONIC): Tin compounds have variable toxicity. Elemental tin and inorganic tin compounds have low toxicity and are poorly absorbed when ingested. Some inorganic tin salts are irritating or can liberate toxic fumes on decomposition. The latter is particularly true of tin halogens. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Eye Contact:

Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist. .

Skin Contact:

Remove contaminated clothing from affected area; brush material off skin. Wash affected area with mild soap and water. Seek medical attention if symptoms persist.

Inhalation:

Remove victim to fresh air; keep warm and quite; give oxygen if breathing is difficult and seek medical attention.

Ingestion:

Give 1-2 glasses of milk or water and induce vomiting; Seek medical attention; Never induce vomiting or give anything by mouth to an unconscious person.





SECTION 7 : Reactivity Data

Chemical Stability:

Unstable [] Stable [X]

Conditions to Avoid:

CONDITIONS TO AVOID - INSTABILITY: None .; CONDITIONS TO AVOID - HAZARDOUS POLYMERIZATION: None .

Incompatibilities with Other Materials:

Carbon tetrachloride, water, disulfur dichloride, Br2, BrF3, Cl2, ClF3, Cu(NO3), K2O2, S and oxidants .

Hazardous Polymerization:

Will occur [] Will not occur [X]

Hazardous Decomposition Products:

Stannic oxide.





SECTION 8: Precautions For Safe Handling

Spill Cleanup Measures:

Wear appropriate respiratory and protective equipment specified in section VIII-control measures. Isolate spill area and provide ventilation. Scoop or vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust. .

Other Precautions:

None.

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HAZARD LABEL INFORMATION:

Store in cool, dry area Store in tightly sealed container Wash thoroughly after handling

Hygiene Practices:

WORK/HYGIENIC/MAINTENANCE PRACTICES: Implement engineering and work practice controls to reduce and maintain concentration of exposure. Handle in a controlled, inert atmosphere. Minimize exposure of cadmium by local exhaust and enclosing process if/when possible. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Shower and change clothes at the end of workshift. Do not blow dust off clothing or skin with compressed air.

Waste Disposal:

Dispose of in accordance with applicable federal, state, and local regulations. .



SECTION 9 : Control Measures

Ventilation System:

LOCAL EXHAUST: To maintain concentration at or below PEL, TLV SPECIAL: None MECHANICAL (GENERAL): Recommended OTHER: None

Hand Protection Description:

Rubber gloves

Eye/Face Protection:

Safety glasses

Protective Clothing/Body Protection:

Protective gear suitable to prevent contamination.

Respiratory Protection:

NIOSH-approved dust respirator

NIOSH approved respirator Impervious gloves Safety goggles Clothes to prevent skin contact

Ingredient Guidelines

Ingredient: See SECTION IX-ADDITIONAL COMMENTS FOR COSHH Regulations

Guideline ACGIH TLV: No data.; OSHA PEL: No data.; OTHER LIMITS:

Information: No data.

Ingredient: Tin metal

Guideline ACGIH TLV: 2 mg/m3; OSHA PEL: 2 mg/m3; OTHER

Information: LIMITS: NE

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SECTION 10 : Other Information

Tin metal:

Section 302:

No

Section 304:

No

Section 313 Toxic Release Form:

No

HMIS:

Health Hazard: 1 Fire Hazard: 0 Reactivity: 0

Personal Protection: B

Disclaimer:

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Comment:

SUPERCEDES REVISION 07/30/1993 Control of Substances Hazardous to Health Regulations EH40 Occupational Exposure Limits Maximum Exposure Limit: NE Occupational Exposure Standard: 2 mg/m3 4 mg/m3 Short-term Exposure Limit . Minimal:0 Slight: 1 Moderate:2 Serious: 3 Extreme: 4

Abbreviations used

NA=Not Applicable NE: Not Established

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