

SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

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EMERGENCY NO. 1-800-424-9300 CHEMTREC

MATERIAL NAME: **BRIGHT ELECTROLESS TIN PART A**

REVISED: April 2016

CHEMICAL FAMILY: Chelated tin

Product Number: ELP-EL2T-100A-01 Part A

SECTION 2. HEALTH HAZARD INFORMATION

GHS Classifications

H302: Acute toxicity Oral : Category 4

H312: Acute Toxicity Dermal: Category 4

H332: Acute toxicity Inhalation : Category 4

H320: Serious eye damage / Eye irritation : Category 2B

H370: Special target organ systemic toxicity single exposure: Category 1

H372: Special target organ systemic toxicity repeated exposure : Category 1

Pictograms or Hazard symbols



Warning: Harmful if swallowed, in contact with skin, or inhaled.



Warning: Causes serious eye irritation.



Danger: May cause cancer. May cause damage to heart and liver through prolonged or repeated contact.

Precautionary Statements

P260 Do not breathe fume/gas/mist/vapors.

P261 Avoid breathing fumes/mist/vapors.

P264 Wash thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, clothing, and eye and face protection.
 P301 + P312 If swallowed, call a physician if you feel unwell.
 P302 + P352 If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.
 P304 + P340 If inhaled, remove person to fresh air and keep comfortable for breathing.
 P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.
 P308 + P311 If exposed or concerned, call a physician.
 P314 Get medical advice/attention if you feel unwell.
 P330 Rinse mouth.
 P337 + P313 If eye irritation persists, get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Material	CAS#	Wt %	Toxicity
Thiourea	62-56-6	50-55	10 g/kg
Magnesium Chloride	7791-18-6	< 1	
Ethylenediamine tetraacetic acid	64-02-8	5-10	2 g/kg
Sodium Chloride	7647-14-5	5-10	
Citric Acid	77-92-9	10-15	
Stannous Chloride	7772-99-8	10-15	2 ppm
Total		100	

SECTION 4. FIRST AID MEASURES

EFFECTS OF OVEREXPOSURE

FIRST AID:

Eye Contact: Direct contact may cause irritation. Flush thoroughly with water for at least 15 minutes. Seek medical attention if irritation persists.

Skin Contact: Contact may cause irritation. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention.

Inhalation: Inhalation may irritate the respiratory tract; remove to fresh air. If not breathing give artificial respiration. Seek medical attention.

Ingestion: Effects include hemorrhage, bone marrow depression with anemia, leuopenia (decreased white blood cell count) and thrombocytopenia. Get medical attention immediately.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point and Method	Autoignition Temp.	Flammability Limits In Air	<u>LOWER</u>	<u>UPPER</u>
non-flammable	NA		NA	NA

Extinguishing media: Use extinguishing media appropriate for the surrounding fire.

Special fire fighting procedures: Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes.

Hazardous decomposition products: Nitrogen oxides, nitrates, carbon dioxide, carbon monoxide, sulfates.

Hazardous polymerization:	May occur	Conditions to avoid: Excess heat, damp.
	Will not occur	X

SECTION 11. TOXICOLOGICAL INFORMATION

Thiourea

Acute Oral:

Woman, TD_{LO}, oral: 1,660 mg/kg/5 weeks caused hemorrhage, granulocytopenia, and changes in cell count.

Oral, rat LD₅₀: 125 mg/kg

Mutagenicity:

Human, HeLa cell: 30 mmol/L caused DNA damage

Human, fibroblast cell: 140 mmol/L caused DNA damage

Tumorigenicity:

Oral, rat: 18 g/kg administered continuously for 2 year caused liver tumors; 1.95 g/kg administered continuously for 2 years caused liver tumors and change sin the lungs, thorax, or respiration.

Reproductive Effects:

Oral, rat: 240 mg/kg administered on the 12th day or pregnancy caused specific developmental abnormalities of the musculoskeletal system.

Carcinogenic (thiourea): NTP: Yes, Group 2 LARC: Yes, Group 2B Z List: No
OSHA: No

The International Agency for Research on Cancer has classified “strong inorganic mists containing sulfuric acid” as a known human carcinogen (IARC category 1). This classification applies only to sulfuric acid mists containing sulfuric acid and not to sulfuric acid solutions.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity (Thiourea):

Daphnia magna, LC₅₀ = 1.8 mg/L

Pimephales promelas (fathead minnow), LC₅₀ > 100 mg/L

Environmental Fate:

If released to soil, thiourea may leach to groundwater and some may biodegrade. In one study, it persisted in soil for > 15 weeks. In sunlit water, thiourea will react with hydroxyl radicals with an estimated half-life of 171 days. It appears to be resistant to biodegradation in water. It is not expected to exist in aquatic organisms. In the air, removal is expected to be via wet deposition (rain, snow) or dry deposition (adsorption to particulates). Any thiourea existing in the vapor phase should react with photochemically produced hydroxyl radicals. Thiourea is expected to be highly mobile in soil and may leach to groundwater.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose of in accordance with all federal state and local regulations. Send waste to an approved waste disposal facility.

EPA hazardous waste number: D002 Corrosive Waste

SECTION 14. TRANSPORTATION INFORMATION

Not restricted

SECTION 15. REGULATORY

Symbol: Carc Cat 1

R-Phrase:

R36/37/38: Irritating to eyes, respiratory system, and skin.

R45: May cause cancer

S-Phrases:

S17: Keep away from combustible material.

S23-36/37/39-45 Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

The following component of this product is regulated as a toxic chemical under section 313 or Title III SARA, and 40CFR 372:

Thiourea CAS# 62-56-6

SECTION 16. OTHER INFORMATION

NFPA Codes:

Health: 2

Flammability: 2

Reactivity: 1

WHMIS Codes:

Health: 3

Flammability: 0

Reactivity: 0

All ingredients of this product are listed on the US TSCA inventory under their parent anhydrous compounds.