1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY.

Product Name
Tetraethyltin
Formula
\((\text{C}_2\text{H}_5)\text{Sn}\)
Company Identification
See footer.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation
Tetraethyltin
Components/Impurities
None
EC No.
Not available.
CAS No.
597-64-8

3. HAZARDS IDENTIFICATION

Highly flammable liquid. Highly toxic liquid. Evolves toxic fumes during combustion. Fumes may cause skin and eye irritation. Avoid inhalation of fumes.

4. FIRST AID MEASURES

Prompt medical attention is required in all cases of exposure to Tetraethyltin and its by products. Rescue personnel should be equipped with appropriate protective equipment (e.g. Self-contained breathing apparatus) to prevent unnecessary exposure and must be aware of the fire and toxic potential of Tetraethyltin.

Skin
Immediately remove contaminated clothing if not stuck to skin, and excess material off skin then wash affected area with plenty of water. Remove affected clothing as rapidly as possible.

Eyes
Persons with potential exposure to tetraethyltin should not wear contact lenses. Flush contaminated eyes with large quantities of water for at least 15 minutes. Hold eyelids open to ensure complete flushing.

Inhalation
Move exposed personnel to an uncontaminated area quickly using self-contained breathing apparatus. If breathing is difficult, give oxygen. If breathing has stopped, apply artificial respiration. Medical assistance should be sought immediately. Keep victim warm and quiet.

5. FIRE-FIGHTING MEASURES

Extinguishing Media
Always use dry powder, soda ash or lime. Never use water, foam or halogenated compounds to fight fires involving organometallic materials. Without risk, stop flow of this compound to the fire. Without risk, and if safe to do so, move container(s) away from fire area.

Exposure Hazards
Flammable liquid. Smoke will contain toxic decomposition products.

Special Protective Equipment for Fire-Fighters
Fire resistant clothing, self-contained breathing apparatus, face shield and safety goggles, safety shoes and fire resistant gloves.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Evacuate area. Use appropriate protective equipment. Purge equipment with inert gas before attempting repairs. Ensure adequate ventilation. If leak is in container call the emergency number. (See footer).

Environmental Precautions
Try to stop release, if safe to do so. Prevent from entering sewers or waterways. For fire-fighting measures see Section 5.

Clean up methods
Contact Epichem for specific advice.

7. HANDLING AND STORAGE

Handling
Valve outlet seals must remain in place unless container is secured and valve outlet piped to use point. Use a check valve or trap to prevent hazardous back flow into the container. Any equipment used for tetraethyltin service must be thoroughly cleaned and prepared to eliminate contamination and must be maintained in a leak free state. All air and moisture in the system must be eliminated before use.

Storage
Protect containers from physical damage. Do not allow temperatures to exceed (125°F)/51°C. Store away from flammable material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls
OSHA or ACGIH: 0.1 mg (Sn)/m\(^3\)

OS and MEL: Tin compounds, organic except cyhexatin (ISO) (as Sn)

Long term exposure limit (8-hour TWA reference period) 0.1 mg/m\(^3\)
Short term exposure limit (15-min reference period) 0.2 mg/m\(^3\)

Ensure adequate ventilation.

Personal Protection
Self-contained breathing apparatus, fire resistant gloves, face shield and safety goggles, safety shoes, fire-resistant garments. Safety shower and eyewash.
SAFETY NOTICE: In Order to provide our customers with the highest quality material and maintain our high standards of safety, the surface temperature of the bubbler will be monitored during the transportation of our products. We would like to monitor the surface temperature of the bubbler using a Tempilabel. Tempilabel is a temperature-monitoring strip ranging from 120F to 150F (49C to 66C) which will indicate the temperature during shipment. If the temperature monitor is changed, please notify an Epichem representative immediately and we will assist you in the proper measures to be taken. We ask for your co-operation in our efforts of quality assurance and safety. If you have any questions or comments, please contact an Epichem representative. We thank you for your co-operation. Your assistance is greatly appreciated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: (356F) 181C
Vapour Pressure: Log10P (mmHg) = 8.9047 – 2739/T (K)
Melting Point: -112C
Density: 1.187 g/ml
Molecular Weight: 234.94 grams
Flash point: (127F) 53C
Appearance and Odor: Colorless liquid.

10. STABILITY AND REACTIVITY

Conditions to avoid
None
Note: Tetraethyltin is stable indefinitely in an inert atmosphere at room temperature.

Materials to avoid
Avoid oxidizing agents and halogens.

Hazardous Decomposition Products
Carbon monoxide, carbon dioxide, organic fumes, tin salts.

11. TOXICOLOGICAL INFORMATION

The toxicological properties of this compound have not been fully investigated. Highly toxic. May cause irritation of skin eyes and by inhalation. Exposure may affect the liver, kidneys, and cardiovascular, pulmonary, autonomic and central nervous system. 200 mg(Sn)/m³ is immediately dangerous to life.

Tetraethyltin is listed on the TSCA inventory.

12. ECOLOGICAL INFORMATION

This product does not contain any Class I or Class II ozone depleting chemicals.

13. DISPOSAL CONSIDERATIONS

Regional and national regulation should be followed during waste disposal. Contact an Epichem representative for disposal of container and any unused quantities.

14. TRANSPORT INFORMATION

UN No: 1992
CLASS: 3.3 (6.1)
PG III
ECCN#: EAR99
IMDG Code: 3346-1
Shipping Name: Flammable liquid, toxic, n.o.s. (Tetraethyltin)

15. REGULATORY INFORMATION

Classification
Highly Flammable, Toxic

Risk and Safety Phrases
R11: Highly flammable
R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.
S16: Keep away from sources of ignition: No smoking
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S43a: In case of fire use dry powder - Never use water.
S45: In case of accident or if you feel unwell seek medical advice immediately. (Show label where possible)

16. OTHER INFORMATION

Ensure operators understand the flammable and toxic nature of the product. Before using this product, it is recommended that a risk assessment and safety study be carried out. Further information on the use of this product can be obtained from the Technical Product Manager at the nearest Epichem facility.