



## Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Liothyronine Sodium USP (T3)

55-3090

### Section 1: Identification

**Product Name** Liothyronine Sodium USP (T3)  
**Commercial Name** Not available.  
**Product Use** Active pharmaceutical substance  
**Restrictions On Use** Not available.

**Product Code** 55-3090

**Company** PCCA  
9901 South Wilcrest  
Houston, TX 77099  
Phone: 1-800-331-2498  
Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

### Section 2: Hazard(s) Identification

**OSHA Haz Com:** Acute Toxicity, Category 3 Specific target organ toxicity, repeated exposure, Category 1  
**CFR 1910.1200**

**Signal Word** DANGER

**Hazard Statement(s)** Toxic if swallowed. Causes damage to organs through prolonged or repeated exposure.

**Pictogram(s) or Symbol(s)**



**Precautionary Statement(s):**

<b>Prevention</b>	Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling.
<b>Response</b>	If swallowed: Immediately call a poison center/doctor. Rinse mouth. Get medical advice/attention if you feel unwell.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3: Composition/Information on Ingredients

**Substance/Mixture** Substance  
**Components** Liothyronine Sodium USP  
**% By Weight** 100  
**CAS#** 55-06-1  
**Molecular Weight** 672.96 g/mole  
**Chemical Formula** C<sub>15</sub>H<sub>11</sub>I<sub>3</sub>NO<sub>4</sub>.Na  
**Synonym(s)** Triiodothyronine

#### Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Liothyronine Sodium USP	55-06-1	100	Not available.	Not available.

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Slight inhalation allows the victim to rest in a well ventilated area. Seek medical attention. Hazardous inhalation remove source of contamination or move victim to fresh air. If breathing has stopped, cardiopulmonary resuscitation (CPR) immediately (use protective mask with one way valve). If breathing is difficult give oxygen. Seek medical attention.
<b>Skin Contact</b>	Skin contact flushes the contact area with lukewarm running water. Hazardous skin contact flushes the contact area with lukewarm running water for at least 15 minutes. Remove contaminated clothing, taking care not to spread the chemical. Seek medical attention if irritation persists.
<b>Eye Contact</b>	immediately flush eyes with running water for at least 15 minutes, keeping eye lids open. Take care not to rinse contaminated water into the non-affected eye. Always seek medical attention for accidents involving the eyes.
<b>Ingestion</b>	Slight ingestion may cause irritation. Flush out mouth with water. Hazardous ingestion Never give anything by mouth if victim is rapidly losing consciousness or is unconscious convulsing. Rinse mouth thoroughly with water. If breathing has stopped, trained personnel should begin artificial respiration (use protective mask with one -way valve), or if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Seek medical attention.
<b>Symptoms/Effects</b>	
<b>Acute</b>	Adults rarely experience symptoms with one time ingestions of up to 3 mg, but ingestion of larger amounts can be serious.
<b>Delayed</b>	Not available.

**Immediate Medical Attention**

Overdose treatment includes the following. 1. For recent ingestions, empty the stomach by induced vomiting. Charcoal instillation may be useful up to 3 to 4 hours following ingestion. 2. Administer cardiac glycosides if congestive heart failure develops. 3. Use appropriate measures to control fever, hypoglycemia, fluid loss. 4. Give ant adrenergic agents such as propranolol for treatment of increased sympathetic activity. 5. Intravenous hydrocortisone can be used to partially inhibit conversion of T4 to T3.

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials.

**Unsuitable Extinguishing Media**

Not available.

**Products of Combustion**

The product is combustible. Fire degradation products these products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>), halogenated compounds. Flammability emits toxic fumes under fire conditions

**Firefighters Special Equipment and Precautions**

As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

**Section 6: Accidental Release Measures**

Small spill and leak Vacuum or sweep up spillage. Avoid dust. Place spillage in appropriate labeled solid pharmaceutical waste class 261N container for waste disposal. Wash contaminated clothing before reuse. Ventilate area and wash spill site. Follow appropriate safe work practice. Large spill and leak Use a shovel put the material into a appropriate labeled waste disposal container. Finish cleaning by spreading water on the contaminated surface. Label and dispose as pharmaceutical waste class 261N. Follow appropriate safe work practices. Protective clothing in case of large spill Hooded full suit - Tyvek coveralls or equivalent air purifying

**Section 7: Handling and Storage**

Precautions Use with adequate dust control. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid inhalation, skin and eye contact. Wash thoroughly after handling. Dispose as pharmaceutical waste 26 IN. Incompatibility strong oxidizing agents, strong acids. Packaging and Storage condition: Material shall be packed in transparent LDPE bag with nitrogen purging, and tied with nylon strip followed by black LDPE bag along with silica gel desiccant and tied with nylon strip followed by triple laminated bag along with O-buster and hot seal and followed by FIDPE container. Preserve in tight containers, store at 2-8°C (As per USP monograph). In an air tight container. Protected from light, at a temperature between 2-8°C (As per Ph. Eur. monograph).

## Section 8: Exposure Controls/Personal Protection

### Exposure Limits

Not available.

### Engineering Controls

Exposure to This material can be controlled in many ways. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. This general information can be used to help develop specific control measures. Ensure that control systems are properly designed and maintained. Comply with occupational, environmental, fire and other applicable regulations. Engineering methods to control hazardous conditions are preferred. Methods include mechanical (local exhaust) ventilation, process or personnel enclosure and control of process conditions. Administrative controls and personnel enclosure and control of process conditions. Administrative controls and personnel protective equipment may also be required. Supply sufficient replacement air to make up for air removed by exhaust system.

### Personal Protection

Personal protection Splash goggles. Full suit with hood, or disposable/washable cover all. Half face piece Air purifying respirator with particulate cartridge PI00 (HEPA) (Less than 1g.) Powdered air purifying respirator (PAPR) with particulate cartridge PI 00 (HEPA) (greater than 1g). Boots rubber gloves (impervious). Chemical fume hood. Personal protective equipment: If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment, including approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire. If respiratory protection is required, institute a complete respiratory protection program, including selection, fit testing, training, maintenance and inspection, Refer to the CSA standard Z94, 4-M1982," selection care and use of respirators," available from the Canadian standards association, Rexadale, Ontario, M9W IR3, or equivalent local codes and standards. Respiratory protection guidelines: Where barrier technology or a. high degree of process contaminant exists, respiratory protection may not be required. When working with quantities less than 1 kg and in the absence of appropriate local exhaust ventilation (LEV) or other containment, a half face piece Air purifying respirator with particulate cartridge PI 00 (HEPA) and goggles is adequate. When working with quantities greater than 1 kg and in the absence of local exhaust ventilation (LEV) or other containment, a powdered Air purifying respirator (PAPR) with particulate cartridge PI00 (HEPA) and helmet/hooder supplied air respirator is recommended. The specific respirator selected must be based on contamination levels found in the work place, the specific operation and not exceed the working limits of the respirator. When performing cleaning activities refer to appropriate cleaning solution MSDS. NOTE: barrier technology utilizes physical containment facilities and methods to prevent human contact with a chemical or biological material with hazardous properties. Examples include glove boxes, flexible isolators, robotics or remote operation. EYE/FACE PROTECTION: Safety goggles SKIN PROTECTION: Impervious gloves (eg. Natural or butyl rubber, nitrile, neoprene or PVC). Azico Biophore standards require that all latex gloves should be medical grade hypoallergenic gloves or those who have type 1 hyper sensitive reaction to latex nitrile gloves are recommended. Hooded full impervious suit and boots (eg. Shield 2 or Tyvek brands and/or equivalent resistant protective clothing). Have a safety shower/eye wash fountain readily available the immediate work area. RESISTANCE OF MATERIALS FOR PROTECTIVE CLOTHING: Guidelines: GOOD: natural, butyl or styrene-butadienerubber (SBR), neoprene, nitrile, polyvinyl chloride (PVC), polyurethane, nitrile+PVC, neoprene+SBR, neoprene+natural rubber, SBR/ne oprene NOTE: Resistance of speci

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	Light tan, odorless, Crystalline powder		
<b>Odor</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	Decomposes	<b>pH</b>	Not available.
<b>Freezing Point</b>	Not available.	<b>Vapor Pressure</b>	Not applicable.
<b>Boiling Point/Range</b>	Not available.	<b>Vapor Density</b>	Not available.
<b>Decomposition temperature</b>	Not available.	<b>Viscosity</b>	Not available.
<b>Partition Coefficient: n-octanol/water</b>	Not available.	<b>Evaporation Rate</b>	Not available.
<b>Flash Point</b>	Not available.	<b>Autoignition temperature</b>	Not available.
<b>Flammability</b>	Not available.	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	Not available.
		<b>Upper</b>	Not available.
<b>Solubility(ies)</b>	Very slightly Soluble in cold water		
<b>Other</b>	Loss on Drying: Not more than 4.0%		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available.
<b>Chemical Stability</b>	the product is stable
<b>Hazardous Polymerization</b>	these products are halogenated compounds
<b>Conditions to Avoid</b>	Not available.
<b>Incompatible Materials</b>	Strong oxidizing agents, strong acids
<b>Hazardous Decomposition Products</b>	Not available.

**Section 11: Toxicological Information****RTECS** XP3583000**Acute Toxicity**

LD50: Not available. LC50: Not available.

**Skin Corrosion/Irritation**

Not available.

**Serious Eye Damage/Irritation**

Not available.

**Respiratory or Skin Sensitization**

Not available.

**Germ Cell Mutagenicity**

Not available.

**Carcinogenicity**

Not listed.

**Reproductive Toxicity**

Not available.

**Routes of Entry**

Eye contact. Ingestion.

**Symptoms Related to Exposure**

Behavior (headache, coma) Cardiac (change in rate). Possible eye, skin, gastrointestinal and/or respiratory tract irritation. Effects from overdose can be delayed for several days and may include changes in appetite, changes in menstrual periods, sensitivity to heat, weight loss, palpitations, rapid and irregular pulse, headache, dizziness hand tremors nervousness or irritability, insomnia, delirium, leg cramps, shortness of breath, chest pain, sweating, high fever, vomiting, diarrhea, seizures, collapse and coma.

**Potential Health Effects**

Possible allergic reaction to material of inhaled, ingested or in contact with skin.

**Target Organ(s)** Not available.

**Section 12: Ecological Information****Ecotoxicity**

Not available.

**Persistence and Degradability**

possibly hazardous short term degradation product are not likely, however, long term degradation products may arise.

**Bioaccumulative Potential**

degradation are as toxic as the product itself.

**Mobility in Soil**

Not available.

**Other Adverse Effects**

Not available.

**Section 13: Disposal Considerations****Waste Disposal**

Collect in sealed containers and place in appropriate labeled pharmaceuticals solid waste class 26IN container according to internal and external standards and procedures. Follow all appropriate safe work, procedures and federal, provincial and local regulations for disposal. Use only licensed disposal and waste hauling companies.

**Disposal of Container**

Not available.

**Other Considerations**

Not available.

**Section 14: Transport Information****DOT Classification**

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

**Section 15: Regulatory Information****Regulations**

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD INDEX: NFPA-HEALTH-blue ; 1 -slightly hazardous to health NFPA-FLAMMABILITY-red: 1-materials that must be preheated before ignition can occur NFPA-REACTIVITY-yellow: 0-normally stable

**Other**

WHMIS CLASS D-2B: Material causing other toxic (Canada) effects (TOXIC); DSCL (EEC) R37/38- Irritating to respiratory system and skin. R41- Risk of serious damage to eyes.; Gloves.; Lab coat.; Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.; Splash goggles.

**Section 16: Other Information**

Not available.