



# CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

Product name: TPCM750

Issue date: 30-June-2015

Revision date: -

Version #: 01

## 1. Chemical product and company identification

**Product name** TPCM750  
**Company name** Laird Technologies  
**Address** C3&C4 Building, HongTai Industry Park, NO.87 Tai Feng Road, TEDA,  
Tianjin  
China  
**Telephone number** +86(0)22-66298160  
**Emergency telephone number** +1-703-527-3887  
**Telephone hours** 24 hours per day, 7 days per week. Collect calls accepted.

### Recommended use and Limitations on use

**Recommended use** Industrial use.

**Limitations on use** Not available.

**Issue date** 30-June-2015

**Revision date** -

**Supersedes date** -

## 2. Hazards identification

**Emergency overview** Causes mild skin irritation. Causes eye irritation. Dangerous for the environment if discharged into watercourses.

### GHS-classification

**Physical hazards** Not classified.

**Health hazards** Skin corrosion/irritation Category 3  
Serious eye damage/eye irritation Category 2B

**Environmental hazards** Hazardous to the aquatic environment, acute hazard Category 2  
Hazardous to the aquatic environment, long-term hazard Category 2

### Label elements

#### Pictograms



**Signal word** Warning

**Hazard statement** Causes mild skin irritation. Causes eye irritation. Toxic to aquatic life with long lasting effects.

#### Precautionary statement

**Prevention** Wash thoroughly after handling. Avoid release to the environment.

**Response** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Collect spillage.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Physical and chemical hazards** The product is stable and non-reactive under normal conditions of use, storage and transport. No unusual fire or explosion hazards noted.

**Health hazards** Prolonged inhalation may be harmful. Causes mild skin irritation. Expected to be a low ingestion hazard. Causes eye irritation.

**Environmental hazards** Toxic to aquatic life with long lasting effects.

### 3. Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name		CAS Number	Concentration (%)
Zinc oxide		1314-13-2	10 - 20

**Composition comments** Components not listed are either non-hazardous or are below reportable limits.

### 4. First aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms and health effects</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Mild skin irritation.
<b>Personal protection for first-aid responders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
<b>Notes to physician</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

### 5. Fire-fighting measures

<b>Extinguishing media</b>	Powder. Dry sand.
<b>Extinguishing media to avoid</b>	Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO <sub>2</sub> ).
<b>Specific hazards</b>	During fire, gases hazardous to health may be formed.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Protection of fire-fighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
<b>Clean-up methods and materials and containment measures</b>	Eliminate sources of ignition. Stop the flow of material, if this is without risk. Prevent product from entering drains. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
<b>Prevention of secondary hazards</b>	Not available.

### 7. Handling and storage

<b>Handling</b>	Provide adequate ventilation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Normal handling and use of this product should not generate dust or fumes. During dust-raising work: Use mechanical ventilation in case of handling which causes formation of dust.
<b>Storage</b>	Store in closed original container in a dry place. Store away from incompatible materials (see Section 10 of the SDS).

### 8. Exposure controls/personal protection

#### Exposure limits

China Components	Type	Value
Zinc oxide (CAS 1314-13-2)	STEL	5 mg/m <sup>3</sup>

Components	Type	Value
	TWA	3 mg/m3
<b>Biological limit values</b>		No biological exposure limits noted for the ingredient(s).
<b>Control parameters</b>		Follow standard monitoring procedures.
<b>Engineering measures</b>		Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.
<b>Personal protective equipment</b>		
<b>Respiratory protection</b>		In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Hand protection</b>		Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
<b>Eye protection</b>		Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>		Wear suitable protective clothing.
<b>Hygiene measures</b>		Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Solid sheet
<b>Color</b>	Grey.
<b>Odor</b>	Mild.
<b>Odor threshold</b>	Not applicable.
<b>pH</b>	Not applicable.
<b>Melting point/freezing point</b>	Not applicable.
<b>Boiling point, initial boiling point, and boiling range</b>	Not applicable.
<b>Flash point</b>	Not applicable.
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	2.56 (77 °F (25 °C))
<b>Density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not applicable.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Other data</b>	
<b>Bulk density</b>	Not applicable.
<b>Explosive properties</b>	Not applicable.
<b>Oxidizing properties</b>	Not applicable.
<b>Viscosity</b>	Not applicable.

**VOC (Weight %)** Not applicable.

## 10. Stability and reactivity

**Reactivity** The product is stable and non-reactive under normal conditions of use, storage and transport.

**Stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

**Conditions to avoid** Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

**Acute toxicity** Not classified.

**Routes of exposure** Inhalation. Skin contact. Eye contact. Ingestion.

**Symptoms** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Mild skin irritation.

**Skin corrosion/irritation** Causes mild skin irritation.

**Serious eye damage/eye irritation** Causes eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitizer** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classified.

**Toxic to reproduction** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity following single exposure** Not classified.

**Specific target organ toxicity following repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

### Ecotoxicological data

Components	Species	Test Results
Zinc oxide (CAS 1314-13-2)		
<b>Aquatic</b>		
Crustacea	LC50 Water flea (Daphnia magna)	0.098 mg/l, 48 Hours
<b>Ecotoxicity</b>	Toxic to aquatic life with long lasting effects.	
<b>Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>Bioaccumulation</b>	No data available.	
<b>Mobility in soil</b>	No data available.	
<b>Other hazardous effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

## 13. Disposal considerations

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**Local disposal regulations** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. Transport information

### CNDG

UN number UN3077  
 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)  
 Transport hazard class(es)  
 Class 9  
 Subsidiary risk -  
 Packing group III  
 Environmentally hazardous Yes  
 Read safety instructions, SDS and emergency procedures before handling.

### IATA

UN number UN3077  
 UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)  
 Transport hazard class(es)  
 Class 9  
 Subsidiary risk -  
 Packing group III  
 Environmental hazards Yes  
 ERG Code 9L  
 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

### IMDG

UN number UN3077  
 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE)  
 Transport hazard class(es)  
 Class 9  
 Subsidiary risk -  
 Packing group III  
 Environmental hazards  
 Marine pollutant Yes  
 EmS F-A, S-F  
 Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## 15. Regulatory information

### Inventory of Existing Chemical Substances in China

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### Applicable regulations

This safety data sheet conforms to the following laws, regulations and standards:  
 Regulations on the Control over Safety of Dangerous Chemicals  
 Regulations on Labor Protection in Workplaces Where Toxic Products Are Used  
 Measures for the Safe Use of Chemicals in Workplaces  
 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)  
 General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009 )  
 Packing Symbol of Dangerous Goods(GB190-2009)  
 Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

### Occupational exposure limits for hazardous agents in the workplace (GBZ 2.1-2007)

Zinc oxide (CAS 1314-13-2)

### National Catalogue of Hazardous Wastes

Zinc oxide (CAS 1314-13-2)

### Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2013-85, December 30, 2013)

Not regulated.

### Classification and code of dangerous goods (GB 6944-2012)

Regulated.

### List of Dangerous Goods (GB 12268-2012)

Regulated.

---

**The Principle of Classification of Transport Packaging Groups of Dangerous Goods (GB/T15098-2008)**

Regulated.

**General Specifications for Transport Packages of Dangerous Goods (GB 12463-2009)**

Regulated.

**Regulations on Road Transport of Dangerous Goods**

Regulated.

**Regulations on Rail Road Transport of Dangerous Goods**

Regulated.

**UN Recommendations on the Transport of Dangerous Goods (UN RTDG)**

Regulated.

**16. Other information**

**References**

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

**Disclaimer**

Laird Technologies, Inc cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.