



Product Name: Tpcm 580SP
MSDS Number: 154

Material Safety Data Sheet

(Prepared in accordance with OSHA Hazard communication
Standard 29 CFR 1910.1200 Section (g)(c)(1))

Manufacturer's Name: Laird Technologies
4707 Detroit Road
Cleveland, OH 44102
Date of Preparation: February 2007

Emergency Telephone Number
*** (216) 939 – 2300***
Information Telephone Number
*** (216) 939 – 2300***

Section 1: Product Identification

Product Name: Tpcm 580SP

Synonym: Phase Change Material

Chemical Family: Mixture

Formula: Mixture

Section 2: Composition Information

Component	CAS Reg. #	Weight %
Zinc Oxide	1314-13-2 [†]	0 – 50 %
Naphtha (petroleum)	64742-48-9	3 – 6 %

[†] Zinc oxide a toxic chemical and subject to the report requirements of Section 313 of the Emergency Planning & Community Right-to-Know Act of 1986 and of 40 CFR Part 372.

Section 3: Hazards Identification

Potential Health Effects:

Ingestion: Non-toxic by ingestion.
Skin: Possible irritant on prolonged contact.
Inhalation: Harmful if strongly heated vapors are inhaled.
Eyes: May cause eye irritation.

Medical Conditions Aggravated: None known

Subchronic Effects: None known

Chronic Effects/Carcinogenicity: This product contains no carcinogens or suspected carcinogens, in concentrations of 0.1% or greater, as defined by OSHA, ACGIH, NTP, and IARC.

Section 4: First Aid Measures

Ingestion: Do not induce vomiting. Rinse mouth and seek medical attention.
Skin: Wash with soap and water.
Inhalation: Harmful if strongly heated vapors are inhaled. Remove to fresh air.
Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Section 5: Fire Fighting Measures

Flammable Properties:

Flash Point: Not Established

Flammable Limits: LFL: Not Established
UFL: Not Established

Sensitivity to Static Discharge: Not expected

Extinguishing Media: Dry chemical, foam, water spray or fog, carbon dioxide.

Fire & Explosion Hazards: None known

Special Firefighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against toxic and irritating fumes.

Section 6: Accidental Release Measures

Wipe or scrape spilled material and dispose of material in accordance with federal, state, and local regulations.

Section 7: Handling and Storage

Store in a dry area between 15 °C and 35 °C. Keep container closed when not in use

Section 8: Exposure Controls/Personal Protection

Engineering Controls: No special ventilation requirements if good ventilation is maintained

Personal Protective Equipment (PPE): Where contact is likely, wear chemical resistant gloves, long sleeves, and safety glasses with side shields.

General Hygiene Considerations: Wash hands thoroughly after handling and before eating or drinking

Exposure Guidelines:

Component	CAS Reg #	OSHA PEL		ACGIH TLV	
		TWA	STEL	TWA	STEL
Zinc Oxide (resp dust)	1314-13-2	15 mg /m ³	NE	5 mg/m ³	NE
Naphtha (Petroleum)	64742-48-9	400 mg /m ³	NE	-	-
Zinc Oxide (Total dust)	1314-13-2	15 mg /m ³	NE	10 mg/m ³	NE

Section 9: Physical / Chemical Properties

Boiling Point:	Not available	Volatile by Volume:	< 7.0 %
Density:	2.20 to 2.50 g/ml	Vapor Pressure:	Unknown
Solubility in Water @ 20°C:	Negative	Evaporation Rate:	Unknown
Vapor Density:	Negligible (Air = 1)	Physical State:	Paste
Appearance:	Gray	Odor:	Mild odor

Section 10: Stability and Reactivity

Stability:	Stable
Conditions to Avoid:	None known
Materials to Avoid:	Inorganic acids, oxidizing agents.
Hazardous Polymerization:	Does not occur
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, and silicon dioxide.

Section 11: Toxicological Information

Consult manufacturer for details.

Section 12: Ecological Information

Consult manufacturer for details

Section 13: Waste Disposal

Please refer to Sections 5, 6, and 15 for disposal and regulatory information.

Section 14: Transport Information

DOT Shipping Name: None

DOT Hazard Class: None

DOT Label(s): None

UN/NA Number: None

IATA: None

IMO - IMDG Code: None

Section 15: Regulatory Information

SARA Section 302: Not listed

SARA Section 311, 312: Not listed

SARA Section 313: This material contains Zinc oxide (CAS # 1314-13-2) which is subject to the reporting requirements of Section 3131 of SARA Title III and 40 CFR 372.

Section 16: Other Information

NOTICE: The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.