



**MATERIAL SAFETY DATA SHEET**

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Revised 10/24/08  
Replaces 4/04/07  
Printed 9/29/10

TIN OXIDE OTO 105

MSDS ID: TIN OXIDE

**Section I (General Information)**

**MANUFACTURER'S NAME/ Supplier:**  
OXIMET

Distributed by:  
Laguna Clay Company  
14400 Lomitas Ave  
City of Industry, CA 91746  
1-800-4Laguna  
info@lagunaclay.com  
www.lagunaclay.com

**CHEMICAL NAME AND SYNONYMS:**

Tin Oxide OTO 105

**TRADE NAME AND SYNONYMS:**

Tin Oxide OTO 105

**CHEMICAL FAMILY:**

Ceramic Pigment/Frit

**FORMULA:**

Proprietary

**DATE OF PREPARATION:**

09/21/06

**PREPARED BY:**

Environmental, Health and Safety Technician

**DISCLAIMER:**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgements of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

**Section II - Hazardous Ingredients**

THIS PRODUCT IS FORMED BY HIGH TEMPERATURE CALCINATION. THEREFORE, IT MAY NOT EXHIBIT ANY OF THE PROPERTIES OF THE FOLLOWING METAL COMPOUNDS LISTED.

NAME	WT%	CAS#	ACGIH TLV	OSHA PEL
Tin Oxide	100	18282-10-5	2 mg/m3	2 mg/m3

- (C) Ceiling Limit Value
- (a) Respirable Fraction
- (b) Total Dust

**Section III - Physical Data**

**BOILING POINT:**

Not applicable

**VAPOR PRESSURE (mm Hg):**

Not applicable

**VAPOR DENSITY (AIR = 1):**

Not applicable

**SPECIFIC GRAVITY (H2O=1):**

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**Section III - Physical Data (Cont.)**

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6.950

PERCENT VOLATILE BY VOLUME (%):

Not applicable

EVAPORATION RATE (BuAc = 1):

Not applicable

SOLUBILITY IN WATER:

Insoluble

APPEARANCE AND ODOR:

White powder, no odor.

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**Section IV - Fire and Explosion Hazard Data**

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FLASH POINT (METHOD USED):

Not applicable

EXTINGUISHING MEDIA:

Material will not burn, however water may be used to cool down metal containers.

SPECIAL FIRE FIGHTING PROCEDURES:

Fire fighters should wear Self-Contained Breathing Apparatus. Use water spray to cool metal containers. Use care when approaching advanced or massive fires. Run off from fire control may cause environmental pollution.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic fumes may be evolved during a fire.

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**Section V - Health Hazard Data**

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PRIMARY ROUTES OF EXPOSURE:

Skin: No      Eyes: No      Inhalation: Yes      Ingestion: Yes

TARGET ORGAN(S) EFFECTS:

Tin-Eyes, skin, Respiratory system

CARCINOGENICITY STATUS:

The following compound(s) are listed as carcinogens by NTP, IARC, OSHA or all:

Not Applicable

EFFECTS OF OVEREXPOSURE:

Inorganic tin salts are poorly absorbed into the body. When parenterally administered, tin salts are highly toxic. Tin oxide inhaled as a dust or fume leads to a benign pneumonconiosis with no sign of interference with pulmonary function. Deposited dust appears nodular with the particles being mostly extracellular. No necrosis, foreign-body giant cell reaction or collagen formation has been seen. Tin salts that have gained access to the blood stream are highly toxic and produce neurologic damage and paralysis. With complicated by hydrolysis in body fluids producing unphysiologic pH values. The reported symptoms of hyperemia, vascular changes with bleeding in the central nervous system, liver heart and other organs may be due to tin itself or to the unphysiological pH changes. Ingestion produces vomiting due to the gastric irritation from the activity and astringency of tin compounds. Injection of inorganic tin salts produces diarrhea, muscle paralysis and twitching.

EMERGENCY AND FIRST AID PROCEDURES:

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Section V - Health Hazard Data (Cont.)

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Eyes: Flush with plenty of water for 15 minutes. If irritation persists, contact a physician.

Skin: In case of contact, wash skin with soap and water. Remove any contaminated clothing and shoes. Wash or clean properly before reuse.

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. If breathing is difficult, give oxygen. Contact a physician immediately.

Ingestion: Give milk or water. Do not induce vomiting if person is unconscious. Contact a physician immediately.

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Section VI - Reactivity Data

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STABILITY (choose one): ( ) UNSTABLE  
(x) STABLE

INCOMPATIBILITY (MATERIALS TO AVOID):

Acidic conditions and acids

HAZARDOUS DECOMPOSITION PRODUCTS:

Not applicable

HAZARDOUS POLYMERIZATION (choose one): ( ) MAY OCCUR  
(x) WILL NOT OCCUR

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Section VII - Spill or Leak Procedures

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Evacuate area. Use appropriate personal protective equipment during clean up. Use a wet mop or vacuum cleaner equipped with a HEPA filter. Prevent entry into waterways. If reportable quantity is exceeded, contact the National Response Center.

WASTE DISPOSAL METHOD:

Follow all Federal, State and Local regulations for removal and disposal.

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Section VIII - Special Protection Information

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RESPIRATORY PROTECTION (SPECIFY TYPE):

A NIOSH/MSHA approved respirator with HEPA filter represents the minimum level of protection. See OSHA 29 CFR 1910.134 for respirator fit, selection and use.

VENTILATION:

LOCAL EXHAUST: At source of generation to remove dust from breathing zone.

MECHANICAL (GENERAL): Acceptable for small quantities

PROTECTIVE GLOVES:

Rubber gloves

EYE PROTECTION:

Safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT:

Safety shower and eye bath. Disposable coveralls to prevent contaminated

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Section VIII - Special Protection Information (Cont.)

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clothing.

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Section IX - Special Precautions

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PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in sealed, closed containers. Prevent moisture inside containers.

OTHER PRECAUTIONS:

Do not eat, drink or smoke while using this material. Use in accordance with good industrial hygiene standards.

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Section X - Regulatory Information

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REGULATORY INFORMATION:

TSCA Status: Components on Inventory

SARA Title III Section 313 Reportable Chemicals:  
Not Applicable

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Section XI - Right-to-Know Information

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RIGHT-TO-KNOW INFORMATION:

Component	Cas#
Tin Oxide	18282-10-5

California Proposition 65:

This material does not contain any ingredients that are known to the State of California to cause cancer or reproductive toxicity.

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Section XII - References

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REFERENCES:

Barclays California Code of Regulations.  
NIOSH Pocket Guide to Chemical Hazards.  
29 CFR 1910.1000, Z-tables  
ACGIH TLV for Chemical Substances and Physical Agents.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. Any information relating to usage is for guidance purposes only.