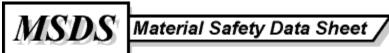
MSDS Number: **S6410** \* \* \* \* \* Effective Date: **11/02/01** \* \* \* \* \* Supercedes: **11/17/99** 



From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151

CHEMTREC: 1-800-424-9300

National Response in Canada CANUTEC: 613-996-6666

Outside U.S. And Canada Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

# STANNIC OXIDE

## 1. Product Identification

**Synonyms:** Tin oxide; Tin (IV) Oxide; White tin oxide

CAS No.: 18282-10-5 Molecular Weight: 150.71 Chemical Formula: SnO2 Product Codes: 3975

# 2. Composition/Information on Ingredients

Ingredient Hazardous	CAS No	Percent
Stannic Oxide Yes	18282-10-5	98 - 100%

## 3. Hazards Identification

**Emergency Overview** 

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

## **J.T. Baker SAF-T-DATA**(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight Flammability Rating: 0 - None Reactivity Rating: 1 - Slight Contact Rating: 0 - None

Lab Protective Equip: GOGGLES; LAB COAT Storage Color Code: Orange (General Storage)

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### **Potential Health Effects**

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#### **Inhalation:**

May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

## **Ingestion:**

Large oral doses may cause irritation to the gastrointestinal tract.

### **Skin Contact:**

May cause irritation with redness and pain.

### **Eve Contact:**

May cause irritation, redness and pain.

## **Chronic Exposure:**

Prolonged inhalation of dust or fume may result in a benign pneumoconiosis, producing distinctive changes in the lungs with no apparent disability or complications.

## **Aggravation of Pre-existing Conditions:**

Persons with impaired respiratory function may be more susceptible to the effects of the substance.

## 4. First Aid Measures

#### Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

### **Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

## **Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

## **Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

## 5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

**Explosion:** 

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

**Special Information:** 

Use protective clothing and breathing equipment appropriate for the surrounding fire.

## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

# 8. Exposure Controls/Personal Protection

## **Airborne Exposure Limits:**

Inorganic Tin Compounds, as Sn:

- -OSHA Permissible Exposure Limit (PEL):2 mg/m3 (TWA)
- -ACGIH Threshold Limit Value (TLV): 2 mg/m3 (TWA)
- -NIOSH Recommended Exposure Limits (REL): 2 mg/m3 (TWA).

### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### **Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the

appropriate regulatory agency or respirator supplier, whichever is lowest.. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **Skin Protection:**

Wear protective gloves and clean body-covering clothing.

## **Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

# 9. Physical and Chemical Properties

## Appearance:

White or slightly gray powder.

Odor:

Odorless.

**Solubility:** 

Insoluble in water.

**Specific Gravity:** 

6.95

pH:

No information found.

% Volatiles by volume @ 21C (70F):

0

**Boiling Point:** 

1800 - 1900C (3272 - 3452F)

**Melting Point:** 

1127C (2061F)

Vapor Density (Air=1):

No information found.

**Vapor Pressure (mm Hg):** 

No information found.

**Evaporation Rate (BuAc=1):** 

No information found.

# 10. Stability and Reactivity

### **Stability:**

Stable under ordinary conditions of use and storage.

### **Hazardous Decomposition Products:**

No information found.

## **Hazardous Polymerization:**

Will not occur.

## **Incompatibilities:**

Chlorine trifluoride, hydrogen trisulfide, magnesium, potassium, and sodium.

### **Conditions to Avoid:**

Incompatibles.

## 11. Toxicological Information

Oral rat LD50: > 20 gm/kg.

\Cancer			
Lists\			
	NTP	Carcinogen	
Ingredient	Known	Anticipated	IARC
Category			
Stannic Oxide (18282-10-5)	No	No	None

# 12. Ecological Information

### **Environmental Fate:**

No information found.

### **Environmental Toxicity:**

No information found.

# 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

# 15. Regulatory Information

 Stannic Oxide (18282-10-5) Yes		Yes	Yes	Yes	
\Chemical Inventory Status - Part 2\					
Ingredient Phil.		Korea	a DSL	nada NDSL	
 Stannic Oxide (18282-10-5) Yes			Yes	No	
\Federal, State & International Regulations - Part					
	-SARA	302-		SARA	
313 Ingredient Chemical Catg.	~	TPQ	List		
				-	
Stannic Oxide (18282-10-5)	No	No	No	No	
\Federal, State & International Regulations - Part					
Ingredient	CERCL	A		-TSCA- 8 (d)	
Stannic Oxide (18282-10-5)		_	No		
Chemical Weapons Convention: No TSCA 12(b): No CDTA: No SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure / Solid)					

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

# 16. Other Information

NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0

**Label Hazard Warning:** 

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT.

## **Label Precautions:**

Avoid contact with eyes, skin and clothing.

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

### Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.

### **Product Use:**

Laboratory Reagent.

### **Revision Information:**

MSDS Section(s) changed since last revision of document include: 8.

Disclaimer:

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**Prepared by:** Environmental Health & Safety Phone Number: (314) 654-1600 (U.S.A.)