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Since 1985



**TECHNO PHARMCHEM**

An ISO 9001 : 2008 Certified Company

Registered Off. : 101-A, Deep Enclave, Pocket "D", Ashok Vihar, Phase-III, Delhi-110 052 (India)  
Corporate Off. : 152, Vardhman City Centre, Near Shakti Nagar Underbridge, Delhi-110052 (India)  
Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)  
Telephone : 0091 - 11 - 23646422 E-mail : tecpharm@gmail.com  
Website : www.technopharmchem.com

## TIN (II) OXIDE

### 1. Product Identification

Synonyms: Tin Monoxide ; Stannous Oxide

CAS No.: 21651-19-4

Molecular Weight: 134.71

Chemical Formula : SnO

Product Codes: 39150

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Weight %
Tin (II) Oxide	21651-19-4	> 97

### 3. Hazards Identification

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingested inorganic tin exhibits only moderate toxicity due to poor absorption and rapid tissue turnover. Ingestion of large amounts may cause gastrointestinal irritation, nausea, cramps, vomiting and diarrhea. May interfere with various enzyme systems

Inhalation: May cause respiratory tract irritation. Inhalation of fumes may cause metal fume fever, which is characterized by metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count.

Chronic: Chronic exposure to tin oxide dusts and fumes may result in stannosis (benign pneumoconiosis).

Aggravation of Pre-existing Conditions: No information found.

### 4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

### 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.

Water spray will also reduce fumes and irritant gases.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

The information contained herein is in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



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## 6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section.

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Place under an inert atmosphere.

## 7. Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation. Handle under an inert atmosphere. Store protected from air.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Do not expose to air. Store under an inert atmosphere

## 8. Exposure Controls/Personal Protection

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. 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.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. 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-face positive pressure, air-supplied respirator.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties

Physical State: Powder

Color: black-gray

Odor: None reported

pH: Not available.

Vapor Pressure: Negligible.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 1080 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: N/A

Explosion Limits, upper: N/A

Decomposition Temperature: N/A

Molecular Formula: OSn

Molecular Weight: 134.71



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## 10. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: High temperatures, incompatible materials, dust generation, exposure to air.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Irritating and toxic fumes and gases, tin/tin oxides.

Hazardous Polymerization: Has not been reported.

## 11. Toxicological Information

CAS# 21651-19-4:

LD50/LC50 : Not available.

Carcinogenicity:

-----\Cancer Lists\-----

-----NTP Carcinogen-----

Ingredient	Known	Anticipated	IARC Category
Stannous Oxide (21651-19-4)	No	No	None

## 12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

## 13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

Safety, health and environmental: Ensure all national/local regulations are observed.

regulations/legislation specific for the substance or mixture

Chemical Safety Assessment: It has not been carried out.

## 16. Other Information

Product Use:

Laboratory Reagent