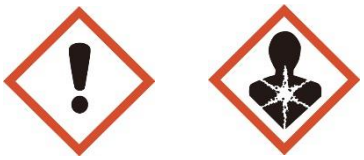
Material Safety Data Sheet

Section 1 – Product and Company Identification

Product Name	Stannous oxide
Chemical Name	Tin(II) oxide
Chemical Formula	SnO
Company Identification	Showa Kako Corporation 18-23, Yoshino-cho, Suita-city, Osaka 564-0054 JAPAN
Telephone Number	+81-6-6384-1501
24-hour Emergency Telephone Number	+81-6-6384-1501
Fax Number	+81-6-6384-2287

Section 2 – Hazards Information

GHS Classification	
Physical Hazards	Not classified
Health Hazards	
Specific target organs/systemic toxicity following single exposure	Category 3 (Respiratory tract irritation)
Specific target organs/systemic toxicity following repeated exposure	Category 1 (Lungs by Tin)
Environmental Hazards	Not classified
GHS Symbol	
Signal Word	Danger
Hazard Statements	
H335	May cause respiratory irritation
H372	Causes damage to organs through prolonged or repeated exposure
Precautionary Statements	
P264	Wash hand and face, etc. thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.

P260	Do not breathe dust/fume/gas/mist/vapors/spray
P270	Do not eat, drink or smoke when using this product.
Response Statements	
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P314	Get medical advice/ attention if you feel unwell.
Storage Statements	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
Disposal Statements	
P501	Dispose of contents/ container through a waste management company authorized by the local government.

Section 3 – Composition and Information on Ingredients

Substance/Mixture	Substance
Chemical Name	Stannous oxide
CAS #	21651-19-4
Percent	92.0% min.

Section 4 – First Aid Measures

Eyes	Immediately flush eyes with copious amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult with ophthalmologist.
Skin	Immediately flush skin with copious amounts of water for at least 15 minutes.
Ingestion	Wash out mouth with water. Induce vomiting. Call a physician.
Inhalation	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

Section 5 – Fire Fighting Measures

Flash Point		No data found
Autoignition		None
Explosion Limits	**Lower**	No data found
	Upper	No data found
Extinguish Media		Water, powder, carbon dioxide, foam

Firefighting Instructions	Avoid non-firefighting equipped personnel to enter. Extinguish upwind from the fire wearing appropriate protective gear.

Section 6 – Accidental Release Measures

Spills/ Leaks	Evacuate area. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilator area and wash spill site after material pickup is complete.

Section 7 – Handling and Storage

Handling	Wear appropriate protective gear. Do not contact with eyes, skin and on clothing. Do not inhale. Handle with care. Wash mouth and hand after handling the material.
Storage	The product is so easy to be oxidized by oxygen, water, moisture, etc. to perform vacuum. Keep container tightly closed. Avoid such conditions as direct sunlight, high temperature, high humidity and high piling. Store indoor.

Section 8 – Exposure Controls, Personal Protection

Engineering Controls	Facilities storing or utilizing the material should be equipped with an eye wash facilities and a safety shower. Use adequate ventilation to keep airborne concentrations low.
Exposure Limits	No data found
Personal Protective Equipment	
Eyes	Safety goggles
Skin	Rubber gloves
Clothing	Protective clothing and rubber boots
Respirators	Anti-dust mask

Section 9 – Physical and Chemical Properties

Physical State	Crystalline powder
Appearance	Black
Odor	Odorless
Boiling Point	No data found
Melting Point	No data found
Flash Point	No data found
Autoignition	None
Explosibility	None

Vapor Pressure	No data found
Vapor Density	No data found
Solubility	Insoluble in water. Easily soluble in Hydrochloric acid, soluble in dilute sulfuric acid

Section 10 – Stability and Reactivity

Stability	Stable
Conditions to avoid	Direct sunlight, high temperature, high humidity and high piling
Incompatibilities with Other Material	No data found
Hazardous Decomposition Product	No data found
Hazardous Polymerization	Will not occur

Section 11 – Toxicological information

RTECS #	No data found
LD50/ LC50	No data found
Carcinogenicity	No data found
Mutagenicity	No data found
Reproductive Effects	No data found
Teratogenicity	No data found
Immunology	No data found
Irritation	No data found

Section 12 – Ecological Information

Ecotoxicity	No data found
Environmental Standard	No data found

Section 13 – Disposal Consideration

Disposal Method	Federal (national), state or local laws and regulations will determine the proper waste disposal method.
Regulation Method	Federal (national), state or local laws and regulations

Section 14 – Transport Information

Shipping Name	Not applicable
Hazard Class	Not applicable
UN #	Not applicable
Packing Group	Not applicable

Section 15 – Regulatory Information

United States	**TSCA**	No data found
EC	**EINECS**	No data found
Canada	**WHMIS**	No data found
Japan	**PRTR law**	Not on the list

Section 16 – Other Information

MSDS Creation Date	March 29, 2012
Revised Date	April 12, 2013
Revised No.	Revised 2nd

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