Bath Potters' Supplies

MATERIAL SAFETY DATA SHEET

1. Identification of the preparation/Supplier reference

Trade Name	**Tin Oxide**
Chemical name	SnO_2
Synonyms	Stannic oxide, tin IV oxide, tin dioxide, superlite tin oxide.
Supplier	Bath Potters Supplies, Unit 18, Fourth Avenue, Westfield Trading Estate, Radstock, Nr. Bath. BA3 4XE
Emergency numbers	Tel: 01761 411077 Fax: 01761 414115 Internet: coshh@bathpotters.demon.co.uk

---

2. Composition

Component	CAS	EINECS	% of composition
Tin IV oxide	18282-10-5	2421590	97%
Plus trace impurities (as oxides)			3%

---

3. Health Hazard Identification

Inhalation	Excessive exposure may cause respiratory irritation with possible cumulative effects.
Ingestion	Low sol. product in body fluids and likely to be of low acute toxicity.
Eyes	May cause physical irritation and inflammation.
Skin	The material is not a primary irritant but as with any abrasive powder it may give rise to irritation and/or sensitisation.

---

4. First Aid Measures

Inhalation	Remove patient to fresh air and loosen tight clothing. Seek medical attention if the inhalation is particularly large, or if any irritation persists.
Ingestion	Do not induce vomiting. Rinse mouth with copious amounts of water and provide fresh air.
Eyes	Wash immediately with copious amounts of water while lifting the eyelid. Seek medical attention if irritation persists.
Skin	Wash affected areas with soap and water. If irritation persists, seek medical attention.

---

5. Fire Fighting Measures

Extinguishing Media	Suitable for surrounding fire conditions The product is not explosive or combustible. Standard fire fighting techniques only are required, i.e. water, sand, carbon dioxide, chemical foam extinguishers etc.
Special Exposure hazard	Since Tin Oxide is already fully oxidised it is very unlikely that it could cause any fire and/or explosion.
Protective equipment	None required other than for surrounding conditions.

---

6. Accidental Release Measures

Leaks & Spills	Remove dry materials either by a vacuum cleaner fitted with an efficient particulate filter or by damping down and scooping in to a receptacle.
Protective equipment	Respiratory protective equipment.

---

7. Handling & Storage

Handling	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the material. Local exhaust ventilation is recommended to comply with occupational exposure limits

(refer to Guidance Note EH40 - latest edition).

Storage — Store in dry area, and keep containers closed when not in use.

8. Exposure Control/Personal protective Equipment

Engineering controls	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is normally recommended.
Personal protective equipment	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Chemically resistant protective gloves and overalls are recommended for prolonged contact. Safety goggles should be used for prolonged contact.

9. Physical & Chemical properties

Appearance & Odour	White odourless powder.
Flash point (ºC)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	None
Specific gravity	6.8 – 7
pH value	Not known (insoluble in water)
Melting point (ºC)	Not available

10. Stability & Reactivity

Chemical stability	The material is stable
Conditions/materials to avoid	Avoid any substances which might lead to the formation of volatile hydrides or halides or of organic tin compounds. Avoid contact with acids.
Hazardous decomposition products	None known
Hazardous polymerisation products	None known

11. Toxicology Information

Acute toxicology	LD_{50} Oral	Not known
	LD_{50} Dermal	Not known
	LD_{50} Inhalation	Not known
Health effects	As with any respirable dust, prolonged or repeated exposure above Occupational Exposure Standards may cause fibrosis of the lungs. Chronic exposure to tin oxide through the inhalation route of dust may induce Stannosis (pneumoconiosis).	

12. Ecological information

Ecotoxicity	Practically insoluble in water, stable and inert under normal environmental conditions.
Persistence	The substance is in inert and not expected to cause a hazard.

13. Disposal

Dispose in accordance with current waste Disposal regulations (for UK - Control of Pollution (Special Waste) Regulations 1980). Landfill is the most appropriate method.

14. Transport Information

UN/SI No.		Not classified
UN Class		Not classified
Packing group		Not classified
Road	UK	Not classified
ADR		Not classified
Sea	IMO	Not classified

Air	ICAO	Not classified

15. Regulatory information

EC Supply Labelling	None required by directive 88/379/EEC, and subsequent amendments.
R-Phrases	Optional R-phrases; R36 Irritating to the eyes. R38 Irritating to the skin.
S-Phrases	Optional S-phrases; S13 Keep away from food, drink and animal feeding stuffs. S20/21 When using do not eat, drink or smoke. S22/23 Do not breath dust or spray. S38 In case of insufficient ventilation wear suitable respiratory equipment.

UK Occupational exposures limits*	Mg/m^3 8 hr TWA	% in product
Tin IV oxide	2.0	97%

* Refer to HSE Guidance note EH40. All products containing lead compounds are subject to the control of lead at work regulations 1980, via the HSC approved code of practise 1985.

In accordance with the H.S.E. Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitute the user's assessment of workplace risk.

16. Other information

General industrial hygiene practices are recommended when handling and using this product.

COSHH ACOP:	H.S.C. Approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994.
CHIP 96:	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996.
CHIP SDS ACOP:	H.S.C. Approved Code of Practice for Safety Data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40:	HSE Guidance note EH40 on Occupational Exposure Limits, to be used in conjunction with the COSHH regulations.
EP'92:	Environmental Protection (Duty of Care) regulations 1992 SI 2839.
CDRR 1994:	Carriage of Dangerous goods by Road and Rail Regulations 1994.
CA 1974:	Control of pollution Act 1974.
EPA 1990:	Environmental Protection Act 1990.
HFLPSR 1972:	Highly Flammable Liquids and Petroleum Spirit Regulations 1972.

The information contained in this safety data sheet has been prepared using the best available information. However, in view of technical developments this may alter.

The material must only be used for its stated purpose and the information contained within this data sheet is offered solely for use in the evaluation of this product in respect of safety, health and environmental hazards.

Due to the many factors outside our control when using this product we cannot accept liability for any injury, accident, loss or damage caused through its use.

August 2000-08-04