

MATERIAL SAFETY DATA SHEET

Ref: MSDS-001

Date: 01/05/2013

Issue: 6

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Tin Oxide (SnO₂) - All Grades

1 Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Tin Oxide

Product Code:

47.516

IUPAC Nomenclature:

tin dioxide

Synonyms:

tin(IV) oxide, stannic oxide

REACH registration number:

01-2119946062-44-0000

1.2. Relevant identified uses of the substance or mixture and uses advised against

Uses of the substance include, but are not limited to, as a raw material for use in ceramic colours and glazes, electrodes for glass melting, electrical contact materials, electrical and electronic components, brake pads, polishing

There are currently no uses that are advised against for the substance

1.3. Details of the supplier of the safety data sheet

Grobet File Company of America, LLC.
750 Washington Avenue
Carlstadt, NJ 07072

1.4. Emergency telephone number

ChemTel: 800-255-3924

2 Hazards identification

2.1. Classification of the substance or mixture

Tin oxide is not classified as a hazardous substance for carriage or supply

2.2. Label Elements

Not applicable

2.3. Other hazards

Chronic exposure to tin dioxide dust may cause Stannosis (pneumoconiosis)

3 Composition/information on ingredients

3.1. Substances

tin dioxide, chemical formula SnO₂

Synonyms: tin(IV) oxide, tin oxide, stannic oxide

CAS Number: 18282-10-5

EC Number: 242-159-0

Tin Oxide (SnO₂) - All Grades**4 First aid measures****4.1. Description of first aid measures**

Inhalation: Remove from exposure to fresh air
Skin contact: The substance is non-irritating
Eye contact: Flush eyes with copious amounts of water
Ingestion: In case of persistent symptoms consult doctor

4.2. Most important symptoms and effects, both acute and delayed

May be irritating to eyes
Chronic exposure to tin dioxide dust may cause Stannosis (pneumoconiosis)

4.3. Indication of any immediate medical attention and special treatment needed

No additional requirements other than those listed in Section 4.1.

5 Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media: As appropriate to the surrounding environment
Unsuitable extinguishing media: None

5.2. Special hazards arising from the substance or mixture

Special hazards: None known

5.3. Advice for firefighters

Additional advice for firefighters: No special measures required

6 Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust. Wear appropriate personal protective equipment

6.2. Environmental precautions

No special measures required

6.3. Methods and material for containment and cleaning up

Vacuum cleaner or wet-sweeping. Neutralising chemicals not required

6.4. Reference to other sections

Refer to Sections 8 and 13 for exposure controls/personal protection and disposal considerations

7 Handling and storage**7.1. Precautions for safe handling**

Avoid causing dust. Use local exhaust ventilation or adequate respiratory protective equipment

7.2. Conditions for safe storage, including any incompatibilities

No special requirements

7.3. Specific end use(s)

Refer to Section 1.2.

Tin Oxide (SnO₂) - All Grades**8 Exposure controls/personal protection****8.1. Control parameters**

Inhalation: Workplace Exposure Limits:

Tin dioxide:	2mg.m ⁻³ (as Sn)	Long-term exposure limit (8-hour TWA reference period)
	4mg.m ⁻³ (as Sn)	Short-term exposure limit (15-minute reference period)

8.2. Exposure controls

Use local exhaust ventilation or adequate respiratory protective equipment to maintain exposure below Workplace Exposure Limits

9 Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance:	White powder
Odour:	Odourless
pH:	neutral (100g/l slurry)
Melting point:	Decomposes in air at 1613 °C
Flammability:	Non-flammable
Relative density:	6.936
Solubility in water:	Practically insoluble (below detection limit)

9.2. Other information

Non applicable

10 Stability and reactivity**10.1. Reactivity** Stable under normal conditions of storage and use**10.2. Chemical stability** Stable under normal conditions of storage and use**10.3. Possibilities of hazardous reactions** None known**10.4. Conditions to avoid** None known**10.5. Incompatible materials** None known**10.6. Hazardous decomposition products** None known**11 Toxicological information****11.1. Information on toxicological effects**

Acute toxicity, oral	Non-toxic - LD ₅₀ greater than 2.0g/kg bodyweight
Acute toxicity, inhalation:	Non-toxic - LC ₅₀ greater than 2.04mg/l (maximum test concentration attainable)
	Chronic exposure to tin dioxide dust may cause Stannosis (pneumoconiosis)
Skin corrosion / irritation:	Non-irritating
Skin sensitisation:	Non-sensitising
Eye contact:	May cause mild irritation to eyes

Tin Oxide (SnO₂) - All Grades**12 Ecological information**

Insoluble in water, stable and inert under normal environmental conditions

12.1. Toxicity

Invertebrates (<i>Daphnia magna</i>)	24 h EC ₅₀	> 0.1 g/l
	48 h EC ₅₀	> 0.1 g/l
	NOEC	≥ 0.1 g/l
Single Cell Green Alga (<i>Desmodesmus subspicatus</i>)	72 h EC ₅₀	> 100 mg/l
	72 h NOEC	9.77 mg/l
	72 h LOEC	31.3 mg/l
Fish (<i>Oncorhynchus mykiss</i>)	96 h LC50	> 100 mg/l
Microorganisms (<i>Activated sludge</i>)	3 h EC50	> 1000 mg/l

12.2. Persistence and degradability

No data

12.3. Bioaccumulative potential

No data

12.4. Mobility in soil

No data

12.5. Results of PBT and vPvB assessment

No data, assessment not required

12.6. Other adverse effects

None known

13 Disposal considerations**13.1. Waste treatment methods**

Disposal of product / packaging: According to official regulations

14 Transport information**14.1. UN Number**

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

None known

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

15 Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not applicable

15.2. Chemical safety assessment

Not required, substance is not classified

16 Other information

Exposure limits reference: EH40/2005 Workplace exposure limits (as amended October 2007)

Compiled in accordance with: Regulation (EC) No. 1907/2006 Annex II as amended by Regulation 453/2010

The information given is based on our present state of knowledge and does not represent a guarantee of any product characteristics

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