SAFETY DATA SHEET

19th November 2013

1. Chemical Product and Company Identification

Manufacture's Name	PASSTRAN MC-18
Company	MITSUI MINING & SMELTING CO.,LTD Engineered Metal Powders Division in Main Office
Address	1-11-1 Osaki,Shinagawa-ku,Tokyo, 141-8584,Japan
Telephone Number	(Country Code 81) 3-5437-8091(Japan)(Telephone) (Country Code 81) 3-5437-8013(Japan)(Facsimile)
Emergency Contact	Sales department +81-3-5437-8091

2. Hazards Identification

Most Important Hazards No significant target effects reported.

3. Composition, Information On Ingredient

Substance/Mixture Mixture

Ingredients and Composition

STANNIC OXIDE (SnO_2) 95.5% min.
METHYL HYDROGEN POLYSILOXANES 3.5% max.

CAS NO. 18282-10-5
63148-57-2

4. First Aid Measures

Inhalation	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing.Get immediate medical attention.
Ingestion	If a large amount is swallowed, get medical attention.
Eye Contact	Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.
Skin Contact	Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Special Considerations for Physicians

None.

5. Fire Fighting Measures

Suitable Extinguishing Media:

Regular dry chemical, carbon dioxide, water, regular foam. Large fires:Use regular foam or flood with fine water spray.

Prohibited Extinguishing Media

None.

Particular Fire Fighting

None.

Particular Dangerous Harmful Nature

None.

6. Accidental Release Measures

Cautions for Personnel	Wear a respirator selected and appropriate personal protective equipment.
Cautions for Environment	None.
Removal/Collection	Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. Handling and Storage

Handling	None.
Storage	Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits

2mg/m3 (Threshold Limited)

Engineering Measures: Provide adequate ventilation.

Respiration Protective Equipment

The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA. Measurement Element: Tin(Sn) 10mg/m3 Any dust and mist respirator. 20 mg/m3 Any dust and mist respirator except single-use and quarter-mask respirators. Any supplied-air respirator.

Eyes Protective Equipment

Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protective Equipment

Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.

9. Physical and Chemical Properties

APPEARANCE ETC.	powder, white to gray.
Melting Point/Freezing Point	Melting point(SnO_2)：1127℃
Specific Gravity (Density)	6.0g/cm3(20℃)

Solubility	insoluble

10. Stability and Reactivity

Stability	Stable
Incompatible Conditions	Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
Incompatible Materials	halogens, reducing agents, metals
Hazardous Decomposition Products	None
Potentially Hazardous Reaction	Will Not Occur

11. Toxicological Information

Acute Toxicity	Inhalation: (SnO_2)May cause chest pain, dyspnea, rales, and leukocytosis. Repeated exposure may cause stannosis, a benign pneumoconiosis, without symptoms of interference of pulmonary function. Ingestion: (SnO_2)Most tin salts are relatively non-toxic and poorly absorbed through the gastrointestinal tract. LD_{50} >20 gm/kg oral-rat LD_{50} >6600 mg/kg intraperitoneal-rat LD_{50} >20 gm/kg oral-mouse LD_{50} >6600 mg/kg intraperitoneal-mouse Eye: (SnO_2) Particulates in the eye may cause lacrimation. Skin:(SnO_2)It is not absorbed and is relatively innocuous to the skin.
Germ Cell Mutagenicity	No data available.
Reprotoxy	No data available.
Carcinogen	SnO_2: No human carcinogen or potential carcinogen according to IARC Monographs, U. S.OSHA Regulation,and NTP

12. Ecological Information

Mobility	No data available.
Residual / Degradability	No data available.
Bioaccumulation	No data available.
Ecotoxicity	No data available.

13. Disposal Considerations

Residual Disposal (including itself)	Dispose in accordance with all applicable regulations.

14. Transport Information

UN#: No classification assigned.
UN Shipping Name: No classification assigned.
UN Classification: No classification assigned.
UN Packing Group: No classification assigned.
Marine Pollutant: No.
Special Precautions: None.

15. Regulatory Information

EU Information:
Information on the Label:
Symbol & Indication: Not required.
R-Phrase: Not required.
S-Phrase: Not required.
Dangerous Component(s): None.
Special Precautions under 67/548/EEC Article 8 and 13 or 1999/45/EC Annex V: Safety data sheet available for professional user on request.
Specific Provisions in Relation to Protection of Man or the Environment:
76/769/EEC: Not regulated.
(EC)2037/2000: Not regulated.
(EC)304/2003: Not regulated.
Others: None.
USA Information:
Information on the Label: Hazardous under OSHA HCS.
Signal Word: CAUTION!
Hazard warning: MAY CAUSE PNEUMOCONIOSIS.
Safety Advice: Avoid breathing dust.
Keep container tightly closed.
Use only with adequate ventilation.
Hazardous Component(s): Tin Oxide (CAS#: 18282-10-5) ≧95.5wt%

16. Other Information

Others: No other information is currently available for this record.

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of MITSUI MINING & SMELTING CO.,LTD. It relates only to the specific material designated herein, and does not relate to use in combination with any other material or in any process. MITSUI MINING & SMELTING CO.,LTD assumes no legal responsibility for use of or reliance upon this information.

Material Safety Data Sheet (MSDS) are made on the basis of literature and information.
However it's inexhaustive, and the specification and information on MSDS aren't warranted.
In addition, the Safety Precaution is aiming at the normal handling, not for the special handling.