

*Read this MSDS before use the ingredients .

*Keep this MSDS in your file for your timely reference.

*The contents of this information sheet are not warranted and the company can accept no liability to any customer or any other person.

Material Safety Data Sheet
Substance containing Antimony Trioxide
“STOX-CA”

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Identification of Substance: Antimony Trioxide Sb₂O₃

CAS No.: 1309-64-4
107-21-1

EINECS No.: 215-175-0
203-473-3

1.2 Company Identification: NIHON SEIKO CO., LTD.
3-2 SHIMOMIYABI-CHO
SHINJUKU-KU TOKYO 162-0822
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2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Distinction of single substance or mixture: Mixture.

2.2 Chemical Composition: Antimony Trioxide:Sb₂O₃
Mono-Ethylene Glycol: HOCH₂CH₂OH
*Each number below means above mentioned materials.

2.3 Total Antimony Trioxide: 96.8%

2.4 Arsenic: 0.03%

2.5 Lead: 0.003%

3. HAZARDS IDENTIFICATION (According to Directive 67/548/EEC)

3.1 Title of Classification: Not applicable.

3.2 Harmfulness: No information available.

3.3 Warning Indication: ! Symbol MARK
[INDUSTRIAL MATERIAL/CAUTION]

4. FIRST AID MEASURES

- 4.1 Skin Contact: Remove contamination clothing immediately. Wash affected area with soap and copious amount of water. Get medical attention.
- 4.2 Eye Contact: Flush eyes with copious amounts of water. Get medical attention.
- 4.3 Inhalation of dust: Move affected person to fresh air. Clean nostril and throat (blow nose, gargle). Get medical attention.
- 4.4 Ingestion: Drink copious amounts of water and induce vomiting. Take to a physician.

5. FIRE FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media: Regular dry chemical, carbon dioxide, water, and regular foam.
- 5.2 Unsuitable Extinguishing Media: Acid
- 5.3 Exposure Hazards: Antimony trioxide sublimes at its melting point 656 . Stay windward side and keep out of low area.
- 5.4 Protective Equipment for Fire-Fighters: Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions: Do not inhale dust. Avoid contact with skin, eyes and clothing. Wear dust mask and goggles.
- 6.2 Environmental Precautions: Dispose of material in accordance with all Federal, State and Local regulations. Legally approved waste landfill is recommendable.
- 6.3 Methods of Cleaning Up: Vacuum up or sweep all spilled material without creating dust and place in closed plastic bags for disposal.

7. HANDLING AND STORAGE

- 7.1 Precautions during Handling: Avoid dust emission. Wear dust mask, gloves, long sleeved shirt and goggles. Do not eat, drink or smoke at the work place.
- 7.2 Storage: Store in well-ventilated dry area. Do not store in bare conditions. Avoid inadequate and mislabeled packing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Exposure Control limits/Effect of Over Exposure: ACGIH(2005):TLV-TWA,0.5mg/m³,as Sb Antimony and Compounds and Antimony trioxide Handling and Use.
ACGIH(2005):TLV-STEL,100mg/m³
- Inhalation can cause irritation to the respiratory tract and mucous membrane.
- 8.2 Special Protective Measures:
- Respiratory: Good local exhaust ventilation.
Wear suitable particle filter mask.
- Hands: Wear gloves.
- Eyes: Wear goggles.
- Skin: Wear overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Appearance: White wetting powder.
- 9.2 Odor: None.
- 9.3 Specific Gravity: 5.2 (20)
1.1 (20)
- 9.4 Melting Point: 656
-13
- 9.5 Boiling Point: 1,425
198
- 9.6 Vapor pressure: 667Pa(625)
7Pa (20)
- 9.7 Flammability: Contact with water or moist air may cause flammable and/or toxic gases or vapor.

10. STABILITY AND REACTIVITY

- 10.1 Thermal decomposition: Sublimes at 656
- 10.2 Condition to Avoid: Avoid heat, flames, sparks and other sources of ignition.
Avoid contact with incompatible materials.
- 10.3 Material to Avoid: Oxidizing materials, acids, halogens, metal salts, and peroxide, metal oxides.

11. TOXICOLOGICAL INFORMATION

- 11.1 LD₅₀ (Rat-oral) : 20g/kg
LD₅₀ (Marmot-oral) : 6.61g/kg
- 11.2 Skin Irritation : May cause irritation.
- 11.3 Carcinogenicity:
- IARC: Group 2B(It can be carcinogenic for the human body.)
- EU: Category 3(Substances which cause concern for man owing to possible carcinogenic effects but in respect of which the available information in not adequate for making satisfactory assessment.)
- ACGIH: Manufacturing process A2 (There may be cause for concern as a carcinogen for the human body.)

12. ECOLOGICAL INFORMATION	
12.1 Environmental Effect:	No information available.
13. DISPOSAL CONSIDERATIONS	
13.1 Disposal of Product:	Landfill subject to local regulation.
13.2 Disposal of Packaging:	Landfill or incineration.
14. TRANSPORT INFORMATION	
14.1 No special precautions are required.	
14.2 ADR	Not applicable Class 6.1 (Antimony trioxide with an Arsenic content <0.5% are not subject to the provisions of ADR)
14.3 UN Number:	Not applicable.
<p>Un regulation: the special provision SP45 is applicable to the UN number 1549(Hazard class 6.1 and packaging group). It means that antimony sulfides and oxides, which contain not more than 0.5% of arsenic calculated on the total weight, are not subject to these regulations.</p>	
15. REGULATORY INFORMATION (According to Directive 67/548/EEC)	
15.1 Risk Phrases:	R40: Possible risks of irreversible effects.
Safety Phrases:	S22: Do not breathe dust. S36: Wear suitable protective clothing.
16. OTHER INFORMATION	
16.1 Uses:	Polyester catalyst.
16.2 Caution with treatment of stated materials:	Do not eat. Avoid contact with eyes and skin. Wash thoroughly after handling and take a shower at end of work shift wear clean clothing daily. Do not dispose to rivers.
16.3 Treatment of stated contents:	The contents of this information sheet are based on the data, information available at the moments, and may be revised by additional data coming up in the future. This caution mentioned in this sheet are subject to usual treatment manner of this material, when use in unusual manner, the proper safety method is required.
16.4 Revision	
No.01 Revision date: Mar. 1997	New issue
No.02 Revision date: Jan. 2007	Addition of the special provision of Un regulation (chapter 14)
17. REFERENCES	
<p>Journal of Industrial Hygiene and Toxicology 30, 63, 1948 Series of Inorganic Chemicals -4 (MARUZEN) Antimony and Compounds (1991, ACGIH) Jpn J Ind Health, vol.33, 1991, 99 ~ 305 IARC MONOGRAPHS VOLUMES 47, 1989 Industrial Toxicological, 359-360 (ISHIYAKU PUBLISHER'S) Jansenn Biotech 8/6/1990 (GLC LTD., MSDS)</p>	