

Material Safety Data Sheet
Sodium Antimonate "SA-A, SA-AF, SA-C"

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Name of chemical substance:	Sodium Antimonate
1.2 Company name:	NIHON SEIKO CO., LTD
1.3 Address:	3-2 SHIMOMIYABI-CHO SHINJUKU-KU TOKYO 162-0822 JAPAN
1.4 Division in charge:	NIHON SEIKO CO., LTD Sales Department
1.5 Contact information:	NIHON SEIKO CO., LTD TEL +81-3-3235-0031 FAX +81-3-3235-0034
1.6 Emergency contact:	NIHON SEIKO CO., LTD Nakase Refinery Quality Assurance Section TEL +81-79-667-2121
1.7 e-mail:	mail@nihonseiko.co.jp
1.8 Recommended use and restriction on use:	Flame-retardant agent, glass fining agent, Ceramic glaze, etc.

2. HAZARDS IDENTIFICATION

2.1 Most important sign and symptom:	Not hazardous under normal handling.
2.2 GHS Classification:	
Physical hazard;	Not applicable (Not classified)
Health hazard;	
Acute toxicity (Oral)	Classification not possible
Acute toxicity (Dermal)	Classification not possible
Acute toxicity (Inhalation: vapour)	Not applicable
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ systemic toxicity (Single exposure)	Classification not possible
Specific target organ systemic toxicity (Repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible
Environmental hazard;	
Acute aquatic toxicity	Classification not possible
Chronic aquatic toxicity	Classification not possible

2.3 Label elements:	
Pictogram or symbol;	None
Signal word: Dangerous;	None
Hazard statements;	None
*This substance is not subject to "Substances whose name should be notified" under Industrial Safety and Health Law. And it is under the transition period of preparing GHS compliant document and appearance is different from MSDS, packaging or labels.	
Precautionary statements;	
Prevention	Do not handle until all safety precautions have been read and understood. Do not inhale dust. Do not eat, drink or smoke when using this product. Wear appropriate protective equipment, gloves, dust mask and face protection. Wash well the area contacted with dust after handling.
Response	If on skin: Remove the product from contaminated clothing and shoes then wash contaminated area with soap and water and rinse with plenty of water. If inhaled: Remove to fresh air, blow nose, gargle.

3. COMPOSITION / INFORMATION ON INGREDIENTS ^{(3), (4)}

3.1 Chemical substance/mixture:	Substance
3.2 Chemical name:	Sodium Antimonate
3.3 Other names:	Sodium Antimonate
3.4 English name:	Sodium Antimonate
3.5 Chemical formula or structural formula:	SA-A, SA-AF: NaSbO ₃ SA-C : NaSb(OH) ₆
3.6 Component and contents:	NaSbO ₃ nH ₂ O Purity is shown in attached grade impurity list
3.7 Hazardous impurities:	Shown in attached grade impurity list
3.8 Reference Number in Gazetted List in Japan:	Existing chemical substance No. 1-506
3.9 CAS No.:	SA-A, SA-AF: 15432-85-6 SA-C : 33908-66-6
3.10 EINECS No.:	SA-A,SA-AF : 239-444-7 SA-C : 251-735-0

4. FIRST AID MEASURES (Response method until getting medical attention)

- 4.1 Skin Contact: Remove contamination clothing and shoes immediately.
Wash affected area with soap and water and copious amount of water.
- 4.2 Inhalation of dust: Remove to fresh air, blow nose, and gargle.
- 4.3 Eye Contact: Flush eyes with plenty of water for at least 15 minutes.
- 4.4 Ingestion: Get medical attention immediately.

5. FIRE FIGHTING MEASURES

- 5.1 Suitable Extinguishing Media: No restriction relating to this product.
Prevent spreading fire using water, powder, carbon dioxide.
- 5.2 Specific hazards arising from the fire: This product does not ignite.
- 5.4 Protective Equipment for Fire-Fighters: Remove the product to safe place promptly at the fire at surrounding area.
Wear protective equipment.
Do not work at leeward.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal Precautions: Wear protective equipment to prevent exposure when handle.
Do not work at leeward.
- 6.2 Environmental Precautions: Be careful for leakage not to flow into river, etc.
- 6.3 Methods of Cleaning Up: In case of small leakage, sweep gather by broom and recover into container, treat it as industrial waste.
In case of large leakage, recover scattered material into empty container as much as possible, gather remainings carefully and completely, and treat it as industrial waste.
- 6.4 Prevention of secondary disaster: Prohibit scattered place from entering and leaving of people by stretching the rope.

7. HANDLING AND STORAGE

7.1 Precautions during Handling:

Engineering measures;

Wear protective equipment when handling and prevent the contact with eyes, mouth and skin.

Handle in well ventilated area.

Install facility of hand wash and face wash in resting area and wash well hands and face after handling.

Do not bring contaminated protective equipment such as protective gloves into resting area.

Do not eat, drink or smoke except the specified area.

Do not inhale flying dust.

Do not put into mouth.

Avoid contact with eye and skin.

Wash hands and face, change contaminated clothing after handling

Do not dispose of into river etc.

Measures for safe handling;

7.2 Storage:

Storage conditions;

Store tightly closed in well ventilated low humidity area to prevent moisture absorption.

Container packaging material;

Confirm the container is compliant to test standard for container by yourself.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control concentration:

None

8.2 Acceptable concentration limit:

Japan Society for Occupational Health (2004 – 2005); 0.1mg/m³
(as Sb for antimony and antimony compound)

ACGIH (2005); 0.5mg/m³
(as TLV-TWA of Sb for the handling and usage of antimony, antimony compound and Sb₂O₃)

8.3 Facility measures:

When in house, keep well ventilated and install exhaust equipment.
When out of doors, work at windward.
Install face wash, eye wash and shower facility near work place.

8.4 Protective equipment:

Respiratory protection;

Dust mask

Hand protection;

Made of rubber or plastic

Eye protection;

Normal type protective glasses or face shield

Skin and body protection;

Long sleeve work wear

9. PHYSICAL AND CHEMICAL PROPERTIES (1), (2), (3)

9.1 Appearance:	
Color	White Powder
Odor	No odor
9.2 Decomposition temperature:	1,427 degree C
9.3 Melting point:	None
9.4 Ignition point:	None
9.5 Vapour pressure:	-
9.6 Volatility:	None
9.7 Combustibility:	None
9.8 Oxidizing property:	None at normal temperature
9.9 Self-reactivity/Explosibility:	None
9.10 Specific Gravity:	SA-A, SA-AF: 4.0 SA-C : 3.9
9.11 Solubility:	
Water;	SA-A, SA-AF: Soluble SA-C : Hardly soluble
Others;	Soluble in conc. hydrochloric acid, conc. sulfuric acid

10. STABILITY AND REACTIVITY (2), (3)

10.1 Stability/reactivity:	
Stability;	Stable under normal temperature and normal pressure.
Dangerous reaction under specific condition; (Hazardous reaction product)	Avoid contact with hydrogen gas. (Generation of toxic gas of Stibine SbH ₃)

11. TOXICOLOGICAL INFORMATION (Include case on human and epidemiological information) (2), (3), (4), (6)

11.1 Acute toxicity: (4), (6), (8), (9)	LD50 (Oral, rat); >5,000 mg/Kg
11.2 Skin corrosion/irritation:	There is a description that it is irritant as antimony compound
11.3 Serious eye damage/eye irritation:	There is a description that it is irritant as antimony compound
11.4 Germ cell mutagenicity:	No information and classification is not possible.
11.5 Carcinogenicity;	
Japan Society for Occupational Health;	Not classified as carcinogen
ACGIH;	Not classified as carcinogen
(American Conference of Industrial Hygienists)	
EPA; (Environmental Protection Agency)	Not classified as carcinogen
NTP; (National Toxicology Program)	Not classified as carcinogen
EU; (European Union)	Not classified as carcinogen
IARC; (National Toxicology Program)	Not classified as carcinogen
11.6 Reproductive toxicity:	No information and classification not possible.
11.7 Specific target organ toxicity:	No information and classification not possible.
(Single exposure) (Repeated exposure)	
11.8 Aspiratory hazard:	No information and classification not possible.

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12. ECOLOGICAL INFORMATION ⁽³⁾

12.1 Persistence/degradability:	Not applicable as solid inorganic oxide
12.2 Accumulation:	No information and classification not possible.
12.3 Ecotoxicity:	No information and classification not possible.
12.4 Acute aquatic toxicity:	No information and classification not possible.
12.5 Environmental Effect:	No information and classification not possible.

13. DISPOSAL CONSIDERATIONS ^{(2), (3)}

13.1 Residual waste:	Treat as industrial waste
13.2 Contaminated container/package:	Treat as industrial waste

* Pay attention to local regulation of disposal and comply with that.

14. TRANSPORT INFORMATION ⁽³⁾

14.1 UN No.:	Hazardous impurity As is less than 0.5% and the product is not applicable.
14.2 UN class:	Not applicable
14.3 Packing label:	Not applicable

Un regulation: the special provision SP45 is applicable to the UN number 1549(Hazard class 6.1 and packaging group III). 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.

15. REGULATORY INFORMATION ^{(2), (3) (7)}

15.1 Follow regulation and law of each country or region.

16. OTHER INFORMATION

16.1 Treatment of the contents:	<p>The contents herein is prepared based on the document, information and data available at this point and may be revised by new knowledge.</p> <p>The precautions are covers normal usage and take appropriate safety measures for application and usage in case use for special treatment.</p>
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16.2 References:

- (1) National Institute of Technology and Evaluation (NITE) GHS classification
- (2) 14705 Chemical product (The Chemical Diary Co., Ltd.)
- (3) Grounds of proposal of acceptable concentration limit, The Japan Society for Occupational Health edition
- (4) Industrial poisoning handbook (Ishiyaku shuppan) 1
- (5) Teck Cominco American Incorporated Industrial MSDS
- (6) GLCC Laurel, LLC MSDS

16.4 Revision

Revision No.	Date of issue	Comment
No.01	94.04.01	New issue (No.J-01)
No.02	01.12.01	Added a name of "SA-A" (No.J-02)
No.03	06.01.20	MSDS of SA-S were integrated and revised. This English MSDS was registered as our quality standard.
No.04	10.08.06	Total revision to comply with GHS. Added a name of "SA-AF"

*List of purity and impurity of each grade of Sodium Antimonate

	SA-A	SA-AF	SA-C
NaSbO ₃ (%)	98.4	98.4	
NaSbO ₃ *3H ₂ O (%)			99.4
As (%)	0.03	0.03	0.03
Pb (%)	0.01	0.01	0.01