Issue date: 9/30/2008
Revision date: 4/12/2024

Safety Data Sheet

1. Chemical product and company identification

Product name : Antimony, lump, 5N

Company information

Name of manufacturer : KANTO CHEMICAL CO., INC.
Address : 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP
Name of section : Business Administration Department, Reagent Division
Telephone number : +81-3-6214-1090
Facsimile number : +81-3-3241-1047
Mail address : BC32@kanto.co.jp
Reference No : 01421
Recommended use : For research use only
Restrictions on use : Seek expert judgment when using the product for applications other than those recommended.

2. Hazards identification

GHS classification

Health hazards Specific target organ toxicity (repeated exposure) Category 2 (respiratory organs)

Hazard pictograms

Signal word : Warning

Hazard statements : May cause damage to organs (respiratory organs) through prolonged or repeated exposure

Precautionary statements

Prevention : Do not breathe dust.

Response : Get medical advice/attention if you feel unwell.

Disposal : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

3. Composition/information on ingredients

Distinction of substance or mixture : Substance

Chemical name	Concentration (%)	Formula	TSCA	EC-No.	CAS RN
Antimony	≥ 99.99	Sb	Listed	231-146-5	7440-36-0

＊Concentration : ≧99.999%.

4. First aid measures

First aid measures

First-aid measures after inhalation	:	Remove the victim to fresh air, and make him blow his nose and gargle.
First-aid measures after skin contact	:	Wash the affected areas under running water.
First-aid measures after eye contact	:	Wash the affected areas under running water.
First-aid measures after ingestion	:	Give the victim water or salt water and make him vomit. Get medical attention.
Personal Protection in First Aid and Measures	:	Rescuers should wear proper protective equipment like rubber gloves, goggles.

Most Important Symptoms/Effects

Symptoms/effects	:	Inhalation causes cough and vomiting.

5. Fire fighting measures

Suitable extinguishing media	:	This product is noncombustible.
Unsuitable extinguishing media	:	None
Firefighting instructions	:	Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.
Personal protection (Emergency response)	:	Firefighters should wear protective equipment.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures

General measures	:	Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.

Environmental precautions

Environmental precautions	:	Attention should be given to avoid damage to the environment by flowing of spillage to rivers.

Methods and Equipment for Containment and Cleaning up

For containment	:	Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

7. Handling and storage

Handling

Technical measures	:	Wear appropriate protective equipment to avoid contact with skin or inhalation of dust.
Precautions for safe handling	:	Avoid formation of dust and aerosols.

Storage

Storage conditions	:	Store in a dark, cool place and tightly closed.
Material used in packaging/containers	:	Glass, polyethylene, polypropylene.

8. Exposure controls / Personal protection equipment

ACGIH TWA	0.5 mg/m³

Appropriate engineering controls : Install a local ventilation system in case of dusty condition.

Protective equipment

Respiratory protection : If necessary, wear dust mask

Hand protection : Impervious protective gloves

Eye protection : Safety goggles

Skin and body protection : Protective clothing, protective boots

9. Physical and chemical properties

Physical state : Solid

Color : Silvery white

Odor : Odorless

pH : No data available

Melting point : 630.5 ° C

Freezing point : No data available

Boiling point : 1380 ° C

Flash point : No data available

Auto-ignition temperature : 900 ° C

Decomposition temperature : No data available

Flammability : Non flammable.

Vapor pressure : No data available

Relative density : 6.684 (25℃)

Density : No data available

Relative gas density : No data available

Solubility : Water: Insoluble.

Partition coefficient n-octanol/water (log Pow) : No data available

Explosive limits (vol %) : No data available

Viscosity, kinematic : No data available

Particle characteristics : No data available

10. Stability and reactivity

Reactivity : When heated in oxygen, it produces antimony(Ⅲ) oxide.
It ignites in chlorine and produces antimony(V) chloride.
Heating a mixture with sulfur produces antimony(Ⅲ) sulfide.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Ignite in fluorine, chlorine and bromine. Iodine can cause an explosion.

Conditions to avoid : Light, heat.

Incompatible materials : Oxidizing substances.

Hazardous decomposition products : antimony oxides.

11. Toxicological information

Acute toxicity (oral)	:	Classification not possible
Acute toxicity (dermal)	:	Classification not possible
Acute toxicity (inhalation)	:	No classification (gas) No classification (vapor) Classification not possible (dust, mist)
Skin corrosion/irritation	:	Classification not possible May cause skin irritation.
Serious eye damage/irritation	:	Classification not possible May cause eye irritation.
Respiratory sensitization	:	Classification not possible
Skin sensitization	:	Classification not possible
Germ cell mutagenicity	:	Classification not possible
Carcinogenicity	:	Classification not possible Japan Society for Occupational Health classifies the substance into group 2B (probably carcinogenic to humans with less sufficient evidence). However, the classification is not possible because of insufficient data.
Reproductive toxicity	:	Classification not possible
STOT-single exposure	:	Classification not possible
STOT-repeated exposure	:	May cause damage to organs (respiratory organs) through prolonged or repeated exposure Based on the human evidence including "pulmonary damage, if exposed to metal vapour or metal oxide powder for a long period of time", and the evidence from animal studies including "interstitial fibrosis, enlargement and hyperplasia of the alveolar wall, metaplasia of the cuboidal/columnar epithelium". The effects on experimental animals were observed at dosing levels within the guidance value ranges for category 2. It was claasified into category 2 (respiratory organs).
Aspiration hazard	:	Classification not possible

12. Ecological information

Ecotoxicity

Aquatic acute	:	Classification not possible
Aquatic chronic	:	Classification not possible

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Hazardous to the ozone layer

Ozone	:	Classification not possible

13. Disposal considerations

Ecological waste information	:	Solidification method : Solidify with cement and bury in a landfill site approved for hazardous waste disposal.

		Or entrust approved waste disposal companies with the disposal.
Contaminated container and packaging	:	In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

International Regulations

Transport by sea(IMDG)

UN-No. (IMDG)	:	2871
Proper Shipping Name (IMDG)	:	ANTIMONY POWDER
Packing group (IMDG)	:	III
Transport hazard class(es) (IMDG)	:	6.1

Air transport(IATA)

UN-No. (IATA)	:	2871
Proper Shipping Name (IATA)	:	Antimony powder
Packing group (IATA)	:	III
Transport hazard class(es) (IATA)	:	6.1
Marine pollutant	:	Not applicable
MFAG-No	:	170

15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16. Other information

Data sources	:	Encyclopaedia Chimica, Kyoritsu Shuppan Co, Ltd. (1963) . Handbook of dangeroous and hazardous chemicals, Japan Industrial Safety & Health Association. (2000-2001) . Handbook of Dangerous Substances Springer-Verlag Tokyo (1991) . NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.The Safety Data Sheet(SDS) is prepared based on JIS Z7253.