Issue date: 7/30/2003
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Safety Data Sheet

1. Chemical product and company identification

Product name	:	Sodium iodide

Company information

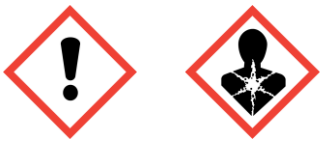
Name of manufacturer	:	KANTO CHEMICAL CO., INC.
Address	:	2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP
Name of section	:	Business Administration Department, Reagent Division
Telephone number	:	+81-3-6214-1090
Facsimile number	:	+81-3-3241-1047
Mail address	:	BC32@kanto.co.jp
Reference No	:	37198
Product numbers applied by the SDS	:	37169, 37198
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	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Reproductive toxicity	Category 1B
	Reproductive toxicity (effects on or via lactation)	Additional category
	Specific target organ toxicity (single exposure)	Category 1 (thyroid)
	Specific target organ toxicity (repeated exposure)	Category 1 (skin, thyroid, systemic toxicity)

Hazard pictograms



Signal word : Danger

Hazard statements :
Causes skin and eye irritation
May damage fertility or the unborn child
May cause harm to breast-fed children
Causes damage to organs (thyroid)
Causes damage to organs (skin, thyroid, systemic toxicity) through prolonged or repeated exposure

Precautionary statements

Prevention :
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Avoid contact during pregnancy and while nursing.
Wash hands, forearms and face thoroughly after handling.

		Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
Response	:	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Call a POISON CENTER or doctor. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	:	Store locked up.
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
Sodium iodide	≥ 98.5	NaI	Listed	231-679-3	7681-82-5

＊Concentration : After drying.

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 for at least 15 minutes. If necessary, get medical treatment.
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.

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 or inhalation of dust.

Environmental precautions

Environmental precautions : Attention should be given to avoid discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.

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 : If necessary, wear proper protective equipment to avoid contact with skin or inhalation of dust.

Precautions for safe handling : Avoid formation of dust and aerosols.

Storage

Storage conditions : As the chemical is deliquescent, keep the bottle tightly closed and store in a cool place.

Material used in packaging/containers : Glass, polyethylene, polypropylene.

8. Exposure controls / Personal protection equipment

ACGIH TWA	0.01 ppm (IFV)

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 : White

Odor : Odorless

pH : 6 - 9 (50g/L, 25℃)

Melting point : 651 ° C

Freezing point : No data available

Boiling point : 1300 ° C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability	:	Non flammable.
Vapor pressure	:	No data available
Relative density	:	3.667 (0℃)
Density	:	No data available
Relative gas density	:	No data available
Solubility	:	Organic solvents; Soluble in acetone, ethanol, methanol. Water: 61.3 % (0℃)
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	:	Halogen exchange reaction with organic halogen compounds.
Chemical stability	:	Stable under normal conditions. Deliquescent. Slowly becomes brown in air due to liberation of iodine.
Possibility of hazardous reactions	:	Stable under normal conditions of use.
Conditions to avoid	:	Light, heat, moisture.
Incompatible materials	:	Oxidizing substances.
Hazardous decomposition products	:	Iodine, hydrogen iodide.

11. Toxicological information

Acute toxicity (oral)	:	No classification rat LD50=4340mg/kg
Acute toxicity (dermal)	:	Classification not possible
Acute toxicity (inhalation)	:	No classification (gas) No classification (vapor) Classification not possible (dust, mist)
Skin corrosion/irritation	:	Causes skin irritation In a test in which this substance was applied to the skin of rabbits at 500 mg / 24 h, it showed moderate irritation, so it was classified into category 2.
Serious eye damage/irritation	:	Causes eye irritation In a test in which 100 mg / 24h of this substance was applied to the eyes of rabbits, it showed moderate irritation. In addition, potassium iodide is classified into category 2B based on the following test.thus , it was classified into category 2B.
Respiratory sensitization	:	Classification not possible
Skin sensitization	:	Classification not possible Besides, Japan Society for Occupational Health classified iodine and its compounds as a skin sensitizer group 2, but there is a cautionary statement that not all compounds were identified.
Germ cell mutagenicity	:	Classification not possible
Carcinogenicity	:	No classification ACGIH classifies iodine compounds as A4 (not classifiable as a human carcinogen).

Reproductive toxicity	:	May damage fertility or the unborn child May cause harm to breast-fed children Excessive iodine ingestion in humans causes thyroid failure, and effects on sexual function such as menstrual abnormality could occur as secondary effects, and there is the information that absorbed iodine is excreted into body milk, and it is possible that iodine transferred to newborns via body milk causes developmental disorder in infants. Because it is hard to say that there is sufficient evidence of reproductive toxicity caused by excessive exposure to iodide in humans, the substance was classified into category 1B in this hazard class, and the category of effects by lactation was added.
STOT-single exposure	:	Causes damage to organs (thyroid) Based on evidence that acute, excessive intakes of iodine transiently decrease the production of thyroid hormones, the substance was classified into category 1 (thyroid) considering the effects on thyroid.
STOT-repeated exposure	:	Causes damage to organs (skin, thyroid, systemic toxicity) through prolonged or repeated exposure Based on the information on potassium iodide, it was classified into category 1 (skin, thyroid, systemic toxicity). Potassium iodide : In the oral administration of this substance as drug therapy, iodine eruption is observed. Furthermore, by excessive oral exposure to this substance, hypothyroidism was found, but on the other hand, cases showing hyperthyroidism were also reported. Besides these, as serious adverse effects in long-term repeated use, other than lesions in skin and thyroid, laryngitis, bronchitis, glottal edema, asthmatic attack, salivary gland edema, parotitis, gastritis, along with iodine cachexia such as generalized weakness, palpitation, depression, sleeplessness, and nervousness are listed as iodine poisoning. As above, other than skin and thyroid, various systemic signs for which it is difficult to identify a target organ were observed. Therefore, the substance was classified into category 1 (skin, thyroid, systemic toxicity).
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	:	Dilute with copious water and adjust the pH to neutral, then flush in drains. 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)	:	Not applicable
Proper Shipping Name (IMDG)	:	Not applicable
Packing group (IMDG)	:	Not applicable
Transport hazard class(es) (IMDG)	:	Not applicable

Air transport(IATA)

UN-No. (IATA)	:	Not applicable
Proper Shipping Name (IATA)	:	Not applicable
Packing group (IATA)	:	Not applicable
Transport hazard class(es) (IATA)	:	Not applicable

Marine pollutant : Not applicable

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) .
Dangerous Properties of Industrial Materials,6th ed.
N.I.Sax Van Nostrand Reinhold Company (1984) .
Handbook of 17322 Chemical Products, The Chemical Daily Co. (2022) .
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.