Safety Data Sheet (SDS)

1. Chemical and Company Information

Chemical Name

Product Name	Potassium iodate
Product Code	

Company Profile

Name of Supplier	GODO SHIGEN CO., LTD.
Department in charge	Sales department
Address	No.1545-1, NANAIDO, CHOSEI-MURA, CHOSEI-GUN, CHIBA-PREF, 299-4333, JAPAN
Telephone Number	0475-32-2302
Fax Number	0475-32-1115
e-mail Address	sales@godoshigen.co.jp
Emergency Phone Number	GODO SHIGEN CO., LTD. Sales department 0475-32-2302

Recommended Use

General industrial use

Restrictions on Use

Do not use for any purposes other than those listed above.

2. Hazards Identification

GHS Classification

Physio-chemical Hazards	
Oxidizing agent	Category 3
Health Hazards	
Acute toxicity (oral)	Category 4
Serious eye damage/ Eye irritation	Category 2B
Environmental Hazards	Classification not possible

GHS Label Elements

Pictogram

Signal Word	WARNING
Hazard Information	May intensify fire: oxidizer Eye irritation

Precautionary Statements

[Safety Measures]	Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking

Keep away from clothing and combustible materials.
Do not eat, drink or smoke while using this product.
Wear protective gloves/eye protection/face protection.
Wash hands thoroughly after handling.

[First Aid Measures] IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists, get medical advice/attention.
IF SWALLOWED: Call a doctor/physician if you feel unwell.

[Disposal] Dispose of contents and containers via an industrial waste disposer licensed by the prefectural governor.

3. Composition and Information on Ingredients

Classification of Chemical Substance or Mixture

Chemical substance

Composition and Information on Ingredients

Chemical Name or General Name Potassium iodate
Chemical Properties (Chemical formula): KIO_3
Content: ≥ 99.5 %
CAS No. 7758-05-6
Reference Number in Gazetted List in Japan: The Chemical Substance Control Law: 1-440
Industrial Safety and Health Act: Announced chemical substance by public notice

4. First Aid Measures

First aid measures by exposure route

IF INHALED: Immediately remove victim to fresh air and keep at rest. Give oxygen if breathing is difficult and get medical attention.

IF ON SKIN: Immediately rinse the affected area thoroughly with plenty of water and wash thoroughly with soap.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a doctor/physician.

IF SWALLOWED: Rinse mouth with water, drink water or milk to induce vomiting, and get medical attention. If the victim is unconscious, do not give anything by mouth.

Precautions Necessary to Protect the First-aid Provider

Rescuers should wear eye and skin protection appropriate for the situation.

5. Firefighting Measures

Suitable Extinguishing Media

Straight water stream, mist, powder fire extinguisher (that uses phosphates)

Unsuitable Extinguishing Media

No data available

Specific Hazards in the Case of Fire

Because the product contains halogen, it emits irritating or toxic fumes (or gases) in the event of a fire.

Particular Firefighting Methods

Prohibit unauthorized persons from entering the area around the fire.
Cut off the combustion source of the fire and extinguish the fire at once using a large amount of water or fire extinguishing agent.
Promptly move transportable containers to a safe place.
Extinguish the fire from the windward side.

Special Protective Equipment and Precautions for Fire Fighters

Wear appropriate self-contained breathing apparatus and protective clothing (heat resistant).

6. Accidental Release Measure

Precautions for Personal Protection, Protective Equipment and Emergency Measures

Cordon off the area around the spill with ropes etc. to prevent unauthorized persons from entering.
Wear protective equipment when working and avoid contact or inhalation of dust.
Work upwind and evacuate people downwind.

Environmental Precautionary Statements

Avoid release into rivers etc. to prevent any environmental impact.

Methods and material for containment and cleaning up

Scoop or sweep up the scattered material and collect it in an empty sealable container.

Secondary Disaster Prevention Measures

Disposal of recovered or treated materials should be outsourced to an industrial waste disposer licensed by the prefectural governor.

7. Handling and Storage Precautions

Handling

Technical measures	Perform local or general exhaust ventilation as described in "8. Exposure Controls and Personal Protection" and wear protective equipment if necessary.
Precautions for Safe Handling	Handle in a well-ventilated place and avoid generating dust. Wear appropriate protective equipment to prevent inhalation or contact with skin or eyes. Handle in a manner that will not indiscriminately generate fumes or dust.
Contact Avoidance	See "10. Stability and Reactivity".
Hygiene Measures	Wash hands and eyes thoroughly after handling. Do not eat, drink or smoke while using this product.

Storage

Technical measures	Comply with the provisions of the Fire Service Act.
Prohibited contact substances	Reducing agents
Storage conditions	Store locked up. Keep container tightly sealed and store in a cool, dry, dark place if possible. Do not store with other dangerous, flammable or organic substances.
Safe container packaging material	Glass containers, resin containers, containers with a plastic interior.

8. Exposure Controls and Personal Protection

Permissible concentration (exposure limit, biological exposure index)

Japan Society for Occupational Health (2021)	2 mg/m3 (Class 3 dust [other inorganic or organic dust], respirable dust) 8 mg/m3 (Class 3 dust [other inorganic or organic dust], total dust)
ACGIH TLV- TWA (2021)	0.01ppm (Iodine and Iodides as inhalable fraction and vapor)

Equipment Measures

Install appropriate eyewash stations and safety showers in workplaces where this substance is stored or handled.
Install appropriate general or local exhaust ventilation in the workplace to prevent exposure.

Protective equipment

Respiratory protective equipment	Anti-dust mask
Protective gloves	Impervious protective gloves.
Eye and/or face protection	Protective glasses or goggles.
Skin and body protection	Hard hat, protective clothing, protective boots

Special Precautions

No information available

9. Physical and Chemical Properties

Physical state	Solid
Color	White
Odor	No odor
Melting point/Freezing point	560℃
Boiling point or initial boiling point and boiling range	No data available
Flammability	No data available
Explosive limits and explosive upper limit/flammability limit	No data available

Flash point	No data available
Auto ignition point	No data available
Decomposition temperature	No data available
pH	5 to 8 (50 g/L, 25°C)
Dynamic viscosity	Not applicable
Solubility	Water: 4.74g/100ml (25°C)
n-octanol/water partition coefficient (log value)	log P = -7.18: SRC (Access on Oct. 2010)
Vapor pressure	No data available
Density and/or relative density	Density: 3.89 g/mL (20°C)
Relative gas density	Not applicable
Particle properties	No data available

10. Stability and Reactivity

Reactivity	Stable under normal handling conditions
Chemical stability	Decomposes when heated. Reacts violently with aluminum, arsenic, carbon, copper, metal sulfides, organic matter, phosphorus and sulfur. Combustible
Possibility of hazardous reactions	May intensify fire: oxidizer Eye irritation
Conditions to avoid	Avoid contact with sunlight, moisture, strong heat or the incompatible dangerous substances listed above.
Incompatible dangerous substances	Reducing agents
Hazardous decomposition products	Iodine, hydrogen iodide, potassium oxide.

11. Toxicological Information

Product Toxicological Information

Acute toxicity (oral)	Mouse LD50 = 531, 1177 mg/kg bw) (JECFA FAO NMRS 40A, B, C [1966])
Acute toxicity (dermal)	No data available (GHS classification: Classification not possible)
Acute toxicity (inhalation: gas)	Solid according to the GHS definition.
Acute toxicity (inhalation: vapor)	Solid according to the GHS definition.
Acute toxicity (inhalation: dust/mist)	No data available (GHS classification: Classification not possible)
Skin corrosion/irritation:	No data available (GHS classification: Classification not possible)
Serious eye damage/eye irritation	No data available (GHS classification: Classification not possible)
Respiratory sensitization	No data available (GHS classification: Classification not possible)
Skin sensitization	No data available (GHS classification: Classification not

	possible)
Germ cell mutagenicity	No data available (GHS classification: Classification not possible)
Carcinogenicity	Does not appear on the IARC or NTP lists.
Reproductive toxicity	No data available (GHS classification: Classification not possible)
Specific target organ toxicity (single exposure)	No data available (GHS classification: Classification not possible)
Specific target organ toxicity (repeated exposure)	Insufficient data (GHS classification: Classification not possible)
Aspiration hazard	No data available (GHS classification: Classification not possible)

12. Ecological Information

Product Ecological Information

Ecotoxicity	
Aquatic toxicity Short-term (acute)	No information available
Aquatic toxicity Long-term (chronic)	No information available
Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Ozone Hazard	No information available

13. Disposal Considerations

Residual waste

Conduct detoxification, stabilization and neutralization as far as possible before disposal to reduce the hazard level to a low level. Dispose of this product in compliance with all laws and local government standards.

Processing of waste should be outsourced to an industrial waste disposer licensed by the prefectural governor or a local public entity.

Contaminated containers and packaging

When disposing of containers, do so after completely removing all content.

14. Precautions for Transport

International regulations

UN number	1479
Product name (UN proper shipping name)	Oxidizing substance Solid (OXIDIZING SOLID, N.O.S.)
UN classification (transport hazard class)	5.1
Container grade	II, III
Marine pollutants (Applicable/Not applicable)	Not applicable
Sea regulation information	Comply with the provisions of the IMO.

Air regulation information	Comply with the provisions of the ICAO /IATA.

Japanese regulations

Land regulation information	Comply with the provisions of the Fire Service Act.
Sea regulation information	Comply with the provisions of the Ship Safety Law.
Marine pollutants	Not applicable
Air regulation information	Follow the provisions of the Aviation Law.

Special safety measures for transportation or methods of transportation:

Avoid direct sunlight during transportation. Load in a manner that will prevent damage, corrosion or spillage to the container and take measures to prevent load collapse. Do not stack heavy goods.

15. Applicable Laws and Regulations

Names of applicable laws and regulations and information relating to regulations based on those laws and regulations

Fire Service Act	Article 2 Dangerous Goods Class 1 Iodates Class 1 Oxidizing Solid (50kg)
Ship Safety Law	Oxidizing substances (Dangerous Goods Regulation Article 3 Dangerous Goods)
Aviation Law	Oxidizing substances (Enforcement Regulation Article 194 Dangerous Goods)
Port Regulations Act	Oxidizing substances (Enforcement Regulation Article 12 Dangerous Goods)
Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof	Not applicable
Industrial Safety and Health Act	Dangerous goods and hazardous substances that require the name to be indicated on the label (Iodine)
Poisonous and Deleterious Substances Control Act.	Not applicable

16. Other Information

References

List of classification results for NITE GHS (2021)
Japan Society for Occupational Health (2021) Recommendations for permissible concentrations etc.
Handbook of Chemistry - Basics Revised 5th Edition Maruzen (2004)
ACGIH, American Conference of Governmental Industrial Hygienists (2021) TLVs and BEIs.

[Note] This SDS complies with JIS Z 7253: 2019 and was created based on the product information and hazard information available at the time of creation. However, this may not necessarily be sufficient. Therefore, handle with care. If new knowledge becomes available, changes may be made to this SDS as required. Precautionary statements apply to normal handling. In the case of special handling, safety measures suitable for the use and conditions should be taken before handling.