

Safety Data Sheet



1. Identification of the Substance/Mixture and the Supplier

Supplier : National Institute of Advanced Industrial Science and Technology (AIST)
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Identity of Substance/Mixture : Certified Reference Material NMIJ CRM 3006-a Potassium Iodate
 Recommended Use of the Chemical and Restriction on Use : This CRM can be used for the primary standard in titrimetric analysis. Do not use this reference material for other purposes than testing/research.

2. Hazards Identification

GHS Classification : Oxidizing solid : Hazard Category 2
 Serious eye damage/ Eye irritation : Hazard Category 2B
 Acute toxicity (Oral) : Hazard Category 4

GHS Label Element:



Signal Word : Danger
 Hazards Statement : Risk of promoting fire
 Oxidizing material
 Harmful if swallowed
 [Critical Hazard]
 Oxidization, Hazard
 Precautionary Statement : [Precaution]
 Wash exposed face and hands thoroughly after handling this reference material.
 Avoid drinking, eating and smoking when handling this reference material.
 Remove heat, high temperature material, spark, bare fire and other

ignition sources in vicinity.

Keep clothes and flammable material at a distance.

Use appropriate personal protective equipment such as protective glove, protective cloth, protective glasses and protective mask.

[First-Aid Measure]

If in eyes, wash eyes with water for several minutes carefully. If possible take off contact lenses. Continue washing. Get medical advice/attention immediately, if eye irritation is lasting.

If ingested: rinse mouth with water.

Get medical advice/attention immediately.

In case of fire, use carbon-dioxide, powder (except hydrogen carbonate type) and foam extinguisher.

[Storage]

Store in a closed container in room-temperature environment with humidity of 60% or less.

Protect this reference material from effects of acids and alkalis.

[Disposal]

Entrust disposal of this reference material to a professional waste disposal company licensed by prefectural governor.

The other hazards than the above do not result in classification or are not covered by the GHS.

3. Composition/Information on Ingredients

Substance or Mixture	: Substance
Chemical Identity	: Potassium Iodate
Synonym	: -
Chemical Formula or Structural Formula	: KIO_3
Mass Fraction (%)	: 99.9 % or more
Molecular Weight	: 214.00
Reference Number in Gazetted List in Japan	: Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : (1)-440 The Industrial Safety and Health Law : Published
CAS Number	: 7758-05-6

4. First-aid Measures

If in eyes	: Rinse eyes carefully with plenty of water for several minutes. Then take off contact lenses if possible. Get medical advice/attention immediately, if eye irritation is lasting.
If on Skin	: Take off/remove all contaminated clothing and shoes immediately. Wash exposed skin area with plenty of soap and water.
If Inhaled	: Remove victim to fresh air. Make the person blow his/her nose and gargle. Get medical advice/attention.

If Ingested : Get medical advice/attention if feel bad. Rinse mouse with water.

5. Fire-fighting Measures

- Extinguishing Media : Plenty of water (This reference material increases susceptibility of combustible materials to burn.), Sand, carbon-dioxide, powder (except hydrogen carbonate type) and foam.
- Fire-Specific Hazards : Use appropriate personal protective equipment to avoid breathing smoke as irritating or toxic fume (or gas) is generated in the case of fire.
- Specific Fire-Fighting Method : Eliminate ignition sources at the origin of a fire and put out fire by using plenty of water. Remove movable containers promptly to a safe place. In the case of immovable containers, cool them and their surroundings with sprayed water.
- Protection of Fire-Fighters : Carry out fire-fighting from the windward in order to avoid breathing toxic gas. Use personal protective equipment such as compressed air open-circuit self-contained breathing apparatus.

6. Accidental Release Measures

- Personal Precaution, Personal Protective Equipment and Emergency Procedures : Ventilate the affected areas thoroughly, if it is in an indoor environment, until the clean-up operation is completed. Use appropriate personal protective equipment to avoid contact with eye and skin and inhalation of gas. Mark the restricted area with rope etc. to keep out unauthorized people. Carry out the clean-up operation from the windward and make people on the leeward side evacuate.
- Environmental Precautions : Take precautions to prevent spillage from draining into rivers etc. to adversely impact the environment. Make it sure to appropriately treat contaminated wastewater in order to prevent untreated wastewater from being released into the surrounding environment.
- Recovery and Neutralization : Collect spillage in containers which can be kept tightly closed. Rinse away the remains with plenty of water.
- Prevention of Secondary Disaster : Mark the restricted area with rope etc. to keep out unauthorized people. Carry out the clean-up operation from the windward and make people on the leeward side evacuate.

7. Handling and Storage

- Handling Engineering : Strict ban on fire.

- Precautions : Keep away from shock, hot surface and spark.
 Avoid contact with organic materials and reducing agents.
- Local and General Ventilation : Use local ventilation system in indoor handling areas.
- Precautions for Safe Handling : Avoid rough handling such as turning over, dropping, giving a shock to or dragging containers.
 Prevent spill, overflow and scattering, and avoid dust generation.
 Keep container tightly closed after using this reference material.
 Wash hands, face etc. thoroughly and gargle after handling this reference material.
 Restrict drinking, eating and smoking to a designated area.
 Use appropriate personal protective equipment to avoid inhalation and contact with eyes, skin and clothing.
 Make a place handling this reference material a restricted area to keep out unauthorized people.
- Storage Conditions : Store in a closed container in room-temperature environment with humidity of 60% or less.
 Protect this reference material from effects of acids and alkalis.
- Safe Container Packing Material : Glass

※ Please refer the certificate about the details of appropriate storage conditions and precautions for the use as reference material.

8. Exposure Controls/Personal Protection

Engineering Controls

Keep container tightly closed and install local ventilation system if dust is generated.
 Install facilities to rinse eyes and to wash hands and body in the vicinity of a place handling this reference material and label them.

Personal Protective Equipment (PPE)

- ◇Respiratory System:Dust protective mask
- ◇Hands:Protective gloves
- ◇Eyes:Eye protector with side plates
- ◇Skin and Body:Work clothes with long sleeves

Hygiene measure

Treat in accordance with rules on Industrial hygiene and Industrial safety.

9. Physical and Chemical Properties

- Appearance, etc. : Powder
- Color : White
- Odor : Odorless

- pH : 5.0 to 8.0 (50 g/L (25°C))
 - Melting point : 560°C (Decomposed)
 - Boiling point : No data
 - Flashing point : No data
 - Explosive range : No data
 - Vapor pressure : No data
 - Relative vapor density(Air=1) : No data
 - Specific gravity or bulk : 3.89 g/cm³
- specific gravity
- Solubility : Soluble in water (4.7 g/100 mL, 0 °C), Insoluble in alcohol
 - *n*-Octanol/water partition coefficient (Log Po/w) : No data
 - Auto-ignition temperature : No data

10. Stability and Reactivity

◇Stability

Decomposed and release oxygen to increase susceptibility of substances to burn if heated.

◇Reactivity

Its aqueous solution acts as a strong oxidizer.

May react in contact with reducing agents.

◇Conditions to Avoid

Sunlight, Heat, Shock, Being mixed with combustible materials

◇Hazardous Decomposition Products

No data available

11. Toxicological Information

Acute Toxicity	Oral Mouse LDLo: 531 mg/kg (RTECS)
	Abdominal cavity Mouse LD50: 136 mg/kg (RTECS)
	Oral Dog LDLo: 200 mg/kg (RTECS)
Skin Corrosion/Irritation	No data available
Serious Eye Damage/ Eye Irritation	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available

12. Ecological Information

Persistence and Degradability

No data available

Bioaccumulative Potential

No data available

Ecotoxicity

No data available

13. Disposal Considerations

- Dispose of this reference material in accordance with applicable legislation and local government ordinance.
 - Dispose of container after thoroughly removing its contents.
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14. Transport Information

UN Number	: 1479
UN	: Class 5.1 (Oxidizer)
Classification	
Shipping Name	: Oxidizing solid, n.o.s
Packing Group	: PG II
Marine	: Not applicable
Pollutant	
Precautions	: When transporting this reference material, make it sure that its containers are not leaky, load it in a way to prevent turning over, dropping and being damaged, and take appropriate measures to avoid collapse.

15. Regulatory Information

Fire Defense Law

- Class 1 (Iodates) Danger Rating 1

Poisonous and Deleterious Substances Control Act

- Not applicable

Industrial Safety and Health Act

- Enforcement Order Appendix 1-3 Hazardous Substance (Oxidizing Material)

Ship Safety Law (Dangerous Material Rule)

- Other Oxidizer

Civil Aeronautics Act

- Oxidizer

Pollutant Release and Transfer Register Act (PRTR Act)

- Not applicable
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16. Other Information

Others

The information in this document is not intended to be exhaustive and is based on currently available information and data. The measures given in this document are applicable only to normal handling conditions. When handling this reference material under special conditions etc., it is recommended to take safety measures appropriate to each specific application and context of use. This document is intended to provide information and not intended to guarantee anything in handling this reference material.
