

# **SAFETY DATA SHEET**

Revision Date 01-April-2024 Revision Number 4

1. Identification

Product Name Potassium iodate, Acculute Standard Volumetric Solution, Final

Concentration 0.1N

Cat No.: 88605

Synonyms No information available

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6, Canada

Tel: 1-800-234-7437

**Emergency Telephone Number** 

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

# 2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Oxidizing liquidsCategory 2Acute oral toxicityCategory 4Serious Eye Damage/Eye IrritationCategory 2

Label Elements

Signal Word

Danger

**Hazard Statements** 

May intensify fire; oxidizer Harmful if swallowed Causes serious eye irritation



## **Precautionary Statements**

### Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep/Store away from clothing/combustible materials

Take any precaution to avoid mixing with combustibles

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

#### Response

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Rinse mouth

If eye irritation persists: Get medical advice/attention

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

### Disposal

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	55.00
Iodic acid (HIO3), potassium salt	7758-05-6	45.00

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms/effects

Notes to Physician

None reasonably foreseeable.

Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO<sub>2</sub>). Powder. Water spray. In case of major fire and large quantities:

Evacuate area. Fight fire remotely due to the risk of explosion.

No information available **Unsuitable Extinguishing Media** 

**Flash Point** No information available Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available Lower No data available

Oxidizer **Oxidizing Properties** 

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### Specific Hazards Arising from the Chemical

Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.).

#### **Hazardous Combustion Products**

Hydrogen iodide. Potassium oxides.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	- OX

## Accidental release measures

**Personal Precautions Environmental Precautions**  Ensure adequate ventilation. Use personal protective equipment as required. Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Up

/	'. H	land	ling	and	stor	age

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not Handling

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near

combustible materials. Incompatible Materials. Strong reducing agents. Combustible

material.

## 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

## **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control

hazardous materials at source

#### Personal protective equipment

**Eye Protection** Goaales

Hand Protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Natural rubber See manufacturers - Splash protection only Nitrile rubber recommendations Neoprene PVC	Glove material	Breakthrough time	Glove thickness	Glove comments
	Nitrile rubber Neoprene		-	Splash protection only

Inspect gloves before use, observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, gloves with care avoiding skin contamination.

## **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly Recommended Filter type: Multi-purpose/ABEK conforming to EN14387 Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

## **Environmental exposure controls**

No information available.

## **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

# 9. Physical and chemical properties

**Physical State** Liquid Colorless **Appearance** Odorless Odor

No information available **Odor Threshold** No information available

**Melting Point/Range** No data available **Boiling Point/Range** No information available Flash Point No information available **Evaporation Rate** No information available

Flammability (solid.gas) Not applicable

Flammability or explosive limits

No data available Upper Lower No data available <=1100 hPa @ 50 °C **Vapor Pressure Vapor Density** No information available **Specific Gravity** No information available Solubility No information available No data available

Partition coefficient: n-octanol/water

**Autoignition Temperature** No information available **Decomposition Temperature** No information available **Viscosity** No information available

**Molecular Formula** KIO3 **Molecular Weight** 214.00

# 10. Stability and reactivity

Reactive Hazard Yes

Stability Oxidizer: Contact with combustible/organic material may cause fire.

**Conditions to Avoid** Incompatible products. Excess heat. Combustible material.

Incompatible Materials Strong reducing agents, Combustible material

Hazardous Decomposition Products Hydrogen iodide, Potassium oxides

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

**Oral LD50** Category 4. ATE = 300 - 2000 mg/kg.

**Dermal LD50**Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. **Vapor LC50**Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

**Component Information** 

Component	Component LD50 Oral		LC50 Inhalation
Water	-	-	-
lodic acid (HIO3), potassium salt	Not listed	LD50 > 2000 mg/kg (Rat)	Not listed

**Toxicologically Synergistic** 

No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 No information available

 Sensitization
 No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed				
lodic acid (HIO3), potassium salt	7758-05-6	Not listed				

Mutagenic Effects No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information No information available

#### Other Adverse Effects

The toxicological properties have not been fully investigated.

# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

Persistence and Degradability Miscible with water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
lodic acid (HIO3), potassium salt	-1

## 13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOT

UN-No UN3139

Proper Shipping Name OXIDIZING LIQUID, N.O.S.

Technical Name (Potassium iodate)

Hazard Class 5.1 Packing Group II

TDG

**UN-No** UN3139

**Proper Shipping Name** OXIDIZING LIQUID, N.O.S.

Hazard Class 5.1 Packing Group II

<u>IATA</u>

UN-No UN3139

Proper Shipping Name OXIDIZING LIQUID, N.O.S.\*

Hazard Class 5.1 Packing Group II

IMDG/IMO

UN-No UN3139

Proper Shipping Name OXIDIZING LIQUID, N.O.S.

Hazard Class 5.1 Packing Group II

# 15. Regulatory information

## All of the components in the product are on the following Inventory lists: X = listed

### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Water	7732-18-5	Х	-	Х	ACTIVE	231-791-2	-	-
lodic acid (HIO3), potassium salt	7758-05-6	Х	-	Х	ACTIVE	231-831-9	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Water	7732-18-5	X	KE-35400	X	-	X	X	X	X

# Potassium iodate, Acculute Standard Volumetric Solution, Final Concentration 0.1N

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lodic acid (HIO3), potassium salt	7758-05-6	Х	KE-29148	Х	Х	Х	Х	Х	Х

#### Legend:

X - Listed '-' - Not Listed

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## **Other International Regulations**

Authorisation/Restrictions according to EU REACH

Not applicable

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
lodic acid (HIO3), potassium	7758-05-6	Not applicable	Not applicable	Not applicable	Not applicable
salt					

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Water	7732-18-5	Not applicable	Not applicable	Not applicable	Not applicable
lodic acid (HIO3), potassium salt	7758-05-6	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Product Safety Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

Revision Date 01-April-2024 Print Date 01-April-2024

**Revision Summary** New emergency telephone response service provider.

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**