

SAFETY DATA SHEET

Revision Date 01-Apr-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

Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
Ward Hill. MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757

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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Oxidizing liquids Category 2
Acute oral toxicity Category 4
Serious Eye Damage/Eye Irritation Category 2

Label Elements

Signal Word

Danger

Hazard Statements

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



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep/Store away from clothing/ other combustible materials

Take any precaution to avoid mixing with combustibles

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

Eves

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

Ingestion

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

Rinse mouth

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

	Component	CAS No	Weight %
Γ	Water	7732-18-5	55.00
	lodic 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 and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO₂). Powder. Water spray. In case of major fire and large quantities:

No information available

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

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

UpperNo data availableLowerNo data available

Oxidizing Properties Oxidizer

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

6. 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**

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

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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.

Recommended Filter type: Multi-purpose/ABEK. conforming to EN14387. Particulates filter conforming to EN 143.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateLiquidAppearanceColorlessOdorOdorless

Odor Threshold No information available

pH No information available

Melting Point/Range No data available

Melting Point/RangeNo data availableBoiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate
No information available Flammability (solid,gas)
Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressure23 hPa @ 20 °C

Vapor DensityNo information availableSpecific GravityNo information availableSolubilityNo information availablePartition coefficient; n-octanol/waterNo data available

Autoignition Temperature

No information available

Decomposition Temperature
Viscosity

No information available
No information available

Molecular FormulaKIO3Molecular Weight214.00

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 ReactionsNone under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

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

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	LD50 Oral	LD50 Dermal	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

No information available Irritation 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				
Iodic acid (HIO3),	7758-05-6	Not listed				
potassium salt						

Mutagenic Effects No information available

No information available. **Reproductive Effects**

Developmental Effects No information available.

Teratogenicity No information available.

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

No information available **Aspiration hazard**

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.

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

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

lodic acid (HIO3), potassium salt	-1		

13. Disposal considerations Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

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

IMDG/IMO

UN-No UN3139

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

Hazard Class 5.1 Packing Group II

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA TSCA Inventory notification Active-Inactive		TSCA - EPA Regulatory Flags
Water	7732-18-5	X	ACTIVE	-
lodic acid (HIO3), potassium salt	7758-05-6	Χ	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

X = listed.

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Water	7732-18-5	Х	-	231-791-2	Χ	Х		Х	Х	KE-35400
lodic acid (HIO3), potassium salt	7758-05-6	Х	-	231-831-9	Χ	Х	Х	Х	Х	KE-29148

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

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Water	7732-18-5	-	=	-
lodic acid (HIO3), potassium salt	7758-05-6	-	-	-

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 salt	7758-05-6	Not applicable	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - (2012/18/EC) - Qualifying Quantities Qualifying Quantities		Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		for Major Accident Notification	for Safety Report Requirements		
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 Health, Safety and Environmental Department

Email: chem.techinfo@thermofisher.com

www.thermofisher.com

 Revision Date
 01-Apr-2024

 Print Date
 01-Apr-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