

SAFETY DATA SHEET



1. IDENTIFICATION

Product identifier

Product Name Potassium Iodide, 50% w/v

Other means of identification

Product code: PI7450-B

Recommended use and restriction on use

Recommended use: Laboratory chemicals

Restrictions on use: No relevant information available.

Manufacturer/Supplier

AquaPhoenix Scientific, Inc.

860 Gitts Run Road Hanover, PA 17331

Phone: (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

Emergency telephone number

Emergency Phone Numbers ChemTel, Inc.
(800)255-3924 (North America)
+1 (813)248-0585 (International)

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

STOT RE 1 H372 Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms:



GHS08

Signal word: Danger

Hazard statements:

H372 Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards

There are no other hazards not otherwise classified that have been identified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight %
Water	7732-18-5	40-60%
Sodium hydrogen carbonate	144-55-8	<1.0%
Potassium hydroxide ☞ Met. Corr. 1, H290; Skin Corr. 1A, H314 ☞ Acute Tox. 4, H302	1310-58-3	<1.0%
Sodium carbonate ☞ Eye Irrit. 2A, H319	497-19-8	<1.0%
Potassium iodide ☞ STOT RE 1, H372	7681-11-0	40-60%

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

For the wording of the listed Hazard Statements, refer to section 16.

4. FIRST AID MEASURES

First aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

Eye Contact

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Skin Contact

Wash with soap and water.

If skin irritation is experienced, consult a doctor.

Inhalation

Supply fresh air; consult doctor in case of complaints.

If experiencing respiratory symptoms: Call a doctor.

Ingestion

Rinse out mouth and then drink plenty of water.

Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Danger: Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

Indication of any immediate medical attention and special treatment needed

If medical advice is needed, have product container or label at hand.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use firefighting measures that suit the environment.

Unsuitable Extinguishing Media

No relevant information available.

Specific Hazards Arising from the Chemical

During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment and precautions for firefighters

Wear self-contained respiratory protective device.
Wear fully protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Ensure adequate ventilation.
For large spills, wear protective clothing.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Prevent formation of aerosols.
Avoid splashes or spray in enclosed areas.
Use only in well ventilated areas.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.

Further information about storage conditions: Keep containers tightly sealed.
Store in cool, dry conditions in well-sealed receptacles.

Specific end use(s): No relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	TLV	OSHA PEL	Ceiling Limit
Potassium Iodide 7681-11-0	Long-term value: NIC-0.015** mg/m ³ , (0.01*) ppm NIC-Skin; *inhalable fraction & vapor **inhal.;	-	-

Potassium Hydroxide 1310-58-3	TLV-C: 2 mg/m ³ Ceiling TLV TWA (Inhalable particles) 10 mg/m ³	-	REL (USA): Ceiling limit value: 2 mg/m ³ TLV (USA): Ceiling limit value: 2 mg/m ³ EL (Canada): Ceiling limit value: 2 mg/m ³ EV (Canada): Ceiling limit value: 2 mg/m ³ LMPE (Mexico): Ceiling limit value: 2 mg/m ³
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TLV: Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits.

Exposure controls

General protective and hygienic measures:

Engineering Controls: Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses. Follow relevant national guidelines concerning the use of protective eyewear.

Skin and Body Protection Protective gloves. Protective work clothing.
Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Respiratory Protection Not required under normal conditions of use.
Use suitable respiratory protective device when aerosol or mist is formed.

Hygiene Measures The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages, and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Limitation and supervision of exposure into the environment

No relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Liquid	Odor	Odorless
Appearance	Aqueous solution	Odor Threshold	Not determined
Color	Clear, colorless	Remarks/ Method	
Property	Values		
pH	Not determined		
Melting point	Not determined		
Boiling point / boiling range	> 100°C (212 °F)	None known	
Flash Point	Not Flammable	N/A	
Flammability (solid, gas)	Not applicable.	None known	
Auto-ignition temperature:	Not determined.		
Decomposition temperature:	Not determined.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion Limits			
Lower:	Not Determined.	None known	
Upper:	Not Determined.	None known	
Oxidizing properties:	Not Determined		
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	None known	
Density at 20 °C (68 °F):	2.07 g/cm ³ (17.27 lbs./gal)		
Relative density:	Not determined.		
Vapor density:	Not determined.		
Evaporation rate:	Not determined.		
Solubility in / Miscibility with water:	Not determined.		
Partition coefficient (n-octanol/water):	Not determined.		
Viscosity			
Kinematic viscosity:	Not determined.		

Dynamic viscosity: Not determined.
Other information: No relevant information available.

10. STABILITY AND REACTIVITY

Reactivity: No relevant information available.

Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of Hazardous Reactions

Toxic fumes may be released if heated above the decomposition point.

Conditions to avoid: No relevant information available.

Incompatible materials: No relevant information available.

Hazardous Decomposition Products:

Under fire conditions only:

Halogen gases.
Corrosive gases/vapors
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:

LD/LC50 values that are relevant for classification:

7681-11-0 potassium iodide

Oral	LD50	3,118 mg/kg (rat)
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Primary irritant effect:

On the skin: Based on available data, the classification criteria are not met.

On the eye: Based on available data, the classification criteria are not met.

Sensitization: Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.
Inhalation.
Eye contact.
Skin contact.

Acute effects (acute toxicity, irritation and corrosivity): No relevant information available.

Repeated dose toxicity:

Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

12. Ecological Data

Toxicity

Aquatic toxicity: No relevant information available.

Persistence and Degradability: No relevant information available.

Bioaccumulative potential: No relevant information available.

Mobility in soil: No relevant information available.

Additional ecological information

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Other adverse effects: No relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues, and containers in compliance with all relevant local, state, and federal laws and regulations regarding treatment, storage, and disposal for hazardous and nonhazardous wastes.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

UN-Number
DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

UN proper shipping name
DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

Transport hazard class(es)
DOT, ADR/RID/ADN, IMDG, IATA Not regulated.
Class

Packing group
DOT, ADR/RID/ADN, IMDG, IATA Not regulated.

Environmental hazards Not applicable.

Special precautions for user Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15. REGULATORY INFORMATION

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

United States (USA)

SARA

Section 302 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act)

7681-11-0	Potassium iodide
1310-58-3	Potassium hydroxide
497-19-8	Sodium carbonate
144-55-8	Sodium hydrogen carbonate
7732-18-5	Water

Proposition 65 (California)

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

Canadian Domestic Substances List (DSL):

None of the ingredients are listed.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features

and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

Prepared By	Technical Department
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General 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 Safety Data Sheet