according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification · Product identifier • Trade name: lodide Reagent · Product code: IO2810-Q Recommended use and restriction on use · Recommended use: Laboratory chemicals Restrictions on use: No relevant information available. • Details of the supplier of the Safety Data Sheet · Manufacturer/Supplier: AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 USA Tel +1 (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com Distributor: AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291 · Emergency telephone number: ChemTel Inc. (800)255-3924 (North America) +1 (813)248-0585 (International) 2 Hazard(s) 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 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. (Cont'd. on page 2)

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures				
· Components:				
7681-11-0	potassium iodide	5%		
	🚸 STOT RE 1, H372			
1310-73-2	Sodium hydroxide	0.04%		
	Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318			
7732-18-5	Water	94.96%		
Additiona	information			

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

Description of first aid measures

· General information: No special measures required.

• After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

• After eye contact:

Remove contact lenses if worn.

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

• After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

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

• Extinguishing media

· Suitable extinguishing agents: Use fire fighting measures that suit the environment.

- For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

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Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

For large spills, wear protective clothing.

Environmental precautions

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

Methods and material for containment and cleaning up

Wipe up small spills with paper towel and discard.

For larger spills, add sawdust, chalk or other inert binding material, then sweep up and discard.

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

[·] Handling

• Precautions for safe handling:

Prevent formation of aerosols.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed 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: Avoid storage near extreme heat.
- Information about storage in one common storage facility:
- Store away from foodstuffs.

Do not store together with strong acids.

- Store away from oxidizing agents.
- 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

· Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

7681-11-0 potassium iodide

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Trade name: lodide Reagent (Cont'd. of page 3) TLV (USA) Long-term value: NIC-0.015** mg/m³, (0.01*) ppm NIC-Skin; *inhalable fraction & vapor **inhal.; • Exposure controls General protective and hygienic 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. · Engineering controls: Provide adequate ventilation. · Breathing equipment: Not required under normal conditions of use. Protection of hands: Protective gloves Material of gloves Nitrile rubber, NBR Neoprene gloves Fluorocarbon rubber (Viton) · Eye protection: Safety glasses Follow relevant national guidelines concerning the use of protective eyewear. · Body protection: Not required under normal conditions of use. · Limitation and supervision of exposure into the environment No relevant information available. 9 Physical and chemical properties ...

Form:	Liquid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	The product is not flammable.	
Flammability (solid, gaseous):	Not applicable.	
Auto-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	

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		(Cont'd. of pa
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits		
Lower:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Non-oxidizing.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.11 g/cm³ (9.26 lbs/gal)	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No relevant information available.	
Stability and reactivity		

• Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Contact with acids releases toxic gases.

Toxic fumes may be released if heated above the decomposition point. Reacts with strong oxidizing agents.

· Conditions to avoid

- Excessive heat.
- Direct sunlight.

Incompatible materials

- Oxidizers
- Strong acids

[•] Hazardous decomposition products

- Under fire conditions only:
- lodine compounds

11 Toxicological information

[·] Information on toxicological effects

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

· LD/LC50 values that are relevant for classification:

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7681-11-0 potassium iodide

Oral LD50 3118 mg/kg (rat)

• Primary irritant effect:

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

• **On the eve:** 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: Danger of very serious irreversible effects.
- 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.

· STOT-repeated exposure:

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

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

12 Ecological information

[·] 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.

Toxic for aquatic organisms

Other adverse effects No relevant information available.

13 Disposal considerations

• Waste treatment methods • Recommendation:

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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 packagings

• **Recommendation:** Disposal must be made according to official regulations. • **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number	
DOT, ADR/RID/ADN, IMDG, IATA	Not regulated.
UN proper shipping name	
DOT, IMDG, IATA	Not regulated.
ADR/RID/ADN	Not regulated.
Transport hazard class(es)	
DOT, ADR/RID/ADN, IMDG, IATA	
Class	Not regulated.
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)

All ingredients are listed or exempt.

· Proposition 65 (California)

• Chemicals known to cause cancer:

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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

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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