

Safety Data Sheet

PI8000

Version number: 1.1

Date of compilation: 2026-08-04

SECTION 1: Identification

1.1 Product identifier

Trade name

Potassium Iodate

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

laboratory and analytical use

1.3 Details of the supplier of the safety data sheet

AquaPhoenix Scientific
860 Gitts Run Road
Hanover PA 17331
United States

Telephone: (866) 632-1291
e-mail: info@aquaphoenixsci.com
Website: <https://www.aquaphoenixsci.com/>

1.4 Emergency telephone number

Emergency information service

ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

Hazard class	Category	Hazard class and category	Hazard statement
Oxidizing solid	2	Ox. Sol. 2	H272
Acute toxicity (oral)	4	Acute Tox. 4	H302
Acute toxicity (dermal)	5	Acute Tox. 5	H313
Serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of abbreviations: see SECTION 16.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

- Signal word danger

- Pictograms

GHS03, GHS07



- Hazard statements

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H319	Causes serious eye irritation.

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- Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep/store away from clothing/combustible materials.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P317	IF SWALLOWED: Get medical help.
P302+P317	IF ON SKIN: Get medical help.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330	Rinse mouth.
P337+P317	If eye irritation persists: Get medical help.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Hazards not otherwise classified

May form explosible dust-air mixture if dispersed.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	Potassium Iodate
CAS No	7758-05-6

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

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4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Alcohol resistant foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential. Oxidizing property.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Wear impact- and splash-resistant eyewear.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not

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dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

- Handling of incompatible substances or mixtures

- Keep away from

Organic absorbing material, Pulp/paper

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

- Incompatible substances or mixtures

Keep/store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles.

Control of the effects

Protect against external exposure, such as

heat, high temperatures, light, UV-radiation/sunlight

- Ventilation requirements

Use local and general ventilation.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	Particulate not otherwise regulated		REL							Appx-D	NIOSH REL
US	Particulates not otherwise classified (PNOC)		PEL		15					Dust	29 CFR 1910.10 00
US	Particulates not otherwise classified (PNOC)		PEL	1,765						Partml, dust	29 CFR 1910.10 00
US	Particulates not otherwise classified (PNOC)		PEL	529.5						Partml, r, dust	29 CFR 1910.10 00
US	Particulates not otherwise classified (PNOC)		PEL		5					R	29 CFR 1910.10 00
US	Particulates not otherwise regulated		PEL (CA)		10					Dust	Cal/OSH A PEL
US	Particulates not otherwise regulated		PEL (CA)		5					R	Cal/OSH A PEL

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Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
	lated										

Notation

appx-D	see Appendix D - Substances with No Established RELs
Ceiling-C	ceiling value is a limit value above which exposure should not occur
dust	as dust
part/ml	particles/ml
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

In the case of wanting to use the gloves again, clean them before taking off and air them well.

- Other protection measures

Wash hands thoroughly after handling.

Respiratory protection

Particulate filter device (EN 143).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description: See website or catalog for details.

Physical state	solid
Color	white
Odor	odorless
Melting point/freezing point	560 °C at 975 hPa
Boiling point or initial boiling point and boiling range	not determined
Evaporation rate	not determined

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Flammability	non-combustible
Lower and upper explosion limit	not relevant (solid)
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant

Solubility(ies)

Water solubility	70,000 mg/l at 25 °C
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Partition coefficient

Partition coefficient n-octanol/water (log value)	-1 (25 °C) (ECHA) not relevant (inorganic)
Soil organic carbon/water (log KOC)	1.503 (ECHA)

Vapor pressure	0 Pa at 25 °C
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Density and/or relative density

Density	3.93 g/cm ³
Relative vapour density	not relevant (solid)

Particle characteristics

Particle characteristics	no data available
Particle size	150 – 500 µm

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". It's a reactive substance. The mixture contains reactive substance(s). Oxidizing property.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

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10.5 Incompatible materials

Combustible materials

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200, Rev. 2024)

Acute toxicity

Harmful if swallowed. May be harmful in contact with skin.

- Acute toxicity estimate (ATE)

Oral	500 mg/kg
Dermal	>2,000 mg/kg

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

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n-octanol/water (log KOW)	-1 (25 °C) (ECHA)
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12.4 Mobility in soil

The Organic Carbon normalised adsorption coefficient	1.503 (ECHA)
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12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Recycling/reclamation of other inorganic materials.

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number

DOT

UN 1479

IMDG-Code

UN 1479

ICAO-TI

UN 1479

14.2 UN proper shipping name

DOT

Oxidizing solid, n.o.s.

IMDG-Code

OXIDIZING SOLID, N.O.S.

ICAO-TI

Oxidizing solid, n.o.s.

Technical name

Potassium Iodate

14.3 Transport hazard class(es)

DOT

5.1

IMDG-Code

5.1

ICAO-TI

5.1

14.4 Packing group

DOT

II

IMDG-Code

II

ICAO-TI

II

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

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14.6 Other relevant information

Shipping container markings and labels, received from AquaPhoenix, may vary from the above information. Products that are regulated for transport will be packaged by AquaPhoenix as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. AquaPhoenix may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN1479, Oxidizing solid, n.o.s., (Potassium Iodate), 5.1, II
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Danger label(s)	5.1
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Special provisions (SP)	62, IB8, IP2, IP4, T3, TP33
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ERG No	140
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International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	-
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Danger label(s)	5.1
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Special provisions (SP)	274, 900
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Excepted quantities (EQ)	E2
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Limited quantities (LQ)	1 kg
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EmS	F-A, S-Q
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Stowage category	B
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International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s)	5.1
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Special provisions (SP)	A3
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Excepted quantities (EQ)	E2
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Limited quantities (LQ)	2,5 kg
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

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Toxic Substances Control Act (TSCA)

substance is listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)
not listed
- Specific Toxic Chemical Listings (EPCRA Section 313)
not listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)
not listed

Clean Air Act

not listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)
not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

not listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	None
Health	2	Temporary or minor injury may occur
Flammability	0	Material that will not burn under typical fire conditions
Physical hazard	2	Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	0	Material that will not burn under typical fire conditions
Health	2	Material that, under emergency conditions, can cause temporary incapacitation or residual injury
Instability	0	Material that is normally stable, even under fire conditions
Special hazard	OX	Oxidizer that causes a severe increase in the burning rate of combustible materials with which it comes into contact

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National inventories

Country	Inventory	Status
AU	AIIC	Substance is listed
CA	DSL	Substance is listed
CN	IECSC	Substance is listed
EU	ECSI	Substance is listed
EU	REACH Reg.	Substance is listed
JP	CSCL-ENCS	Substance is listed
KR	KECI	Substance is listed
NZ	NZIoC	Substance is listed
PH	PICCS	Substance is listed
TR	CICR	Substance is listed
TW	TCSI	Substance is listed
US	TSCA	Substance is listed (ACTIVE)

Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substances Control Act

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DOT	Department of Transportation (USA)

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Abbr.	Descriptions of used abbreviations
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ERG No	Emergency Response Guidebook - Number
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)
NLP	No-Longer Polymer
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
Ppm	Parts per million
STEL	Short-term exposure limit
TWA	Time-weighted average
VPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H313	May be harmful in contact with skin.
H319	Causes serious eye irritation.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.