

# Safety Data Sheet

# **KII2 Solution 1**

# **SECTION 1: Identification**

# 1.1 GHS Product identifier

Product name KII2 Solution 1

#### 1.2 Other means of identification

N/A

## 1.3 Recommended use of the chemical and restrictions on use

For laboratory and manufacturing use only.

# 1.4 Supplier's details

Name High Purity Products
Address 14546 N. Lombard Street
Portland OR 97203

United States of America

Telephone 503-227-1616

email help.desk@highpp.com

# 1.5 Emergency phone number

CHEMTREC: 1-800-424-9300

# **SECTION 2: Hazard identification**

### 2.1 Classification of the substance or mixture

# GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Acute toxicity, oral, Cat. 4
- Eye damage/irritation, Cat. 2A
- Skin corrosion/irritation, Cat. 2

## 2.2 GHS label elements, including precautionary statements

## **Pictogram**

Date of issue: 2024-04-03, p. 1 of 7



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation

**Precautionary statement(s)** 

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection/face protection/protective gloves.

P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses

if present and easy to do. Continue rinsing.

P405 Store locked up.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Mixture

Components	CAS#	Percent (weight)
Potassium Iodide	7681-11-0	20 - 40%
Iodine	7553-56-2	2- 12%
Water	7732-18-5	48 - 78%

# **SECTION 4: First-aid measures**

# 4.1 Description of necessary first-aid measures

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Consult a physician.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.

If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms/effects, acute and delayed

Irritation.

# **SECTION 5: Fire-fighting measures**

#### 5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Date of issue: 2024-04-03, p. 2 of 7

### 5.2 Specific hazards arising from the chemical

Hydrogen iodide.

# 5.3 Special protective actions for fire-fighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

#### **6.2** Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Iodine	7553-56-2	(NIOSH REL) C 0.1ppm
		/ 11

#### 8.2 Appropriate engineering controls

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

#### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### **Pictograms**











#### Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.

### Skin protection

Date of issue: 2024-04-03, p. 3 of 7

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

# **Respiratory protection**

No data available.

# SECTION 9: Physical and chemical properties and safety characteristics

Physical state Liquid

Appearance red/brown liquid
Color Red/brown
Odor Iodine smell
Odor threshold No data available.
pH Not applicable

Melting point/freezing point

Boiling point or initial boiling point and boiling range

Flash point

No data available.

No data available.

No data available.

Evaporation rate No data available. Flammability No data available. Lower and upper explosion limit/flammability limit No data available.

Vapor pressure

No data available.

Relative vapor density

No data available.

No data available.

Relative vapor density

No data available.

Density and/or relative density

1.39

Solubility Completely
Partition coefficient n-octanol/water (log value) No data available.

Auto-ignition temperature

Auto-ignition temperature

Decomposition temperature

Kinematic viscosity

Explosive properties

Oxidizing properties

No data available.

No data available.

No data available.

No data available.

# Particle characteristics

No data available.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

None under normal use conditions.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with: Aldehydes, Metal powder, Phosphorus oxides (e.g. P2O5),

Danger of explosion: Acetylene, Alkali metals, Amines, Ammonium compounds, Azides, Reducing agents, and Sodium.

#### 10.4 Conditions to avoid

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

## 10.5 Incompatible materials

strong oxidizers, strong acids or bases.

#### 10.6 Hazardous decomposition products

Date of issue: 2024-04-03, p. 4 of 7

Hydrogen iodide, Hydrogen Iodine

# **SECTION 11: Toxicological information**

## Information on toxicological effects

## Acute toxicity

Iodine:

LD50 - oral - rat - 315 mg/kg LD50 - dermal - rabbit - 1425 mg/kg LC50 - inhalation - rat - 4.588 mg/L 4H

#### Skin corrosion/irritation

Causes skin irritation.

## Serious eye damage/irritation

Causes eye irritation.

### Respiratory or skin sensitization

No data available.

## Germ cell mutagenicity

No data available.

### Carcinogenicity

No data available.

# Reproductive toxicity

No data available.

## STOT-single exposure

No data available.

#### STOT-repeated exposure

Iodine can damage the thyroid gland through prolonged or repeated exposure if swallowed.

#### **Aspiration hazard**

No data available.

# **SECTION 12: Ecological information**

## **Toxicity**

Iodine:

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.67 mg/l - 96 h

Remarks: (ECHA)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 0.55 mg/l - 48 h

Remarks: (ECHA)

Potassium Iodide:

Crustacea LC50 Zebra mussel (Dreissena polymorpha) 220 - 313 mg/l, 24 hours: 7681-11-0

Fish LC50 - Oncorhynchus mykiss (rainbow trout) - 2,190 mg/l - 96 h: 7681-11-0

Date of issue: 2024-04-03, p. 5 of 7

## Persistence and degradability

No data available on product

## Bioaccumulative potential

No data suggest a potential bioaccumulation of iodine/iodide.

#### Mobility in soil

Iodide is proven to be highly mobile within aqueous solutions.

# **SECTION 13: Disposal considerations**

### **Product disposal**

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

# **SECTION 14: Transport information**

## DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

# **SECTION 15: Regulatory information**

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

#### Pennsylvania Right To Know Components

Potassium iodide

CAS number: 7681-11-0

# **New Jersey Right To Know Components**

Potassium iodide

CAS number: 7681-11-0

### Canadian Domestic Substances List (DSL)

Chemical name: Potassium iodide (KI)

CAS: 7681-11-0

## **New Jersey Right To Know Components**

Common name: IODINE CAS number: 7553-56-2

#### Canadian Domestic Substances List (DSL)

Chemical name: Iodine CAS: 7553-56-2

Date of issue: 2024-04-03, p. 6 of 7

#### **HMIS Rating**

KII2 Solution 1		
HEALTH	1	
FLAMMABILITY	0	
PHYSICAL HAZARD	0	
PERSONAL PROTECTION		

# **NFPA Rating**



# **SECTION 16: Other information**

#### Disclaimer:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

High Purity Products provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. HIGH PURITY PRODUCTS MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, HIGH PURITY PRODUCTS WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.

\*\*\*\*\*\*\*\*\*\*\*\*