

## **SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY/SUPPLIER**

Product Name: POTASSIUM IODIDE

**Synonyms:** Hydriodic Acid, Potassium Salt

**CAS Number:** 7681-11-0 **EINECS:** 231-659-4

**ASG Product Codes:** 0150, 0155, 0160, 0164, 0165, 0168, 0169, 0170, 0175, 0180, 0181,

0182, 0185

**Product Use**: Raw material for chemical and pharmaceutical industry.

Manufacturer/Supplier (1): Lab Alley LLC

Address: 22111 Highway 71 West, Suite 601,

Spicewood, Texas 78669

e-mail: customerservice@laballey.com

General Information Number: 512-668-9918

Transportation Emergency Number: InfoTrac: 800-535-5053

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## **SECTION 2**: HAZARDS IDENTIFICATION

In accordance with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals Globally Harmonized System of Classification and Labeling of Chemicals (GHS) and Regulation (EC) No. 1272/2008 concerning the Classification, Labeling and Packaging of Chemicals (CLP).

### 2.1 GHS/CLP Classification:

Health	Environmental	Physical
Eye Irritation - Category 2B Skin Irritation - Category 3	Acute Toxicity - Category 4	



# 2.2 GHS/CLP labeling, hazards and precautionary statements:

GHS/CLP Label Pictogram(s): Exclamation mark (GHS07)



Signal Word: Warning

**Hazard Statements:** 

H303: May be harmful if swallowed

H317: May cause an allergic skin reaction

**H335**: May cause respiratory irritation

**Precautionary Statements:** 

P220: Keep/Store away from oxidizers.

P232: Protect from moisture.

P233: Keep container tightly closed

**P260**: Do not breath dust/fume/gas/mist/vapors/spray **P262**: Do not get into eyes, on skin or on clothes

P264: Wash hands thoroughly after handling

**P280**: Wear protective gloves/protective clothing/eye

protection/face protection

P235+P410: Keep in a cool place. Protect from sunlight.

# **SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS**

Component	CAS Number	Weight %
Potassium lodide	7681-11-0	99.0 -101.5

#### **SECTION 4**: FIRST AID MEASURES

**Eye:** Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. If irritation persists get medical assistance.

**Skin:** Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. If irritation persists get medical attention. Wash contaminated clothing before reuse.



**Inhalation:** Remove exposed person from exposure areas to fresh air immediately.

**Ingestion:** If victim is conscious, immediately give 2 to 4 glasses of water and induce vomiting by touching fingers to back of throat. Get immediate medical attention.

## **SECTION 5: FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Use dry chemical, foam, or carbon dioxide to extinguish fire. Water may be ineffective but should be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills and to flush them away from sources of ignition.

**Fire Fighting Procedures**: Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full-face mask and full protective clothing. Cool down the containers and equipments exposed to heat with a water spray.

Unusual Fire and Explosion Hazards: No acute hazard. Avoid breathing vapors or dust.

**Combustion Products:** Irritating or toxic substances may be emitted upon thermal decomposition. Thermal decomposition products may include potassium oxides and iodine fumes.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Avoid contact with skin and eyes. Do not breath dust. (Also see Section 8).

Sweep up or vacuum up the spilled product. Collect the product and place it in a suitable (e.g. plastic) container. Avoid generating dust. Wash spill area with water.

Do not flush to sewer or waterways. Prevent release to the environment if possible. Refer to Section 15 for spill/release reporting information.

For disposal of residues refer to Section 13.

### **SECTION 7: HANDLING AND STORAGE**

**Handling:** Avoid contact with eyes, skin or clothing. Avoid generating dust. Do not breathe dust. Keep container closed. Use in a well ventilated area. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

**Storage:** Store in the original closed containers secure from children, pets or livestock. Store away from sunlight and moisture. Store away from oxidizers. Empty containers may contain residue. Do not cut, grind, drill, or weld on or near containers unless precautions are taken against these hazards.



## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Controls:** Local exhaust or general dilution ventilation should be in the facility. Provide mechanical ventilation for confined spaces. Safety shower and eyewash should be in the facility.

#### **Personal Protective Equipment:**

**Eye Protection:** Wear chemical safety goggles and face shield. Have eye-wash stations available where eye contact can occur.

**Skin Protection:** Avoid skin contact. Wear appropriate protective garments to prevent bodily contact.. Recommended protective materials include: PVC, Butyl, Neopren and Viton rubber.

**Respiratory Protection:** High efficiency particulate respirator should be used. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134 or EC 89/686/EEC.

### **SECTION 9**: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, white crystalline powder, granules or briquets

Odor: None Odor threshold: N/A

**pH**: 6 to 9 (5% aqueous solution)

Melting point/freezing point: 686 °C Initial boiling point or boiling range: 1323 °C Flash point: N/A Evaporation rate (Water=1): N/A

Flammability: Non flammable

Upper/lower flammability or explosive limits: N/A Vapor pressure: N/A Vapor density (Air=1): N/A Relative density: 3.12

Solubility in water: 144 g/100 mL (20 °C)

Partition coefficient: n-octanol/water: log Kow = 0.04

Auto-ignition temperature:N/ADecomposition temperature:N/AViscosity:N/AMolecular formula:KI

Molecular weight: 166.0 g/mol

#### **SECTION 10**: STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use. Protect from moisture and sunlight.

**Incompatibility:** Incompatible with oxidizers, metals and strong acids.



**Hazardous Reactions/Decomposition Products:** Oxidation products may include iodine fumes, hydrogen iodide and potassium oxides.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

## Signs and Symptoms of Overexposure:

Eye Contact: May cause irritation and burning.

Skin Contact: May cause irritation to sensitive skin.

**Inhalation:** Dust inhalation may be irritating to mucous membranes.

Ingestion: May cause angioneurotic edema, cutaneous and mucosal hemorrhage, fever or lymph node

enlargement.

#### **Acute Effects:**

**Eye Contact:** May cause irritation, pain and redness.

**Skin Contact:** May cause irritation. May cause sensitization in persons previously exposed.

**Inhalation:** Dust inhalation may cause mucus membrane and lung irritation.

**Ingestion:** May cause severe gastrointestinal burns.

**Chronic Effects:** Chronic exposure may cause thyroid adenoma, goiter, iodism, skin rashes, headaches, running nose, weakness, anemic and general depression. The use of iodides for asthma in pregnancy has caused fetal death and deformity.

Medical Conditions Aggravated by Exposure: Preexisting respiratory tract diseases

#### **Acute Toxicity Values:**

Oral LD<sub>50</sub> (Mouse fasting)  $^{[1]}$  = 1,962 mg/kg body weight Oral LD<sub>50</sub> (Mouse fed)  $^{[1]}$  = 2,068 mg/kg body weight

Eye irritation (Rabbits) [2] : Slight reaction

#### **SECTION 12**: ECOLOGICAL INFORMATION

#### Bioaccumulation:

Octanol/water partition coefficient: log Pow = 0.04. Not potentially bioaccumulable (log Pow <1).

# **Ecotoxicity**:

 $LC_{50}$  (Oncornhynchus mykiss, Rainbow trout) <sup>[3]</sup> = 896 mg/L/96 hr  $LC_{50}$  (Dreissena polymorpha, Zebra mussel) <sup>[4]</sup> = 226 mg/L/24 hr



# **SECTION 13**: DISPOSAL CONSIDERATIONS

Waste Classification: Non-hazardous

Disposal Methods: Recycle or dispose in a chemical landfill in accordance with all local, state or federal

regulations. Dispose packaging at an authorized site.

## **SECTION 14: TRANSPORT INFORMATION**

TDG / USDOT Transportation Pictogram(s): None

#### **U.S. Department of Transportation (DOT):**

Proper Shipping Name: POTASSIUM IODIDE DOT Label: Chemical N.O.S.

Hazard Class: N/A
UN/NA Number: N/A
Packing Group: N/A
Labels (Pictograms) Required: None

## Maritime Organization (IMDG)

Proper Shipping Name: POTASSIUM IODIDE

Hazard Class: N/A
UN/NA Number: N/A
Packing Group: N/A
Labels (Pictograms) Required: None

RID / ADR / IMO / IATA: NOT RESTRICTED

### **SECTION 15: REGULATORY INFORMATION**

# U.S. Federal Regulations

#### Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):

POTASSIUM IODIDE (CAS No. 7681-11-0): Not listed for CERCLA Section 103 - Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center, (800-424-8802). Listed at 40 CFR 302.4.

#### **Toxic Substances Control Act (TSCA):**

POTASSIUM IODIDE (CAS No. 7681-11-0): Listed for TSCA, Flag XU - Toxic Substances Control Act. Requirement to submit a pre-manufacturing notice before commencing the manufacture or import a new substance. Flag XU means a substance exempt from reporting under the Inventory Update Rule.

#### Clean Water Act (CWA):

POTASSIUM IODIDE (CAS No. 7681-11-0): is not a hazardous substance under the Clean Water Act. Consult



Federal, State and local regulations for specific requirements.

### Clean Air Act (CAA):

POTASSIUM IODIDE (CAS No. 7681-11-0): is not a hazardous substance under the Clean Air Act. Consult Federal, State and local regulations for specific requirements.

#### Superfund Amendments and Reauthorization Act (SARA) Title III Information:

**SARA 302 EHS RQ**: POTASSIUM IODIDE (CAS No. 7681-11-0): Not listed for SARA 302 EHS RQ - Reportable Quantity of Extremely Hazardous Substance listed at 40 CFR 355.

**SARA 302 EHS TPQ**: POTASSIUM IODIDE (CAS No. 7681-11-0): Not listed for SARA 302 EHS TPQ - Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (\*) following the Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micro-meters, the Threshold Planning Quantity = 10.000 LBS.

**SARA Section 313**: POTASSIUM IODIDE (CAS No. 7681-11-0): Not listed for SARA Section 313 Chemicals - Toxic Substance subject to annual release reporting requirements listed at 40 CFR 372.65.

#### OSHA:

POTASSIUM IODIDE (CAS No. 7681-11-0) is not considered hazardous by OSHA.

#### California Prop 65:

POTASSIUM IODIDE (CAS No. 7681-11-0) is not listed for California Prop 65

# **European Inventory of Existing Chemical Substances (EINECS):**

EU Classification: IRRITANT (Xi)

**Risk (R) Phrases**: R36/37/38 : Irritating to eyes, respiratory system and skin.

**Safety (S) Phrases:** S20/21: When using do not eat, drink or smoke.

S24/25: Avoid contact with skin and eyes.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S46: If swallowed, seek medical advice (show the label where possible).

# **SECTION 16: OTHER INFORMATION**

General References: HSDB (Hazardous Substances Data Bank)

IRIS (Integrated Risk Information System)
ITER (International Toxicity Estimated for Risk)

CCRIS (Chemical Carcinogenesis Research Information System)

GENE-TOX (Genetic Toxicology)

RTECS Registry of Toxic Effects of Chemical Substances)

EPA (Environmental Protection Agency)



ECB (European Chemicals Bureau)
GHS (UN Globally Harmonized System of Classification and Labeling of Chemicals)
CLP (EC Regulation No. 1272/2008)

## **Specific Toxicity Data:**

- [1] Webster, S. H., Rice, M. E., Highman, B. & von Oettingen, W. F., Journal of Pharmacology and Experimental Therapeutics. Vol. 120, Pg. 171, 1957.
- [2] Grant, W. M. Toxicology of the Eye. 2nd ed. Springfield, Illinois: Charles C. Thomas, 1974., p. 586.
- [3] Davies, P.H., and J.P. Goettl Jr., Environ. Impacts Artif. Ice Nucleating Agents: 149-161, 1978.
- [4] Fisher, S.W., P. Stromberg, K.A. Bruner, and L.D. Boulet, Aquat.Toxicol. 20:219-234, 1991.

**Revision Indicator**: GHS/CLP Safety Data Sheet in accordance with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals Globally Harmonized System of Classification and Labeling of Chemicals and EC Regulation No. 1272/2008 concerning the Classification, Labeling and Packaging of Chemicals.

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