

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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Version: 1.1

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance

Substance name : Potassium Biiodate, ACS
Chemical name : Potassium Hydrogen Diiodate

 CAS No
 : 13455-24-8

 Product code
 : LC18725

 Formula
 : KHI2O6

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

Use of the substance/mixture : For laboratory and manufacturing use only.

#### 1.3. Details of the supplier of the safety data sheet

LabChem Inc

Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court

Zelienople, PA 16063 - USA T 412-826-5230 - F 724-473-0647 info@labchem.com - www.labchem.com

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification (GHS-US)

Ox. Sol. 2 H272 Skin Corr. 1B H314 Eye Dam. 1 H318

Full text of H-phrases: see section 16

## 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS03 GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H272 - May intensify fire; oxidizer

H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) : P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking

P220 - Keep/Store away from clothing, combustible materials P221 - Take any precaution to avoid mixing with combustibles

P260 - Do not breathe dust

P264 - Wash exposed skin thoroughly after handling P280 - Wear protective gloves, eye protection

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P310 - Immediately call a poison center/doctor P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state and federal regulations

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#### 2.3. Other hazards

Other hazards not contributing to the

: None under normal conditions.

classification

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

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

#### 3.1. Substance

Substance type : Mono-constituent

Name	Product identifier	%	Classification (GHS-US)
Potassium Biiodate, ACS (Main constituent)	(CAS No) 13455-24-8	100	Ox. Sol. 2, H272 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

#### 3.2. Mixture

Not applicable

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

# 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately

call a poison center or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Immediately call a poison center or doctor/physician.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

## 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Causes serious eye damage. Symptoms/injuries after ingestion : Burns. Nausea. Vomiting.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Obtain medical assistance.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

## 5.2. Special hazards arising from the substance or mixture

Fire hazard : May intensify fire; oxidizer.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries.

Reactivity : Thermal decomposition generates : Corrosive vapors.

## 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment. Fight fire remotely due to

the risk of explosion.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## **SECTION 6: Accidental release measures**

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

General measures : No naked lights. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Gloves. Dust mask.

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Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away

from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed

: Hazardous waste due to potential risk of explosion.

Precautions for safe handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Take any precaution to avoid mixing with Combustibles. Do not breathe dust.

Hygiene measures : Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

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

Technical measures

: Proper grounding procedures to avoid static electricity should be followed. Comply with

applicable regulations.

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : combustible materials, Heat sources., Ignition sources. Keep container closed when not in use. Keep in

fireproof place.

Incompatible products

: Strong reducing agents. metals.

Incompatible materials

: Sources of ignition. Direct sunlight. Heat sources. Combustible material.

#### 7.3. Specific end use(s)

No additional information available

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

## 8.1. Control parameters

Potassium Biiodate, ACS (13455-24-8)		
ACGIH	Not applicable	
OSHA	Not applicable	

#### 8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate

vicinity of any potential exposure. Ensure adequate ventilation.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or face shield.
Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Color : white
Odor : None.

Odor threshold : No data available

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рΗ : No data available Melting point : No data available Freezing point No data available Boiling point : No data available : No data available Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available **Explosion limits** : No data available Explosive properties : No data available

Oxidizing properties : May intensify fire; oxidizer.

Vapor pressure : No data available
Relative density : No data available
Relative vapor density at 20 °C : No data available
Molecular mass : 389.91 g/mol

Solubility : Insoluble in organic solvents. Soluble in water.

Water: 1.33 g/100ml

: No data available

Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available

#### 9.2. Other information

No additional information available

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Viscosity, dynamic

Thermal decomposition generates: Corrosive vapors.

#### 10.2. Chemical stability

May intensify fire; oxidizer.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Overheating. Open flame.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

## 10.6. Hazardous decomposition products

lodine vapor.

## **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and

symptoms

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

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Burns

Symptoms/injuries after eye contact : Causes serious eye damage.
Symptoms/injuries after ingestion : Burns. Nausea. Vomiting.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

Potassium Biiodate, ACS (13455-24-8)	
Persistence and degradability	Not established.

## 12.3. Bioaccumulative potential

# Potassium Biiodate, ACS (13455-24-8)

Bioaccumulative potential Not established.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to comply with local, state and federal regulations.

Additional information : Hazardous waste due to potential risk of explosion.

Ecology - waste materials : Avoid release to the environment.

## **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN3085 Oxidizing solid, corrosive, n.o.s. (Potassium Biiodate), 5.1, II

UN-No.(DOT) : UN3085

Proper Shipping Name (DOT) : Oxidizing solid, corrosive, n.o.s.

Transport hazard class(es) (DOT) : 5.1 - Class 5.1 - Oxidizer 49 CFR 173.128

Hazard labels (DOT) : 5.1 - Oxidizer 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 212 DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

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DOT Special Provisions (49 CFR 172.102)

: 62 - Oxygen generators (see §171.8 of this subchapter) are not authorized for transportation under this entry.

IB6 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2). Additional Requirement: Composite IBCs 11HZ2 and 21HZ2 may not be used when the hazardous materials being transported may become liquid during transport.

IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.

T3 - 2.65 178.274(d)(2) Normal...... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx)

DOT Quantity Limitations Passenger aircraft/rail : 5 kg

(49 CFR 173.27)

: None : 5 kg

DOT Quantity Limitations Cargo aircraft only (49 : 25 kg

CFR 175.75)

**DOT Vessel Stowage Location** 

25 kg

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 13 - Keep as dry as reasonably practicable,34 - Stow "away from" foodstuffs,56 - Stow

"separated from" ammonium compounds,58 - Stow "separated from" cyanides,106 - Stow

"separated from" powdered metal

#### Additional information

Other information : No supplementary information available.

#### **ADR**

No additional information available

#### Transport by sea

No additional information available

## Air transport

No additional information available

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

## Potassium Biiodate, ACS (13455-24-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard

Reactive hazard

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

# 15.2. International regulations

#### CANADA

## Potassium Biiodate, ACS (13455-24-8)

Listed on the Canadian DSL (Domestic Substances List)

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#### **EU-Regulations**

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### **National regulations**

No additional information available

### 15.3. US State regulations

No additional information available

## **SECTION 16: Other information**

Revision date : 05/18/2015 Other information : None.

#### Full text of H-phrases: see section 16:

Eye Dam. 1	Serious eye damage/eye irritation Category 1	
Ox. Sol. 2	Oxidizing solids Category 2	
Skin Corr. 1B	Skin corrosion/irritation Category 1B	
H272	May intensify fire; oxidizer	
H314	Causes severe skin burns and eye damage	
H318	Causes serious eye damage	

NFPA health hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 2 - Normally unstable and readily undergo violent

decomposition but do not detonate. Also: may react violently with water or may form potentially explosive

mixtures with water.

NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can

greatly increase the rate of combustion/fire.

HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 2 Moderate Hazard - 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 : F

F - Safety glasses, Gloves, Synthetic apron, Dust respirator

SDS US (GHS HazCom 2012)

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