

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 10/4/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Substance

Substance name : POTASSIUM IODIDE
Chemical name : Potassium iodide
CAS-No. : 7681-11-0

Product code : AEB1527, AR610, ARF10051, ARF10052

Formula : IK

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Laboratory chemicals

1.3. Supplier

Alpha Resources LLC 3090 Johnson Rd.

Stevensville, Michigan 49127

USA

T (269)465-5559

 $\underline{info@alpharesources.com} - \underline{www.alpharesources.com}$

1.4. Emergency telephone number

Emergency number : CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Specific target organ toxicity (repeated exposure) Category 1

H372

Causes damage to organs through prolonged or repeated exposure

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face 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 to hazardous or special waste collection point, in accordance with

local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type : Mono-constituent
Name : POTASSIUM IODIDE

CAS-No. : 7681-11-0

Safety Data Sheet

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

Name	Product identifier	%	GHS US classification
POTASSIUM IODIDE	CAS-No.: 7681-11-0		Acute Tox. 4 (Oral), H302 STOT RE 1, H372

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.

Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to

section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

10/4/2024 (Issue date) US - en 2/7

Safety Data Sheet

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe

dust/fume/gas/mist/vapors/spray.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

POTASSIUM IODIDE (7681-11-0)

No additional information available

POTASSIUM IODIDE (7681-11-0)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):







SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Color : white

Odor : Characteristic odour Odor threshold : No data available

pH : 7.5 Temp.: 26 °C Concentration: 1 vol%

Melting point : 685 °C Atm. press.: 975 hPa Decomposition: 'no' Sublimation: 'no'

Freezing point : Not applicable

Boiling point : 1323 °C Source: HSDB

Flash point : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available

10/4/2024 (Issue date) US - en 3/7

Safety Data Sheet

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

Flammability (solid, gas) : Non flammable.

Vapor pressure : 1 mm Hg Temp.: 745 °C

Relative vapor density at 20°C : 1 Pa

Relative density : 3.12 Source: HSDB

Density : 3.213 g/cm³ Type: 'bulk density' Temp.: 25 °C

Molecular mass : 166.0032 g/mol Source: HSDB

No data available Solubility Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available. No data available Decomposition temperature Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available **Explosion limits** : Not applicable Explosive properties : No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

POTASSIUM IODIDE (7681-11-0)	
LD50 oral rat	3118 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	3118 mg/kg body weight

POTASSIUM IODIDE (7681-11-0)	
LD50 oral	1000 mg/kg
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	1000 mg/kg body weight

Skin corrosion/irritation : Not classified

pH: 7.5 Temp.: 26 °C Concentration: 1 vol%

Safety Data Sheet

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

POTASSIUM IODIDE (7681-11-0)	
pH	7.5 Temp.: 26 °C Concentration: 1 vol%
Serious eve damage/irritation	· Not classified

erious eye damage/irritation : Not classified

pH: 7.5 Temp.: 26 °C Concentration: 1 vol%

POTASSIUM IODIDE (7681-11-0)	
nH	7.5 Temp : 26 °C Concentration: 1 vol

 Respiratory or skin sensitization
 : Not classified

 Germ cell mutagenicity
 : Not classified

 Carcinogenicity
 : Not classified

 Reproductive toxicity
 : Not classified

 STOT-single exposure
 : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

POTASSIUM IODIDE (7681-11-0)		
LOAEL (oral,rat,90 days)	0.55 mg/kg body weight Animal: rat, Guideline: other:	
POTASSIUM IODIDE (7681-11-0)		
LOAEL (oral,rat,90 days)	0.55 mg/kg body weight Animal: rat, Guideline: other:	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.	
1 1 1	N. 1 '0 1	

Aspiration hazard : Not classified Viscosity, kinematic : Not applicable

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

POTASSIUM IODIDE (7681-11-0)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	100 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	29.87 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	66.356 mg/l Test organisms (species): other: Duration: '28 d'

POTASSIUM IODIDE (7681-11-0)		
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	100 mg/l Test organisms (species): Daphnia magna	
EC50 - Other aquatic organisms [1]	2.7 mg/l	
EC50 96h - Algae [1]	4474.192 mg/l Source: ECOSAR	
NOEC (chronic)	29.87 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC chronic fish	66.356 mg/l Test organisms (species): other: Duration: '28 d'	
12.2. Persistence and degradability		

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

10/4/2024 (Issue date) US - en 5/7

Safety Data Sheet

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

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : Not applicable

TDG

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

No data available

TDG

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

10/4/2024 (Issue date) US - en 6/7

Safety Data Sheet

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

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
POTASSIUM IODIDE	7681-11-0	Present	Active	

15.2. International regulations

CANADA

POTASSIUM IODIDE (7681-11-0)

Listed on the Canadian DSL (Domestic Substances List)

POTASSIUM IODIDE (7681-11-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

POTASSIUM IODIDE (7681-11-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

POTASSIUM IODIDE (7681-11-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

No additional information available

SECTION 16: Other information

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

Full text of H-phrases	
H302	Harmful if swallowed
H372	Causes damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

10/4/2024 (Issue date) US - en 7/7