

Current version: 5.0.1, issued: 09.11.2021 Reglaced version: 5.0.0, issued: 06.11.2019 Region: GB

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

1.1 Product identifier

Trade name

Potassium iodide

Substance name potassium iodide

REACH registration no. 01-2119906339-35-XXXX

Identification numbers

CAS no. 7681-11-0 EC no. 231-659-4

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

Relevant identified uses of the substance or mixture

laboratory chemicals
Polymer additive
production of LC displays
doping of activated carbon
photo chemicals
feed- and food additive
pharmaceuticals

Uses advised against

Biocide disinfectant

1.3 Details of the supplier of the safety data sheet

Address

LIQUICHEM Handelsgesellschaft mbH

Kajen 6 - 8

D-20459 Hamburg

Telephone no. 040 89 97 89 0 Fax no. 040 89 97 89 9 e-mail hamburg@liquichem.de

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

STOT RE 1; H372

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3 and 4 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Product identifier

7681-11-0 (potassium iodide)



Trade name: Potassium iodide

Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

Hazard pictograms



Signal word

Danger

Hazard statement(s)

H372 Causes damage to thyroid through prolonged or repeated exposure.

Precautionary statement(s)

P260 Do not breath dust or mist.
P264 Wash 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 a facility in accordance with local and national

regulations.

2.3 Other hazards

PBT assessment

The product is not considered to be a PBT.

vPvB assessment

The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name potassium iodide

Identification numbers

CAS no. 7681-11-0 EC no. 231-659-4

3.2 Mixtures

Not applicable. The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.



Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray jet; Dry chemical extinguisher; Carbon dioxide; Alcohol-resistant foam

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Hydrogen iodide (HJ); Potassium oxide

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations". Avoid raising dust.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid eye, skin and clothing contact. Avoid the formation and deposition of dust.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale dust. Provide eye wash fountain in work area.

Advice on protection against fire and explosion

Keep away from sources of ignition - refrain from smoking.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place. Protect from sun. Protect from atmospheric moisture and water.

Recommended storage temperature

Value 15 - 30 °C

Requirements for storage rooms and vessels

Always keep in containers of same material as the original.

Incompatible products

Do not store together with: oxidizing agents

7.3 Specific end use(s)

No data available.



Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no)
	Route of exposure		Value		
1	potassium iodide			7681-11-0	
			231-659-4		
	dermal	Long term (chronic)	systemic	1.066	mg/kg/day
	inhalative	Long term (chronic)	systemic	1.8807	mg/m³

DNEL value (consumer)

	· · · · · · · · · · · · · · · · · · ·				
No	Substance name			CAS / EC	no
	Route of exposure	Exposure time	Effect	Value	
1	potassium iodide		7681-11-0		
				231-659-4	
	oral	Long term (chronic)	systemic	0.2666	mg/kg/day
	dermal	Long term (chronic)	systemic	0.5333	mg/kg/day
	inhalative	Long term (chronic)	systemic	0.4637	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Туре	Value	
1	potassium iodide		7681-11-0	
			231-659-4	
	water	fresh water	0.1	mg/L
	water	marine water	0.01	mg/L
	water	Aqua intermittent	1	mg/L
	water	fresh water sediment	106.987	mg/kg dry
				weight
	water	marine water sediment	106.987	mg/kg dry
				weight
	soil	-	31.1488	mg/kg dry
				weight
	sewage treatment plant	-	35.83	mg/L

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified. Short term: filter apparatus, Filter P1

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Chemical-resistant work clothes.

Environmental exposure controls



Trade name: Potassium iodide

Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation		
Form/Colour		
solid		
white		
Odour		
odourless		
pH value Value	7.5	
Reference temperature	26	°C
Concentration	1	% aqueous solution
Boiling point / boiling range		
Value	1325	°C
Melting point/freezing point	C05	*0
Value	685	°C
Decomposition temperature No data available		
Flash point		
Not applicable		
Ignition temperature		
No data available		
Auto-ignition temperature Comments	Draduatic not colfigniting	
Confinents	Product is not selfigniting	
	<u> </u>	
Explosive properties Product does not present an explosion hazard.		
Explosive properties Product does not present an explosion hazard. Flammability		
Product does not present an explosion hazard.		
Product does not present an explosion hazard. Flammability not flammable Lower explosion limit		
Product does not present an explosion hazard. Flammability not flammable Lower explosion limit No data available		
Flammability not flammable Lower explosion limit No data available Upper explosion limit		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available		
Flammability not flammable Lower explosion limit No data available Upper explosion limit		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density No data available		
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density No data available Relative density No data available Density Value	3.213	g/cm³
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density No data available Relative density No data available Density		g/cm³ °C
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density No data available Relative density No data evailable Relative density No data available Selective density No data available Reference temperature Solubility in water	3.213	°C
Flammability not flammable Lower explosion limit No data available Upper explosion limit No data available Vapour pressure No data available Relative vapour density No data available Relative density No data available Density Value Reference temperature	3.213	



Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

Solubility	
No data available	

Part	Partition coefficient n-octanol/water (log value)					
No	Substance name	CAS no.		EC no.		
1	potassium iodide	7681-11-0		231-659-4		
log Pow			-0.958			
Reference temperature			25	°C		
Source		ECHA				

Viscosity	
No data available	

Particle characteristics	
No data available	

9.2 Other information

Other information	
No data available.	

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Heat; Moisture. Protect from sun.

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Hydrogen iodide (HJ); Potassium oxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acu	Acute oral toxicity				
No	Substance name		CAS no.		EC no.
1	potassium iodide		7681-11-0		231-659-4
LD5	0			2500	mg/kg bodyweight
Species		rat			
Method		OECD 423			
Source		ECHA			

Acu	Acute dermal toxicity				
No	Substance name		CAS no.	EC n	0.
1	potassium iodide		7681-11-0	231-6	S59-4
LD5	0	>	2	2000	mg/kg bodyweight
Spec	cies	rat			
Method		OECD 402			
Source		ECHA			

Acute inhalational toxicity	
No data available	
Skin corrosion/irritation	



Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

No	Substance name	CAS no.	EC no.
1	potassium iodide	7681-11-0	231-659-4
Spec	cies	rabbit	
with reference to		CAS 7681-82-5	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	

Seri	Serious eye damage/irritation						
No	Substance name	CAS no.	EC no.				
1	potassium iodide	7681-11-0	231-659-4				
Spec	cies	rabbit					
Meth	nod	OECD 405					
Source		ECHA					
Eval	uation	non-irritant					

Res	Respiratory or skin sensitisation					
No	Substance name	CAS no.	EC no.			
1	potassium iodide	7681-11-0	231-659-4			
Rou	te of exposure	Skin				
Species		Human				
Method		Patch-Test				
Source		ECHA				
Eval	uation	non-sensitizing				

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No data available	

STOT - single exposure	
No data available	

STOT - repeated exposure	
No data available	

Aspiration hazard	
No data available	

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)						
No	Substance name		CAS no.	EC no.		
1	potassium iodide		7681-11-0	231-659-4		
LC5	0	>	100	mg/l		
Dura	ation of exposure		96	h		
Species		Danio rerio				
Method		OECD 203				
Sou	rce	ECHA				

Toxicity to fish (chronic)	
No data available	



Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)						
No	Substance name	CAS no.		EC no.		
1	potassium iodide	7681-11-0		231-659-4		
log F	Pow		-0.958			
Reference temperature			25	°C		
Sour	ce	ECHA				

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information	
Do not discharge product unmonitored into the environment.	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG



Trade name: Potassium iodide

Current version: 5.0.1, issued: 09.11.2021 Replaced version: 5.0.0, issued: 06.11.2019 Region: GB

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This substance is not subject to Part 1 or 2 of Annex I

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.



Trade name: Potassium iodide

Current version : 5.0.1, issued: 09.11.2021 **Replaced version:** 5.0.0, issued: 06.11.2019 **Region:** GB

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