Potassium tetraiodomercurate solution alkaline R, Ph.Eur. (1071600)

Date 13.12.2021 Previous date: -

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

1.1.1 Commercial Product Name

Potassium tetraiodomercurate solution alkaline R, Ph.Eur. (1071600)

1.1.2 Product code

FF6785 50 ML
UFI WJSK-K0P8-Q00Q-1YDX

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

1.2.1 Recommended use

Laboratory chemical

1.3 Details of the supplier of the safety data sheet

1.3.1 Supplier

	Oy FF-Chemicals Ab
Street address	Teollisuustie 4
Postcode and post office	FI-90830 HAUKIPUDAS
	Finland
Telephone	+358 8 5563 193
Telefax	+358 8 5563 194
Business ID	05851808
Email	ffc@ff-chemicals.fi

1.4 Emergency telephone number

1.4.1 Telephone number, name and address

Please contact the Emergency Centre in your own country.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

1272/2008 (CLP)

Acute Tox. 2, H300
Acute Tox. 2, H330
Acute Tox. 1, H310
STOT RE 1, H372
Aquatic Acute 1, H400
Aquatic Chronic 1, H410

2.2 Label elements

1272/2008 (CLP)

GHS09 - GHS08 - GHS06

Signal word **Danger**

Hazard Statements

H300	Fatal if swallowed.
H330	Fatal if inhaled.
H310	Fatal in contact with skin.
H372	Causes damage to organs <Kidney> through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

2.3 Other hazards

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

CAS/EC and Reg.number	EINECS	Chemical name of the substance	Concentration	Classification
7774-29-0	231-873-8	Mercury(II) iodide	15 %	Acute Tox. 2, H300; Acute Tox. 2, H330; Acute Tox. 1, H310; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
7681-11-0	231-659-4	Potassium iodide	10 %	STOT RE 1; H372

3.3 Other information

The full text of hazard statements are given in chapter 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Remove patient from exposure. Take off contaminated clothing. Immediately contact medical personnel. If medical advice is needed, have product container or label at hand. First aid personnel has to wear personal protective equipment.

4.1.2 Inhalation

If breathing is difficult, give artificial respiration, use mechanical ventilator if possible. Give oxygen if possible. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Move to fresh air.

4.1.3 Skin contact

Flush skin immediately with water. Immediately contact medical personnel.

4.1.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for several minutes. Immediately contact medical personnel.

4.1.5 Ingestion

Give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

4.2 Most important symptoms and effects, both acute and delayed

See sections 2.2 and / or 11.

4.3 Indication of immediate medical attention and special treatment needed

No information available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

5.1.1 Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Fire may cause evolution of: mercury vapours, iodine, hydrogen iodide.

5.3 Advice for firefighters

Wear chemical protective suit and pressurized respirator.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate the contaminated area. Wear personal protective equipment. Adequate ventilation is required.

6.2 Environmental precautions

Prevent entry into drains, sewers, soil or watercourses.

6.3 Methods and materials for containment and cleaning up
Absorb in suitable absorption material and collect for disposal. Clean surfaces and ventilate the area.

6.4 Reference to other sections
Refer to protective measures listed in Sections 1, 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Handling in the fume hood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes and clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3 Specific end use(s)
Use in laboratories only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Threshold limits

Mercury(II) iodide	0,02 mg/m^3 (8 h)

8.1.2 Other information on limit values
Biological limit values:
Mercury (II) iodide 140 nmol / l Urine Finland
Inorganic mercury 50nmol / l Blood Finland

8.2 Exposure controls

8.2.1 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. Handle in accordance with good industrial hygiene and safety practice.

8.2.2 Individual protection measures

8.2.2.1 Respiratory protection
Respirator (Standard EN 149:2001) if limit values are exceeded. Valve filtering: EN405; or; Half mask: EN140; plus filter, EN141. respiratory protective equipment must be the correct fit and be used and maintained properly.

8.2.2.2 Hand protection
Protective gloves. Material e.g. nitrile rubber (thickness 0,11 mm, breakthrough time 480 min). Inspect gloves before use. Remove gloves with care avoiding skin contamination. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Refer to manufacturer/supplier for information.

8.2.2.3 Eye/face protection
Goggles (European standard - EN 166).

8.2.2.4 Skin protection
Protective clothing with long sleeves.

8.2.3 Environmental exposure controls
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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Important Health Safety and Environmental Information

9.1.1 Appearance
Liquid

9.1.2 Odour	No information available.
9.1.3 Odour threshold	No information available.
9.1.4 pH	No information available.
9.1.5 Melting point/freezing point	No information available.

9.1.6	**Initial boiling point and boiling range**	No information available.
9.1.7	**Flash point**	No information available.
9.1.8	**Evaporation rate**	No information available.
9.1.9	**Flammability (solid, gas)**	-
9.1.10	**Explosive properties**	
9.1.10.1	**Lower explosion limit**	No information available.
9.1.10.2	**Upper explosion limit**	No information available.
9.1.11	**Vapour pressure**	No information available.
9.1.12	**Vapour density**	No information available.
9.1.13	**Relative density**	No information available.
9.1.14	**Solubility(ies)**	
9.1.14.1	**Water solubility**	Soluble in water.
9.1.14.2	**Fat solubility (solvent - oil to be specified)**	No information available.
9.1.15	**Partition coefficient: n-octanol/water**	-
9.1.16	**Auto-ignition temperature**	No information available.
9.1.17	**Decomposition temperature**	No information available.
9.1.18	**Viscosity**	No information available.
9.1.19	**Explosive properties**	-
9.1.20	**Oxidising properties**	-

9.2 Other information

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10. STABILITY AND REACTIVITY

10.1 Reactivity
Stable in normal conditions.

10.2 Chemical stability
Stable in normal conditions.

10.3 Possibility of hazardous reactions
None under normal handling.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
Mercury vapor, iodine, HI

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1 Acute toxicity
Fatal if swallowed.
Fatal if inhaled.
Fatal in contact with skin.
LD50 Oral - Rat - 18 mg / kg

11.1.2 Irritation and corrosion
N/A

11.1.3 Sensitisation
N/A

11.1.4 Subacute, subchronic and prolonged toxicity
N/A

11.1.5 STOT-single exposure
N/A

11.1.6 STOT-repeated exposure
May cause damage to organs. Kidney.

11.1.7 Aspiration hazard
N/A

12. ECOLOGICAL INFORMATION

12.1 Toxicity

12.1.1 Aquatic toxicity
Very toxic to aquatic life with long lasting effects.
Fish LC50 - Leuciscus idus - 0.13 mg / l - 96 h
Daphnia EC50 - Daphnia magna - 0.0052 mg / l - 48 h

12.2 Persistence and degradability

12.2.1 Biodegradation
No information available.

12.3 Bioaccumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
Not classified.

12.6 Other adverse effects
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13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Dispose as hazardous waste. Obey local and national regulations.

14. TRANSPORT INFORMATION

14.1	**UN number**	1638
14.2	**UN proper shipping name**	MERCURY IODIDE SOLUTION
14.3	**Transport hazard class(es)**	6.1
14.4	**Packing group**	II
14.5	**Environmental hazards**	yes

14.6 Special precautions for users
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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
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15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH regulation
CLP regulation
Take note of Dir 94/33/EC on the protection of young people at work.
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

15.2 Chemical safety assessment
Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures.

16. OTHER INFORMATION

16.3 Key literature references and sources for data

CLP regulation (1272/2008/EC)

16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements

H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6 Training advice

Handle with good practice and according to safety instructions. Handling of hazardous chemicals.

16.7 Recommended restrictions

Access only for authorized personnel.

16.8 Additional information available from:

Oy FF-Chemicals Ab, Finland, tel. +358 8 5563 193
ffc@ff-chemicals.fi

The information in this safety data sheet are according to our best knowledge correct on the day it was composed, and may not be regarded as warranty or quality specification.