Iodine concentrate

38060-1EA

Version 1.4 Revision Date 17.12.2022

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

1.1. Product identifier

Product name	:	Iodine concentrate
SDS-number	:	000000021851
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:		
For further information, please contact:	:	SafetyDataSheet@Honeywell.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1-303-389-1414 (Medical)
Country based Poison Control Center	:	see chapter 15.1

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Skin irritation Category 2
H315 Causes skin irritation.
Eye irritation Category 2
H319 Causes serious eye irritation.
Specific target organ toxicity - repeated exposure Category 1
H372 Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms	:		
Signal word	:	Danger	
Hazard statements	:	H315	Causes skin irritation.
		H319	Causes serious eye irritation.
		H372	Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	:	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
		P280	Wear protective gloves/ eye protection/ face protection.
		P302 + P352	IF ON SKIN: Wash with plenty of water.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Hazardous components which must be listed on the label	:	iodine	

2.3. Other hazards

This product is a mixture. Health hazard information is based on its components. Iodide may cause

effects on the thyroid.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
iodine	7553-56-2 053-001-00-3 231-442-4	Acute Tox. 4; H302; Oral Acute Tox. 4; H332; Inhalation Acute Tox. 4; H312; Dermal Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335; Respiratory system STOT RE 1; H372 Aquatic Acute 1; H400	>= 10 % - < 20 %	
Potassium iodide	7681-11-0 231-659-4	STOT RE 1; H372; Oral; Thyroid	>= 20 % - < 25 %	

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:

If breathed in, move person into fresh air. If symptoms persist, call a physician.

Skin contact:
After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.

Eye contact:
Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. If eye irritation persists, consult a specialist.

Ingestion:
When swallowed, allow water to be drunk. Consult a physician.

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray
Foam
Carbon dioxide (CO2)
Dry powder

Extinguishing media which shall not be used for safety reasons:
High volume water jet

5.2. Special hazards arising from the substance or mixture

Fire may cause evolution of:
Hydrogen iodide (HI)
Iodine compounds
Potassium oxide

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Do not use a solid water stream as it may scatter and spread fire.Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Wear personal protective equipment. Unprotected persons must be kept away. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Wear personal protective equipment. Avoid inhalation, ingestion and contact with skin and eyes.

Advice on protection against fire and explosion:
Normal measures for preventive fire protection.

Hygiene measures:
Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
iodine	EH40 WEL			Listed
iodine	EH40 WEL STEL	1,1 mg/m3 0,1 ppm		

STEL - Short term exposure limit

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
iodine	Workers / Long-term systemic effects		0,07 mg/m3	Inhalation	
iodine	Workers / Long-term systemic effects		0,01mg/kg bw/d	Skin contact	
Potassium iodide	Workers / Long-term systemic effects		0,07 mg/m3	Inhalation	
Potassium iodide	Workers / Long-term systemic effects		1,0mg/kg bw/d	Skin contact	

Potassium iodide	Consumers / Long-term systemic effects		0,035 mg/m3	Inhalation	
Potassium iodide	Consumers / Long-term systemic effects		1mg/kg bw/d	Skin contact	
Potassium iodide	Consumers / Long-term systemic effects		0,01mg/kg bw/d	Ingestion	
Potassium iodide	Consumers / Acute systemic effects		0,01mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
iodine	Fresh water sediment: 0,01813 mg/l	
iodine	Marine water: 0,06001 mg/l	
iodine	Sewage treatment plant: 11 mg/l	Assessment factor: 10
iodine	Fresh water sediment: 3,99 mg/kg dw	
iodine	Marine sediment: 20,22 mg/kg dw	
iodine	Soil: 5,95 mg/kg dw	
Potassium iodide	Fresh water: 0,0075 mg/l	Assessment factor: 1000
Potassium iodide	Marine water:	No hazard identified
Potassium iodide	Sewage treatment plant:	No hazard identified
Potassium iodide	Fresh water sediment: 0,0075 mg/kg dw	Assessment factor: 1000
Potassium iodide	Marine sediment:	No hazard identified

Potassium iodide	Soil:	No hazard identified

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.

Hand protection:
Glove material: Natural Latex
Break through time: 480 min
Glove thickness: 0,6 mm
Lapren®706
Gloves must be inspected prior to use.
Replace when worn.
Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Protective suit

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	brown
Odour	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	Stable under recommended storage conditions.
pH	:	No data available
Viscosity, kinematic	:	No data available
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	No data available

Relative vapour density	:	No data available

9.2 Other Information

Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Protect from contamination.

10.5. Incompatible materials

Strong reducing agents

10.6. Hazardous decomposition products

Fire may cause evolution of:
Hydrogen iodide (HI)
Iodine compounds

Potassium oxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:
Acute toxicity estimate
Value: > 2.000 mg/kg
Method: Calculation method

Acute dermal toxicity:
Acute toxicity estimate
Value: > 2.000 mg/kg
Method: Calculation method

Acute inhalation toxicity:
Acute toxicity estimate
Value: > 5 mg/l
Exposure time: 4 h
Method: Calculation method

Skin irritation:
Test substance: Iodine
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Eye irritation:
Test substance: Iodine
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Respiratory or skin sensitisation:
No data available

Carcinogenicity:
Note: No data available

Germ cell mutagenicity:
Note: No data available

Reproductive toxicity:
Remarks: 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:
No data available

Toxicity to aquatic plants:
No data available

Toxicity to aquatic invertebrates:
No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number
ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

14.4 Packaging group

14.5 Environmental hazards
ADR/RID: no Marine pollutant: no

14.6 Special precautions for user
No data available

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Directive 2012/18/EC		Not applicable
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).

Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+)35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
Switzerland	145

Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

United Kingdom	(+44) 844 892 0111

Other inventory information

US. Toxic Substances Control Act
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)

On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

iodine	:	H302	Harmful if swallowed.
		H332	Harmful if inhaled.
		H312	Harmful in contact with skin.
		H315	Causes skin irritation.
		H319	Causes serious eye irritation.
		H335	May cause respiratory irritation.
		H372	Causes damage to organs through prolonged or repeated exposure.
		H400	Very toxic to aquatic life.
Potassium iodide	:	H372	Causes damage to organs through prolonged or repeated exposure if swallowed.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

Iodine concentrate

38060-1EA

Version 1.4 Revision Date 17.12.2022

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.
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