



# Qualikems Lifesciences Pvt. Ltd.

(Formerly known as Qualikems fine chem Pvt Ltd)

Works : Plot No. 68-69,G.I.D.C Industrial Estate,Nandesari,Vadodara-391340 (Gujarat)

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

### Product identifiers

Product name : **Iodine solution**

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

Identified uses : Reagent for analysis

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

Company : Qualikems Lifesciences Pvt Ltd

Works : Plot No.  
68.69,G.I.D.C Industrial  
Estate, Nandesari,  
Vadodara-391340 (Gujarat)

### Emergency telephone number

Emergency Phone # : +91-265-2841531 (9:00am - 6:30 pm) [Office hours]

## SECTION 2: Hazards identification

### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Specific target organ toxicity - repeated exposure, Oral (Category 2), Thyroid, H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

### Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Warning

Hazard statement(s)  
H373

May cause damage to organs (Thyroid) through prolonged or repeated exposure if swallowed.

Precautionary statement(s)  
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
 P314 Get medical advice/ attention if you feel unwell.  
 P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements none

**Reduced Labeling (<= 125 ml)**

Pictogram



Signal word Warning

Hazard statement(s) none

Precautionary statement(s) none

Supplemental Hazard Statements none

**Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

**3.2 Mixtures**

Component	Classification	Concentration
<b>potassium iodide</b>		
CAS-No. 7681-11-0 EC-No. 231-659-4 Registration number 01-2119906339-35-XXXX	STOT RE 1; H372	>= 1 - < 10 %
<b>Iodine</b>		
CAS-No. 7553-56-2 EC-No. 231-442-4 Index-No. 053-001-00-3 Registration number 01-2119485285-30-XXXX	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1; H332, H312, H315, H319, H335, H372, H400 M-Factor - Aquatic Acute: 1	>= 1 - < 2,5 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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**SECTION 4: First aid measures**

**Description of first-aid measures**

**General advice**

Show this material safety data sheet to the doctor in attendance.

**If inhaled**

After inhalation: fresh air. Call in physician.

**In case of skin contact**

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**

After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available

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**SECTION 5: Firefighting measures****Extinguishing media Suitable****extinguishing media**

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

**Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

**Special hazards arising from the substance or mixture**

Not combustible.

Ambient fire may liberate hazardous vapours.

**Advice for firefighters**

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

**Environmental precautions**

Do not let product enter drains.

### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H<sup>+</sup>, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

### **Reference to other sections**

For disposal see section 13.

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

### **Precautions for safe handling**

For precautions see section 2.2.

### **Conditions for safe storage, including any incompatibilities**

#### **Storage conditions**

Tightly closed.

Recommended storage temperature see product label.

### **Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

### **Control parameters**

#### **Ingredients with workplace control parameters**

### **Exposure controls**

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### **Skin protection**

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 480 min

Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 480 min  
Material tested:KCL 741 Dermatril® L

### **Body Protection**

protective clothing

### **Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

### **Control of environmental exposure**

Do not let product enter drains.

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## **SECTION 9: Physical and chemical properties**

### **Information on basic physical and chemical properties**

a) Appearance	Form: liquid Color: dark brown
b) Odor	slight
c) Odor Threshold	No data available
d) pH	ca.3,5 at 20 °C
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	at 20 °C soluble
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	Not applicable

- q) Decomposition temperature No data available
- r) Viscosity Viscosity, kinematic: No data available  
Viscosity, dynamic: No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

**Other safety information**

No data available

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**SECTION 10: Stability and reactivity**

**Reactivity**

No data available

**Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**Possibility of hazardous reactions**

Violent reactions possible with:

Violent reactions possible with:

The generally known reaction partners of water.

**Conditions to avoid**

no information available

**Incompatible materials**

No data available

**Hazardous decomposition products**

In the event of fire: see section 5

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**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Mixture**

**Acute toxicity**

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - > 5 mg/l  
(Calculation method)

Acute toxicity estimate Dermal - > 2.000 mg/kg  
(Calculation method)

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

Mixture may cause damage to organs through prolonged or repeated exposure. - Thyroid

**Aspiration hazard**

No data available

**Additional Information**

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

**Components****potassium iodide****Acute toxicity**

Oral: No data available

Inhalation: No data available

LD50 Dermal - Rat - male and female - > 2.000 mg/kg  
(OECD Test Guideline 402)

**Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation - 4 h  
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

Patch test: - In vitro study

Result: negative

Remarks: (ECHA)

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Germ cell mutagenicity**

No data available

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter.

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

Ingestion - Causes damage to organs through prolonged or repeated exposure. - Thyroid

**Aspiration hazard**

No data available

**Iodine****Acute toxicity**

LD50 Oral - Rat - 315 mg/kg

(US-EPA)

Remarks: The GHS classification specified by the authority

LC50 Inhalation - Rat - male and female - 4 h - > 4,588 mg/l

(OECD Test Guideline 403)

Remarks: (Regulation (EC) No 1272/2008, Annex VI)

LD50 Dermal - Rabbit - male and female - 1.425 mg/kg

(US-EPA)

**Skin corrosion/irritation**

Skin - reconstructed human epidermis (RhE)

Result: Moderate skin irritation

(Regulation (EC) No. 440/2008, Annex, B.46)

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

In animal experiments: - Mouse

Result: negative

(OECD Test Guideline 429)

**Germ cell mutagenicity**

Test Type: Mutagenicity (mammal cell test):

Test system: Mouse lymphoma test

Result: negative

Method: Mutagenicity (micronucleus test)

Species: Mouse - male and female

Result: negative

**Carcinogenicity**

No data available

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation. - Respiratory system

**Specific target organ toxicity - repeated exposure**

Oral - Causes damage to organs through prolonged or repeated exposure. - Thyroid

Oral - Thyroid

**Aspiration hazard**

No data available

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**SECTION 12: Ecological information****Toxicity****Mixture**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects**

No data available

**Components****potassium iodide**

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 3.780 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 7,5 mg/l - 48 h (OECD Test Guideline 202)

**Iodine**

Toxicity to fish	static test LC50 - Oncorhynchus mykiss (rainbow trout) - 1,67 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 0,55 mg/l - 48 h Remarks: (ECHA)
Toxicity to algae	EC50 - Daphnia magna (Water flea) - 0,2 mg/l - 48 h Growth inhibition ErC50 - Desmodesmus subspicatus (green algae) - 0,13 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	EC50 - activated sludge - 280 mg/l - 3 h (OECD Test Guideline 209)



H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.

### **Relevant changes since previous version**

#### 2. Hazards identification

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Qualikems Lifesciences Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.qualikems.com](http://www.qualikems.com) for additional terms and conditions of sale.