

<b>IODINE SOLUTION 0.05M CITRISOL</b> <b>6.3450g I<sub>2</sub> FOR 500 ML 0.1 N SOLUTION</b>	<b>MATERIAL SAFETY DATA SHEET</b> <b>SDS/MSDS</b>
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifiers**

Product name : Iodine Solution 0.05M Citrisol 6.3450 g I<sub>2</sub> For 500 ml 0.1 N solution  
 Product Code : 849840

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
 7/28 Vardaan House  
 New Delhi -110002  
 INDIA  
 Telephone : +91 11 49404040  
 Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008**  
 Acute toxicity, Inhalation (Category 4), H332  
 Skin irritation (Category 2), H315  
 Eye irritation (Category 2A), H319

**2.2 Label elements**

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

Pictogram



Signal word

Warning

Hazard statement(s)

H319 Causes serious eye irritation.  
 H315 Causes skin irritation.  
 H332 Harmful if inhaled.

Precautionary statement(s)

P280 Wear protective gloves, protective clothing, eye protection, face protection.  
 P271 Use only outdoors or in a well-ventilated area.  
 P261 Avoid breathing dust, fume, gas, mist, vapours, spray.  
 P264 Wash thoroughly after handling.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313	If skin irritation occurs: Get medical advice.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before reuse.
Supplemental Hazard Statements	none

### 2.3 Other hazards

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## SECTION 3: Composition/information on ingredients

### 3.1 Mixtures

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Iodine</b>		
CAS No.	7553-56-2	> 10 - < 15 %
EC No.	231-442-4	
Index-No.	053-001-00-3	
<b>Potassium Iodide Pure</b>		
CAS No.	7681-11-0	> 15 - < 25 %
<b>Water</b>		
CAS No	7732-18-5	> 50 - < 75 %
EC No	231-791-2	

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

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

Assure fresh air breathing. Allow the victim to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor. Call a POISON CENTER or doctor if you feel unwell.

#### In case of skin contact

Specific treatment (see on this label). Wash contaminated clothing before reuse. Get medical advice. If skin irritation or rash occurs : Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing.

#### In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Get medical advice. If eye irritation persists :

#### If swallowed

Obtain emergency medical attention. Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. Rinse mouth.

### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms relating to use:** Repeated exposure to this material can result in absorption through skin causing Significant health hazard, Danger of serious damage to health by prolonged exposure through inhalation, Causes severe skin burns and eye damage, Causes serious eye irritation, Causes skin irritation, May cause an allergic skin reaction.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media:** Foam, Dry powder, carbon dioxide, water spray, sand.

**Unsuitable extinguishing media:** Do not use a heavy water stream.

**Surrounding fires:** Use water spray or fog for cooling exposed containers.

#### 5.2 Special hazards arising from the substance or mixture

Under fire conditions, hazardous fumes will be present. Thermal decomposition generates: Corrosive vapours.

#### 5.3 Advice for firefighters

**Protection against fire:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures:** Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

#### 5.4 Further information

No data available

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

**For emergency responders:** Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel:** Evacuate unnecessary personnel.

#### 6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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

**Clean up methods:** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

#### 6.4 Reference to other sections

See section 8. Exposure controls/personal protection

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

**Handling:** Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace.

**Technical protective measures:** Provide good ventilation in process area to prevent formation of vapour.

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

**Storage:** Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage regulation:** Comply with applicable regulations.

**Storage - away from:** Strong bases. Strong acids. Sources of ignition. Direct sunlight.

#### 7.3 Specific end use(s)

None

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

#### 8.2 Exposure controls

##### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## Personal protective equipment

### Eye/face protection

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

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: liquid Colour: Reddish brown
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	1.034g/ml at 25°C
n) Water solubility	Soluble in water
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available

- s) Explosive properties      No data available
- t) Oxidizing properties      No data available

## 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5 Incompatible materials

Strong oxidizing agents, Strong bases

### 10.6 Hazardous decomposition products

**Hazardous decomposition products:** Fumes. Carbon monoxide. Carbon dioxide, Thermal decomposition generates: Corrosive vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute inhalation toxicity

Harmful if inhaled.

#### Acute Dermal toxicity

Harmful in contact with skin.

#### Acute ingestion toxicity

No data available

#### Skin corrosion/irritation

Causes severe skin burns and eye damage.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC:      No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

## Additional Information

No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

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

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

### 12.6 Other adverse effects

**Environmental precautions:** Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### Contaminated packaging

Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADS/RID:-

IMDG:-

IATA:-

### 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)

ADR/RID:-

IMDG: -

IATA:-

### 14.4 Packaging group

ADR/RID:-

IMDG:-

IATA:-

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

## **SECTION 16: Other information**

### **Full text of H-Statements referred to under sections 2 and 3.**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.

### **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. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.