

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

## MATERIAL SAFETY DATA SHEET (MSDS)

### NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)

Product code : SI0309000250  
 CAS No: N/A

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

Use : Industrial. For professional use only.

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

Company identification : SUVCHEM  
 Chaitanya Tower, 2nd Floor, Office # 206,  
 Siddharth Nagar, S.V. Road,  
 Goregaon (West), Mumbai - 400062,  
 Maharashtra, India.  
 Contact: +91 22 28725393 / 94 / 95  
 Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

##### 2.1. Classification of the substance or mixture

##### Classification EC 67/548 or EC 1999/45

Classification : Repr. Cat. 2; R61  
 T; R23  
 Xn; 48/20  
 C; R35  
 N; R51-53

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Reproductive toxicity - Unborn Child - Category 1A - Danger (CLP : Repr. 1A) H360  
 Specific Target Organ Toxicity - Repeated exposure - Category 2 - Warning (CLP : STOT RE 2) H373  
 Skin corrosion - Category 1A - Danger (CLP : Skin Corr. 1A) H314  
 Acute toxicity, Inhalation - Category 4 - Warning (CLP : Acute Tox. 4) H332

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 2 (CLP : Aquatic Chronic 2) H411

##### 2.2. Label elements

**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**2. Hazards identification -DSD (continued)**
**Labelling EC 67/548 or EC 1999/45**
**Symbol(s)**

**Symbol(s)**

: T : Toxic  
 C : Corrosive  
 N : Dangerous for the environment

**R Phrase(s)**

: R23 : Toxic by inhalation.  
 R35 : Causes severe burns.  
 R48/20 : Harmful : danger of serious damage to health by prolonged exposure through inhalation.  
 R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R61 : May cause harm to the unborn child.

**S Phrase(s)**

: S4 : Keep away from living quarters.  
 S24 : Avoid contact with skin.  
 S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S28 : After contact with skin, wash immediately with  
 S35 : This material and its container must be disposed of in a safe way.  
 S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.  
 S38 : In case of insufficient ventilation, wear suitable respiratory equipment.  
 S45 : In case of accident or if you feel unwell, seek medical advice immediately ( show the label when possible).  
 S53 : Avoid exposure - obtain special instructions before use.  
 S57 : Use appropriate container to avoid environmental contamination.  
 S59 : Refer to manufacturer/supplier for information on recovery/recycling.  
 S60 : This material and its container must be disposed of as hazardous waste.  
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Contains**

: Water - Hidróxido de sodio - mercury - Yoduro potásico - Iodine

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H360D: May damage the unborn child.  
 H314 : Causes severe skin burns and eye damage.  
 H332 : Harmful if inhaled.  
 H373 : May cause damage to organs through prolonged or repeated exposure.  
 H411 : Toxic to aquatic life with long lasting effects.

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### NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)

#### 2. Hazards identification -DSD (continued)

##### Precautionary statements

- **General** : P201: Obtain special instructions before use.
- **Prevention** : P280: Wear protective gloves, protective clothing, eye protection, face protection.  
 P271: Use only outdoors or in a well-ventilated area.  
 P260: Do not breathe dust, fume, gas, mist, vapours, spray.  
 P273: Avoid release to the environment.  
 P264: Wash thoroughly after handling.
- **Response** : P301+P330+P331: IF SWALLOWED : Rinse mouth. Do NOT induce vomiting.  
 P308+P313: If exposed or concerned : get medical advice.  
 P391: Collect spillage.  
 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.  
 P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.  
 P363: Wash contaminated clothing before reuse.  
 P314: Get medical advice if you feel unwell.
- **Storage** : P405: Store locked up.
- **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Special labelling** : Restricted to professional users. (Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008)
- Contains** : Water - Hidróxido de sodio - mercury - Yoduro potásico - Iodine

#### 2.3. Other hazards

- 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.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Preparation.

**Hazardous component(s)** : This product is hazardous.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
mercury	> 1 < 5 %	7439-97-6	231-106-7	080-001-00-0	----	Repr. Cat. 2; R61 T+; R26 T; R48/23 N; R50-53  Repr. 1B _ H360D Acute Tox. 2 (inhal) _ H330 STOT RE 1 _ H372 Aquatic Acute 1 _ H400 Aquatic Chronic 1 _ H410
Yoduro potásico	> 1 < 5 %	7681-11-0	-----	-----	----	Xn; R22 Xi; R36/38  Acute Tox. 4 (oral) _ H302 Eye irrit 2 _ H319 Skin Irrit. 2 _ H315

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## MATERIAL SAFETY DATA SHEET (MSDS)

### NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)

#### 3. Composition/information on ingredients (continued)

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Iodine	: > 1 < 5 %	7553-56-2	231-442-4	053-001-00-3	----	Xn; R20/21 N; R50 Acute Tox. 4 (skin) _ H312 Acute Tox. 4 (inhal) _ H332 Aquatic Acute 1 _ H400
Hidróxido de sodio	: > 10 < 15 %	1310-73-2	-----	-----	----	C; R35 Skin Corr. 1A _ H314
Water	: > 75 < 99 %	7732-18-5	231-791-2	-----	----	Not classified (DSD/DPD) Not classified (GHS)

#### 4. First aid measures

##### 4.1. Description of first aid measures

- Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Immediately call a POISON CENTER or doctor.
- Skin contact** : Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor. Remove/Take off immediately all contaminated clothing.
- 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.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

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

- Symptoms relating to use** : May damage the unborn child.  
 Danger of serious damage to health by prolonged exposure through inhalation.  
 Causes damage to organ.  
 Causes severe skin burns and eye damage.

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

- General information** : Never give anything by mouth to an unconscious person.  
 If exposed or concerned : get medical advice.

#### 5. Fire-fighting 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

**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**5. Fire-fighting measures (continued)**

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

**5.3. Advice for fire-fighters**

**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.

**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**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
Avoid release to the environment.

**6.3. Methods and material 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

**7. Handling and storage**
**7.1. Precautions for safe handling**

**Handling** : Obtain special instructions before use. Use only outdoors or in a well-ventilated area. Do not breathe dust, fume, gas, mist, vapours, spray. Avoid contact during pregnancy or while nursing. Wash thoroughly after handling.

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

**Special precautions** : Avoid breathing dust, fume, gas, mist, vapours, spray.

**7.2. Conditions for safe storage, including any incompatibilities**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**7. Handling and storage (continued)**

<b>Storage</b>	: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
<b>Storage regulation</b>	: Comply with applicable regulations.
<b>Storage - away from</b>	: Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

<b>Specific end use(s)</b>	: None.
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**8. Exposure controls/personal protection**
**8.1. Exposure controls**
**Personal protection**


<b>Personal protection</b>	: Avoid all unnecessary exposure.
• <b>Respiratory protection</b>	: In case of insufficient ventilation, wear suitable respiratory equipment.
• <b>Hand protection</b>	: Wear protective gloves.
• <b>Skin protection</b>	: Wear suitable protective clothing.
• <b>Eye protection</b>	: Chemical goggles or face shield.
• <b>Others</b>	: When using, do not eat, drink or smoke.

**8.2. Control parameters**

<b>Occupational Exposure Limits</b>	: No data available.
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**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Physical state at 20 °C</b>	: Liquid.
<b>Colour</b>	: Colorless
<b>Odour</b>	: Characteristic.
<b>Odour threshold</b>	: No data available.
<b>pH value</b>	: No data available.
<b>Melting point [°C]</b>	: No data available.
<b>Decomposition point [°C]</b>	: N/A
<b>Critical temperature [°C]</b>	: No data available.

**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**9. Physical and chemical properties (continued)**

Auto-ignition temperature [°C]	: No data available.
Flammability (solid, gas)	: N/A
Flash point [°C]	: No data available.
Boiling point [°C]	: 1050C
Initial boiling point [°C]	: No data available.
Final boiling point [°C]	: No data available.
Evaporation rate	: N/A
Vapour pressure [20°C]	: No data available.
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: 1,15
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Miscible in water
Solubility in water	: No data available.
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm <sup>2</sup> /s]	: No data available.

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: No data available.
Explosion limits - lower [%]	: No data available.
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity.**

Reactivity	: Not established.
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**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
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**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
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**10.4. Conditions to avoid**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**10. Stability and reactivity (continued)**

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures.

**10.5. Incompatible materials**

**Materials to avoid** : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

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

**11. Toxicological information**
**11.1. Information on toxicological effects**

**Toxicity information** : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

**Acute toxicity**

- **Inhalation** : Harmful if inhaled.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : Based on available data, the classification criteria are not met.

**Corrosion** : Causes severe skin burns and eye damage.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : May damage the unborn child.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity**

**Toxicity information** : Toxic to aquatic life with long lasting effects.

**12.2. Persistence - degradability**

**Persistence - degradability** : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**12. Ecological information (continued)**

Bioaccumulative potential : Not established.

**12.4. Mobility in soil**

Mobility in soil : Not established.

**12.5. Results of PBT and vPvB assessment**

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.

**13. Disposal considerations**
**13.1. Waste treatment methods**

General : 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.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

 Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.  
 UN N° : 2922  
 H.I. nr : 86  
 ADR - Class : 8  
 Labelling - Transport : 8 : Corrosive substance. 6.1 : Toxic substances. 9 : Miscellaneous dangerous substances and articles.

 ADR - Classification code : CT1  
 ADR - Group : II  
 ADR - Packing instructions : P001  
 ADR - Limited Quantity : 1 L

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### NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)

#### 14. Transport information (continued)

ADR - Tunnel code



: E : Passage forbidden through tunnels of category E.

#### 14.2. Sea transport (IMDG) [English only]

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.  
 UN N° : 2922  
 IMO-IMDG - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. ) ( 9 : Miscellaneous dangerous substances and articles. )  
 IMO-IMDG - Packing group : II  
 IMO- IMDG - Packing instructions : P001  
 IMO-IMDG - Limited quantities : 1 L  
 IMO-IMDG - Marine pollution : Yes  
 EMS-Nr : F-A S-B

#### 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.  
 UN N° : 2922  
 IATA - Class or division : 8 : Corrosive substance. ( 6.1 : Toxic substances. ) ( 9 : Miscellaneous dangerous substances and articles. )  
 IATA - Packing group : II  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
   - Passenger and Cargo - Packing instruction : 851  
   - Passenger and Cargo - Maximum Quantity/Packing : 1 L  
 IATA - Cargo only : ALLOWED  
   - Cargo only - Packing instruction : 855  
   - Cargo only - Maximum Quantity/ Packing : 30 L  
 IATA - Limited Quantities : 0.5 L  
 ERG-Nr : 8P

#### 15. Regulatory information

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

**MATERIAL SAFETY DATA SHEET (MSDS)**
**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**
**15. Regulatory information (continued)**

- Safety, health and environmental regulations/legislation specific for the substance or mixture** : Ensure all national/local regulations are observed.
- REACH Restrictions - Annex XVII** : With the exception of those listed below:  
The components of this product are not subject to restrictions.  
• mercury : Annex XVII
- REACH Authorisation - Annex XIV** : The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

- Chemical Safety Assessment** : It has not been carried out.

**16. Other information**

- Revision** : Revision - See : \*
- Abbreviations and acronyms** : PBT: persistent, bioaccumulative and toxic.  
vPvB: very persistent and very bioaccumulative
- Sources of key data used** : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- List of relevant R phrases (heading 3)** : R20/21 : Harmful by inhalation and in contact with skin.  
R22 : Harmful if swallowed.  
R26 : Very toxic by inhalation.  
R35 : Causes severe burns.  
R36/38 : Irritating to eyes and skin.  
R48/23 : Toxic : danger of serious damage to health by prolonged exposure through inhalation.  
R50 : Very toxic to aquatic organisms.  
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R61 : May cause harm to the unborn child.
- List of full text of H-statements in section 3** : H302 : Harmful if swallowed.  
H312 : Harmful in contact with skin.  
H314 : Causes severe skin burns and eye damage.  
H315 : Causes skin irritation.  
H319 : Causes serious eye irritation.  
H330 : Fatal if inhaled.  
H332 : Harmful if inhaled.  
H360U : May damage the unborn child.  
H372 : Causes damage to organs through prolonged or repeated exposure.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.
- Further information** : None.

**MATERIAL SAFETY DATA SHEET (MSDS)**

**NESSLER'S REAGENT (KING'S) (FOR DETERMINATION OF SERUM UREA NITROGEN)**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**