Material Safety Data Sheet

O TOLIDINE REAGENT FOR CHLORINE ESTIMATION (RXSOL-60-6605-151)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-151
Product Type	O-TOLIDINE (REAGENT) FOR CHLORINE ESTIMATION
Revised date	

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

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2. Composition / informationon ingredients

Substance / Preparation : Preparation.
Hazardous component(s) : This product is hazardous.

Substance name	Contents	CAS No.
4,4'-bi-o-toluidine :	> 0.01 1 %	119-93-7
Hydrochloric acid :	> 10 15 %	7647-01-0
Water :	> 75 99 %	7732-18-5

3. Hazards Identification

3.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45
Classification : Carc. Cat. 2;
R45
Xi; R36/37/38
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Carcinogenicity - Category 1A - Danger (CLP : Carc. 1A) H350
Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314
Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : T : Toxic

R Phrase(s) : R22: Harmful if swallowed.
R36/37/38 : Irritating to eyes, respiratory system and skin.
R45 : May cause cancer.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrase(s) : S4 : Keep away from living quarters.
S22 : Do not breathe dust.
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.
S59 : Refer to manufacturer/supplier for information on recovery/recycling.
S61 : avoid release to the environment . refer to special instruction/safety data sheets.

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words : Danger
Hazard statements : H314 : Causes severe skin burns and eye damage.
H350 : May cause cancer. H319 : Causes serious eye irritation.
Precautionary statements
• General : P201: Obtain special instructions before use.
• Prevention : P280: Wear protective gloves, protective clothing, eye protection, face protection.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
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.
P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair) : Remove immediately all contaminated clothing. Rinse skin with water/shower.
P363: Wash contaminated clothing before reuse.
P337+P313: If eye irritation persists: Get medical advice/attention.
• 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)
3.3. 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.

4. First Aid Measures

4.1. Description of first aid measures
Inhalation : Immediately call a POISON CENTER or doctor. Remove to fresh air and keep at rest in a position comfortable for breathing.
Skin contact : Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor.
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 :
Ingestion : Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms relating to use : May cause cancer.
Causes severe skin burns and eye damage.
Causes serious eye irritation. May cause respiratory irritation.
4.3. Indication of any immediate medical attention and special treatment needed
General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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
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.
6.3. Methods and material for containment and cleaning up
Clean up methods : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
6.4. Reference to other sections
See section 8. Exposure controls/personal protection

7. Handling and Storage

7.1. Precautions for safe handling
Handling : Use only outdoors or in a well-ventilated area. Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray. Obtain special instructions before use.
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
Storage : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.
Storage regulation : Comply with applicable regulations.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.
7.3. Specific end use(s)
Specific end use(s) : None.

8. Exposure controls and personal protection

8.1. Exposure controls
Personal protection
Personal protection : Avoid all unnecessary exposure.
• Respiratory protection : Wear approved mask.
• Hand protection : Wear protective gloves.
• Skin protection : Wear suitable protective clothing.
• Eye protection : Chemical goggles or face shield.
• Others : When using, do not eat, drink or smoke.
8.2. Control parameters
Occupational Exposure Limits : No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state at 20 °C : Solid..
Odour threshold : No data available.
pH value : Not applicable.
Melting point [°C] : No data available.
Decomposition point [°C] : N/A
Critical temperature [°C] : Not applicable.
Auto-ignition temperature [°C] : No data available.
Flammability (solid, gas) : N/A
Flash point [°C] : Not applicable.
Boiling point [°C] : N/A
Initial boiling point [°C] : Not applicable.
Final boiling point [°C] : Not applicable.
Evaporation rate : N/A
Vapour pressure [20°C] : No data available.
Vapour pressure mm/Hg : N/A
Vapour density : N/A
Density [g/cm3] : 1,05
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : N/A
Solubility in water : No data available.
Log Pow octanol / water at 20°C : No data available.
Solubility : N/A
Viscosity at 40°C [mm2/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.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Not established.
10.4. Conditions to avoid
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 : Based on available data, the classification criteria are not met.
• 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 : Causes serious eye irritation. May cause respiratory irritation.
Sensitization : Based on available data, the classification criteria are not met.
Mutagenicity : Based on available data, the classification criteria are not met.
Carcinogenicity : May cause cancer.
Toxic for reproduction : Based on available data, the classification criteria are not met.
STOT-single exposure : Based on available data, the classification criteria are not met.
STOT-repeated exposure : Based on available data, the classification criteria are not met.
Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity
Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.
12.2. Persistence - degradability
Persistence - degradability : Biodegradable.
12.3. Bioaccumulative potential
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 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
UN N° : 3082
H.I. nr : 90
ADR - Class : 9
Labelling - Transport : 9 : Miscellaneous dangerous substances and articles.
ADR - Classification code : M6
ADR - Group : III
ADR - Packing instructions : P001 R001 LP001
ADR - Limited Quantity : 5 L
ADR - Tunnel code : E : Passage forbidden through tunnels of category E.
14.2. Sea transport (IMDG) [English only]
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
UN N° : 3082
IMO-IMDG - Class or division : 9 : Miscellaneous dangerous substances and articles.
IMO-IMDG - Packing group : III
IMO- IMDG - Packing instructions : P001 LP01
IMO-IMDG - Limited quantities : 5 L
IMO-IMDG - Marine pollution : Yes
EMS-Nr : F-A S-F
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
UN N° : 3082
IATA - Class or division : 9 : Miscellaneous dangerous substances and articles.
IATA - Packing group : III
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 964
instruction
- Passenger and Cargo - Maximum : 450 L
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 964
- Cargo only - Maximum Quantity/ : 450 L
Packing
IATA - Limited Quantites : 30 kg G
ERG-Nr : 9L

15. Regulatory information

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

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
Further information : None.
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