

## 1. Product and Company Identification

www.rxmarine.com

Product Name RXSOL-60-6605-742  
Product Type TOLLEN'S REAGENT  
Revised date

### Company Details:

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

Stock Point : Mumbai, Kandla, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat Barka

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Email [mail@rxmarine.com](mailto:mail@rxmarine.com)

## 2. Composition / Information on ingredients

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### 2.1. Substance: Tollen's Reagent

Substance name Contents CAS No

Water 96.75 -101.89 7732-18-5

Sodium hydroxide 0.9 - 1.65 1310-73-2

silver nitrate 0.1 - 0.12 7761-88-8

Substance.

Contains no other components or impurities which will influence the classification of the product.

## 3. Hazards Identification

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### 3.1. Classification of the substance or mixture

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

[CLP] Mixture/Substance: SDS EU 2015: According to Annex II

of Regulation (EC) No. 453/2010 (REACH Annex II)

Corrosive to metals, H290

Category 1

Acute toxicity (oral), H302

Category 4

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Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Full text of classification categories and H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

### 3.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Extra labelling to display Extra classification(s) to display

Symbol(s): Xi : Irritation.

N : Dangerous for the environment

R Phrase(s): R36/37/38 Irritating to eyes, respiratory system and skin.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrase(s): S26:In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 : Wear suitable protective clothing and gloves & eye/face protecting.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60: This material and its container must be disposed of as hazardous waste.

S61: avoid release to the environment . refer to special instruction/safety data sheets.

Hazard pictograms:

GHS05 GHS07

Signal word: Warning

Hazard statements: H290 - May be corrosive to metals

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary statements: 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/attention

P337+P313 - If eye irritation persists: Get medical advice/attention

### 3.3. Other hazards

## 4. First Aid Measures

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### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. If you feel unwell, seek medical advice.

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

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Harmful if swallowed.

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

Treat symptomatically.

## 5. Fire-fighting Measures

[www.rxmarine.com](http://www.rxmarine.com)

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry powder. Carbon dioxide.

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

No additional information available

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective

equipment.

## 6. Accidental Release Measures

[www.rxmarine.com](http://www.rxmarine.com)

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release. Ventilate area.

### 6.2. Environmental precautions Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

### 6.4. Reference to other sections

No additional information available

## 7. Handling and Storage

[www.rxmarine.com](http://www.rxmarine.com)

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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

Storage conditions : Store in original container. Keep cool. Protect from sunlight. Store in a dry place.

Store in a closed container.

Incompatible products : Oxidizing agent. Strong bases. Strong acids.

### 7.3. Specific end use(s)

## 8. Exposure controls and personal protection

[www.rxmarine.com](http://www.rxmarine.com)

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear appropriate mask

## 9. Physical and chemical properties

[www.rxmarine.com](http://www.rxmarine.com)

### 9.1. Information on basic physical and chemical properties

Odour threshold : No data available

pH : 14

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

Freezing point : -10 - -12 °C

Boiling point : 105 - 140 °C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

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Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

#### 9.2. Other information

No additional information available

## 10. Stability and reactivity

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### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid Finely divided metals.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## 11. Toxicological information

[www.rxmarine.com](http://www.rxmarine.com)

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ATE CLP (oral) 500 mg/kg bodyweight Skin corrosion/irritation : Causes skin irritation.

pH: 14

Serious eye damage/irritation : Causes serious eye irritation.

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pH: 14

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

## 12. Ecological information

[www.rxmarine.com](http://www.rxmarine.com)

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## 13. Disposal considerations

[www.rxmarine.com](http://www.rxmarine.com)

### 13.1. Waste treatment methods

No additional information available

## 14. Transport information

[www.rxmarine.com](http://www.rxmarine.com)

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In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1760

UN-No. (IMDG) : 1760

UN-No.(IATA) : 1760

UN-No.(ADN) : Not regulated

UN-No. (RID) : Not regulated

14.2. UN proper shipping name

Proper Shipping Name (ADR) : CORROSIVE LIQUID, N.O.S.

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S.

Proper Shipping Name (IATA) : CORROSIVE LIQUID, N.O.S.

Proper Shipping Name (ADN) : Not regulated

Proper Shipping Name (RID) : Not regulated

Transport document description (ADR) : UN 1760 CORROSIVE LIQUID, N.O.S., 8, II,

(E) Transport document description (IMDG) : UN 1760 CORROSIVE LIQUID, N.O.S., 8, II

Transport document description (IATA) : UN 1760 CORROSIVE LIQUID, N.O.S., 8, II

14.3. Transport hazard class(es)

ADR :Transport hazard class(es) (ADR) : 8

Danger labels (ADR) : 8

IMDG : Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8

IATA : Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8

AND : Transport hazard class(es) (ADN) : Not regulated

RID : Transport hazard class(es) (RID) : Not regulated

14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : Not regulated

Packing group (RID) : Not regulated

14.5. Environmental hazards



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Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user -

Overland transport

Classification code (ADR) : C9

Special provision (ADR) : 274

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP15

Portable tank and bulk container instructions (ADR): T11

Portable tank and bulk container special

provisions (ADR): TP2, TP27

Tank code (ADR) : L4BN

Vehicle for tank carriage : AT

Transport category (ADR) : 2

Hazard identification number (Kemler No.) : 80

Orange plates :Tunnel restriction code (ADR) : E

EAC code : 2X

APP code : B

- Transport by sea

Special provision (IMDG) : 274

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T11

Tank special provisions (IMDG) : TP2, TP27

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-B

Stowage category (IMDG) : B

Stowage and handling (IMDG) : SW2

- Air transport

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PCA Excepted quantities (IATA) : E2

PCA Limited quantities (IATA) : Y840

PCA limited quantity max net quantity

(IATA): 0.5L

PCA packing instructions (IATA) : 851

PCA max net quantity (IATA) : 1L

CAO packing instructions (IATA) : 855

CAO max net quantity (IATA) : 30L

Special provision (IATA) : A3

ERG code (IATA) : 8L

- Inland waterway transport

Not regulated -

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## 15. Regulatory information

[www.rxmarine.com](http://www.rxmarine.com)

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

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains no REACH candidate substance

Contains no REACH Annex XIV substances.

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 3, strongly hazardous to  
water (Classification according to AwSV, Annex 1) 12th Ordinance Implementing the  
Federal Immission Control Act - 12.BImSchV: Is not subject of the 12. BImSchV  
(Hazardous Incident Ordinance)

Denmark

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Recommendations Danish Regulation : Young people below the age of 18 years are not

allowed to use the product

15.2. Chemical safety assessment

No additional information available

## 16. Other information

[www.rxmarine.com](http://www.rxmarine.com)

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.

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

(CE) N° 1272/2008

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