Material Safety Data Sheet

TOLLENS REAGENT (RXSOL-60-6605-742)

1. Product and Company Identifaction

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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2. Composition / informationon ingredients

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

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
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 advise.
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
No additional information available

4. First Aid Measures

4.1. Description of first aid measures
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen orartificial 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 cautiouslywith 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

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

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

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)
No additional information available

8. Exposure controls and personal protection

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

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
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

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

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.
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 (repeate dexposure) : Not classified
Aspiration hazard : Not classified

12. Ecological information

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

13.1. Waste treatment methods
No additional information available

14. Transport information

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
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
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

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 accordingto AwSV, Annex 1)12th Ordinance Implementing the FederalImmission Control Act - 12.BImSchV: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Denmark
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

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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