Material Safety Data Sheet

TITANIUM TRICHLORIDE SOLUTION 15% FOR SYNTHESIS (RXSOL-60-6605-741)

1. Product and Company Identifaction

Product Name	RXSOL-60-6605-741
Product Type	TITANIUM TRICHLORIDE SOLUTION 15% FOR SYNTHESIS
Revised date	

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
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2. Composition / informationon ingredients

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

3. Hazards Identification

3.1. Classification of the substance or mixture
Classification EC 67/548 or EC 1999/45
Classification : R14
C; R34
Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)
Health hazards : Skin corrosion - Category 1B - Danger (CLP : Skin Corr. 1B) H314
3.2. Label elements
Labelling EC 67/548 or EC 1999/45
Symbol(s) : C : Corrosive
R Phrase(s) : R14 : Reacts violently with water.
R34 : Causes burns.
S Phrase(s) :S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).
Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms
Signal words : Danger
Hazard statements : H314 : Causes severe skin burns and eye damage.
Precautionary statements
• 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.
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.
• 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.

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 : Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. 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 : 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 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. Sand.

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

Do not use extinguishing media containing water.

Surrounding fires : Do not use extinguishing media containing water.

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.

Special precautions : Do not allow water (or moist air) contact with this material.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. 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 : Wash contaminated clothing before reuse. Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray.

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.
Store in dry protected location to prevent any moisture contact.
7.3. Specific end use(s)
Specific end use(s) : None.

8. Exposure controls and personal protection

8.1. Exposure controls
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 : Liquid.
Odour threshold : No data available.
pH value : No data available.
Melting point [°C] : No data available.
Decomposition point [°C] : N/A
Critical temperature [°C] : No data available.
Auto-ignition temperature [°C] : No data available.
Flammability (solid, gas) : N/A
Flash point [°C] : No data available.
Boiling point [°C] : 100°C
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 : 17.535 mm of Hg (@ 2
Vapour density : 0,62
Density [g/cm3] : 1,22
Relative density, gas (air=1) : N/A
Relative density, liquid (water=1) : N/A
Solubility in water [% weight] : Patially soluble in
Solubility in water : No data available.
Log Pow octanol / water at 20°C : No data available.
Solubility : Acidic. 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 : Highly reactive material.
10.2. Chemical stability
Chemical stability : Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions
Hazardous reactions : Reacts violently with water.
10.4. Conditions to avoid
Conditions to avoid : Direct sunlight. Extremely high or low temperatures. Moisture.
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 : 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 : 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.
Special precautions : Do not allow water (or moist air) contact with this material.

14. Transport information

14.1. Land transport (ADR-RID)
Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N° : 3264
H.I. nr : 80
ADR - Class : 8
Labelling - Transport : 8 : Corrosive substance.
ADR - Classification code : C1
ADR - Group : II
ADR - Packing instructions : P001
ADR - Limited Quantity : 1 L
ADR - Tunnel code : E : Passage forbidden through tunnels of category E.
14.2. Sea transport (IMDG) [English only]
Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N° : 3264
IMO-IMDG - Class or division : 8 : Corrosive substance.
IMO-IMDG - Packing group : II
IMO- IMDG - Packing instructions : P001
IMO-IMDG - Limited quantities : 1 L
IMO-IMDG - Marine pollution : No
EMS-Nr : F-A S-B
14.3. Air transport (ICAO-IATA) [English only]
Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
UN N° : 3264
IATA - Class or division : 8 : Corrosive substance.

IATA - Packing group : II
IATA - Passenger and Cargo Aircraft : ALLOWED
- Passenger and Cargo - Packing : 851
instruction - Passenger and Cargo - Maximum : 1 L
Quantity/Packing
IATA - Cargo only : ALLOWED
- Cargo only - Packing instruction : 855
- Cargo only - Maximum Quantity/ : 30 L
Packing IATA - Limited Quantites : 0.5 L
ERG-Nr : 8L

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Safety, health and environmental : Ensure all national/local regulations are observed.
regulations/legislation specific for the substance or mixture
REACH
Restrictions - Annex XVII : The components of this product are not subject to restrictions
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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