

## 1. Product and Company Identification

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Product Name  
Part Number

TRI CHLORO ETHANE 1,1,2  
RXSOL-19-1455-210

### Company Details:

**RX MARINE INTERNATIONAL**  
**105, A wing , BSEL , TECH PARK.**  
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Website [www.rxmarine.com](http://www.rxmarine.com)

## 2. Composition / Information on ingredients

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Name of Substance	Cas Number
1,1,2-Trichloroethane	79-00-5

## 3. Hazards Identification

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Signal Word  
Hazard Statements

Precautionary statements - prevention

Precautionary statements - response

Warning

H411 Toxic to aquatic life with long lasting effects.  
H420 Harms public health and the environment by destruction of ozone  
P201 - Obtain special instructions before use.  
P262 - Do not get in eyes, on skin, or on clothing.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/ protective clothing/ eye protection  
P302 + P350 - IF ON SKIN: Gently wash with plenty of water.  
P309 + P311 - IF exposed or if you feel unwell: Call a doctor immediately.

## 4. First Aid Measures

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Skin Contact

Eye Contact

Inhalation:

Ingestion:

Most important symptoms/effects

Notes to Physician

Wash off immediately with plenty of water for at least 15 minutes. If necessary, medical attention is required.

Rinse immediately with plenty of water, also under the eyelids. If necessary, medical attention is required.

Remove from exposure, lie down. Move to fresh air. If necessary, use mouth-to-mouth method if victim ingested or inhaled. Provide artificial respiration with the aid of a pocket mask equipped with a one-way valve. Immediate medical attention is required.

Do not induce vomiting. Call a physician or Poison Control Center.

No information available

Treat symptomatically

## 5. Fire-fighting Measures

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Flammability of the Product

May be combustible at high temperature.

Suitable extinguishing media	Use extinguishing measures that are appropriate environment.
Unsuitable extinguishing media	No information available
Flash Point	No information available
Autoignition Temperature	459 °C / 858.2 °F
Explosion Limits Uper	15.5%
Explosion Limits Lower	6%
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	Vapors may form explosive mixtures with air. Non-combustible. May release irritating gases and vapors. Keep product away from sources of ignition
Hazardous Combustion Products	Hydrogen chloride gas Carbon monoxide (CO) Carbon dioxide
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus (SCBA) (full facepiece, equivalent) and full protective gear.
Further Information	Prevent fire extinguishing water from contaminating ground water aquifers. Suppress (knock down) gases/vapours/mists with a water spray.

## 6. Accidental Release Measures

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Spillage	Absorb with an inert material and put the spilled material in a container. Be careful that the product is not present at a concentration above the recommended limits and with local authorities.
Personal Protection	Advice for non-emergency personnel: Do not breathe vapors or dust. Do not observe emergency procedures, consult an expert. AC equipment see section 8.
Environmental Precaution	Do not empty into drains.
Methods and materials for containment and cleaning	Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal. Provide spark-proof tools and explosion-proof equipment.

## 7. Handling and Storage

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Handling	Wear personal protective equipment. Ensure adequate eye protection. Do not breathe dust. Do not breathe vapors or spray. Do not use open flame. Do not use spark-producing tools. Do not use equipment provided with appropriate exhaust ventilation.
Storage	Keep container dry. Keep in a cool place. Ground and bond containers. Keep container tightly closed. Keep in a cool, well-ventilated area. Do not store stored away from extreme heat and away from strong oxidizing agents.
Hygiene measures	Change contaminated clothing. Preventive skin protection. Do not work with substance.

## 8. Exposure controls and personal protection

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Engineering Control	Provide exhaust ventilation or other engineering controls to keep vapors below their respective threshold limit value. Ensure that workers are proximal to the work-station location.
Personal Protection	<b>Eye/face Protection</b> Wear appropriate protective eyewear as described by OSHA's eye and face protection regulation 29 CFR 1910.133. Standard EN166.

Hygiene Measures

Exposure Limits

**Skin and body protection** Wear appropriate protective clothing to avoid skin exposure.

**Respiratory Protection** Follow the OSHA respirator requirements and the European Standard EN 149. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms occur. Handle in accordance with good industrial hygiene and safety practices. TWA: 10 (ppm) from OSHA (PEL) SKIN TWA: 55 (mg/m<sup>3</sup>) from OSHA authorities for acceptable exposure limits



## Gloves Suit

### 9. Physical and chemical properties

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Form	Liquid
Colour	Clear
Odour	Sweet
Odor Threshold	No Information Available
pH	No Information Available
Melting Point	-37 °C / -34.6 °F
Boiling Point	110 - 115 °C / 230 - 239 °F @ 760 mmHg
Flash Point	No Information available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Explosive limits	Upper 15.5% Lower 6.00 %
Vapour pressure	20 @ 25 mbar °C
Vapour Density	4.63 (Air = 1.0)
Secific Gravity	1.430
Solubility	4 g/L @ 20 °C
Partition coefficient	No data available
Autoignition Temperature	459 °C / 858.2 °F
Decomposition Temperature	No information available
Viscosity	1.69 cP at 25 °C
Molecular Formula	C2 H3 Cl3
Molecular Weight	133.4

### 10. Stability and reactivity

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Recativity Hazard	None known, based on information available
Stability	Stable under normal conditions. Conditions to Avoid Excess heat. Incompatible products.
Possibility of hazardous reactions	Risk of explosion with: Violent reactions possible with Alkali metals, Alkaline earth metals, Aluminium, Powdered amide
Conditions to avoid	Excess heat. Incompatible products
Incompatible materials	Bases, Strong oxidizing agents, Strong bases, Metals.
Hazardous Decomposition Products	Products Hydrogen chloride gas, Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Chlorine, Phosgene
Hazardous Polymerization	Hazardous polymerization does not occur. Hazardous Reactions None under normal processing.

## 11. Toxicological information

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Acute toxicity	LD50 Rat: 43,000 mg/kg (IUCLID) LC50 Rat: 299.33 mg/l; 4 h (RTECS)
Acute dermal toxicity	No information Available
Skin corrosion	Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.
Toxic Effects on Humans	Hazardous in case of skin contact (irritant).
Special Remarks on Chronic Effects on Humans	Not Available
Further information After absorption:	The following applies to aliphatic halogenated hydrocarbons in general: systemic effect:narcosis, cardiovascular disorder on liver, kidneys. Further hazardous properties cannot be excluded but unlikely when the product is handled appropriately. Handle in a good industrial hygiene and safety practice.

## 12. Ecological information

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Toxicity to Fish	LC50 Danio rerio (zebra fish): 7 - 14 mg/l; 96 h DIN 38412 (IUCLID)
COD and BOD 5	Not Available
Products of Biodegradation:	Aerobic, Tested according to: ready biodegradability/MITI, , 5 % after 28 d Result: Not readily biodegradable.
Mobility in soil	No Information Available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	Henry constant 39700 Pa*m <sup>3</sup> /mol Distribution preferentially in air.

## 13. Disposal considerations

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Waste treatment Method	Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original mixing with other waste. Handle uncleaned containers like the product itself
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## 14. Transport information

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### DOT

UN Number	UN2810
Proper shipping name	1,1,2-TRICHLOROETHANE
Hazard Class	6.1
Packing group	III

### TDG

UN Number	UN2810
Proper shipping name	1,1,2-TRICHLOROETHANE
Hazard Class	6.1
Packing group	III

### IATA

UN Number	UN2810
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Proper shipping name	1,1,2-TRICHLOROETHANE
Hazard Class	6.1
Packing group	III

**IMDG/IMO**

UN Number	UN2810
Proper shipping name	1,1,2-TRICHLOROETHANE
Hazard Class	6.1
Packing group	III

**15. Regulatory information**

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Federal and State Regulations

California prop. 65: This product contains the following chemicals which California has found to cause cancer, birth defects or other reproductive harm. A warning under the statute: 1,1,2-Trichloroethane California Proposition 65: 1,1,2-Trichloroethane: 0.01 mg/day (inhalation) California Proposition 65: The following ingredients for which the State of California has found that they require a warning under the statute: 1,1,2-Trichloroethane California Proposition 65: 1,1,2-Trichloroethane Pennsylvania RTK: 1,1,2-Trichloroethane Minnesota: 1,1,2-Trichloroethane Michigan critical materials list: 1,1,2-Trichloroethane Massachusetts RTK: 1,1,2-Trichloroethane TSCA 8(b) inventory: 1,1,2-Trichloroethane TSCA 8(a) list of extremely toxic substances.: 1,1,2-Trichloroethane: 100 lbs. (45.36 kg)

- Other Regulation
- WHMIS (Canada)
- DSCL (EEC)

OSHA: Hazardous by definition of Hazard Communication Standard  
 CLASS D-1B: Material causing immediate and serious toxic effects  
 R22- Harmful if swallowed. R38- Irritating to skin. R41- Irritating to eyes.

HMIS

Health Hazard	: 2
Fire Hazard	: 1
Reactivity	: 0
Personal Protection	: j

Fire :

Health Hazard	: 2
Fire Hazard	: 1
Reactivity	: 0
Specific Hazard	: ....

**16. Other information**

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Other Information

The information above is believed to be accurate and complete as of the date it was made available to us. However, we make no warranty of accuracy or completeness, implied, with respect to such information, and we do not intend to be bound by it. You should make their own investigations to determine the accuracy of the information for particular purposes. In no event shall we be liable for any damages, including but not limited to, for lost profits or any special, indirect, incidental,

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