

1. Product and Company Identification

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Product Name Tri Chloro Ethylene
Product Type RXSOL-19-1456-210

Company Details:

RX MARINE INTERNATIONAL
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2. Composition / Information on ingredients

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Substance:

Formula	Cl ₂ CCHCl	C ₂ HCl ₃ (Hill)
Index-No.	602-027-00-9	
EC-No.	201-167-4	
Molar mass	131.39 g/mol	

Hazardous components (REGULATION (EC) No 1272/2008):

Chemical Name (Concentration)	CAS-No.	Registration number	Classification
trichloroethylene (10 mm			

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 890 Vitoject® (full contact), KCL 730 Camatril® -Velours (splash contact).The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

Other protective equipment:
protective clothing

Respiratory protection:

required when vapours/aerosols are generated.Empfohlener Filtertyp: Filter A (acc. to DIN 3181) for vapours of organic compounds The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls:

Do not empty into drains.

9. Physical and chemical properties

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Information on basic physical and chemical properties:

Form	Liquid
Colour	Colourless
Odour	No odour warning
Odour Threshold	28 - 2160 ppm
pH	No information available

Melting point	-86 °C
Boiling point/boiling range	87 °C at 1,013 hPa
Flash point	Not determinable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	7.9 %(V)
Upper explosion limit	>99 %(V)(Saturation-at high volume fractions, explosion turns into a decomposition reaction)
Vapour pressure	77 hPa at 20 °C
Relative vapour density	4.53
Density	1.21 - 1.26 g/cm ³ at 20 °C
Relative density	1.46 g/cm ³ at 20 °C
Water solubility	1.28 g/l at 25 °C
Partition coefficient: n-octanol/water	log Pow: 2.29 (experimental) (IUCLID) Bioaccumulation is not expected.
Auto-ignition temperature	No information available.
Decomposition temperature	> 110 °C.
Viscosity, dynamic	0.55 mPa.s at 25 °C
Explosive properties	Not classified as explosive.
Oxidizing properties	None

Other data:

Ignition temperature

410 °C

10. Stability and reactivity

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Reactivity:	See section 10
Chemical stability:	Heat-sensitive
Possibility of hazardous reactions:	Violent reactions possible with: Oxygen, (as liquefied gas) Alkaline earth metals, alkali amides, semimetallic hydrogen compounds, perchloric acid, Light metals, aluminium chloride, Strong oxidizing agents, POTASSIUM NITRATE
Risk of explosion with:	Alkali metals, Aluminium, Barium, alkali hydroxides, Lithium, magnesium, Powdered metals, sodium amide, nitrogen dioxide, Boranes Strong oxidizing agents, Oxygen, with, alkali hydroxides Oxygen, with, Pressure Risk of ignition or formation of inflammable gases or vapours with: Titanium, Beryllium, Epoxy constituents
Conditions to avoid :	Strong heating (decomposition)., Distillation (Risk of explosion).
Incompatible materials:	Various plastics
Hazardous decomposition products:	In the event of fire: See section 5.

11. Toxicological information

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Information on toxicological effects :

Acute oral toxicity:

LD50 rat: 4,920 mg/kg (IUCLID)

LDLO human: 7,000 mg/kg (RTECS)

absorption:

Symptoms: Nausea, Vomiting, Risk of aspiration upon vomiting., Aspiration may cause pulmonary oedema and pneumonitis.

Acute inhalation toxicity:

LC50 rat: 43.84 mg/l; 4 h (IUCLID)

Symptoms: Possible damages:, mucosal irritations, After a latency period:, Lung oedema

Acute dermal toxicity:

LD50 rabbit: > 29,000 mg/kg (IUCLID)

absorption

Skin irritation

rabbit

Result: Severe irritations

(IUCLID)

Drying-out effect resulting in rough and chapped skin.

Causes skin irritation.

Eye irritation

rabbit

Result: Eye irritation

(IUCLID)

Causes serious eye irritation.

Sensitisation

This information is not available.

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Result: negative

(IUCLID)

Carcinogenicity:

This information is not available.

Reproductive toxicity:

This information is not available.

Teratogenicity

This information is not available.

CMR effects

Carcinogenicity:

May cause cancer.

Mutagenicity:

Suspected of causing genetic defects.

Specific target organ toxicity - single exposure

Target Organs: Central nervous system

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard:

This information is not available.

Further information:

After absorption:

Headache, Dizziness, Cardiac irregularities, Nausea, agitation, spasms, inebriation, narcosis

Absorption can result in damage to:

Liver, Kidney

After long-term exposure to the chemical:

Toxic effect on:

Central nervous system

Further data:

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

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Toxicity:

Toxicity to fish:

LC50 Pimephales promelas (fathead minnow): 41 mg/l; 96 h (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 18 mg/l; 48 h (IUCLID)

Toxicity to algae:

IC50 Pseudokirchneriella subcapitata (green algae): 175 mg/l; 96 h (IUCLID)

Toxicity to bacteria:

EC50 Photobacterium phosphoreum: 975 mg/l; 5 min (IUCLID)

Persistence and degradability:

Biodegradability:

19 %; 28 d

OECD Test Guideline 301D

Not readily biodegradable.

4 %; 28 d

Zahn-Wellens Test:

Not readily eliminated from water.

Bioaccumulative Potential:

Partition coefficient: n-octanol/water

log Pow: 2.29

(experimental)

(IUCLID) Bioaccumulation is not expected.

Mobility in soil:

Distribution among environmental compartments

Adsorption/Soil

log Koc: 1.97

(experimental)

Mobile in soils

Results of PBT and vPvB assessment:

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Other adverse effects:

Henry constant

998 Pa*m³/mol

(Lit.) Distribution preferentially in air.

Additional ecological information

Discharge into the environment must be avoided.

13. Disposal considerations

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Waste treatment methods:

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

14. Transport information

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Land transport (ADR/RID):

UN number	UN 1710
Proper shipping name	TRICHLOROETHYLENE
Class	6.1
Packing group	III
Environmentally hazardous	--
Special precautions for user	Yes
Tunnel restriction code	E

Inland waterway transport (ADN): Not relevant

Air transport (IATA):

UN number	UN 1710
Proper shipping name	TRICHLOROETHYLENE

Class	6.1
Packing group	III
Environmentally hazardous	--
Special precautions for user	no
Tunnel restriction code	E

Sea transport (IMDG):

UN number	UN 1710
Proper shipping name	TRICHLOROETHYLENE
Class	6.1
Packing group	III
Environmentally hazardous	--
Special precautions for user	Yes
Tunnel restriction code	E
EmS	EmS

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
Not relevant

15. Regulatory information

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EU regulations:

Major Accident Hazard	96/82/EC
Legislation	Directive 96/82/EC does not apply
Occupational restrictions	Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	Not regulated
Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC	Not regulated
Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals	Not regulated
Substances of very high concern (SVHC)	This product does contain substances of very high concern above the respective regulatory limit (> 0.1 % (w/w), Regulation (EC) No 1907/2006 (REACH), Article 57). Contains:trichloroethylene

Chemical Safety Assessment:

For this product a chemical safety assessment was not carried out.

16. Other information

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The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents. The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties. The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

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