Material Safety Data Sheet

TRI ETHYLENE GLYCOL (RXSOL-19-1464-210)

1. Product and Company Identifaction

Porduct Name	TRI ETHYLENE GLYCOL
Part Number	RXSOL-19-1464-210

Company Details:

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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2. Composition / informationon ingredients

Product name	Cas No	EC No	Weight	Formula
Triethylene glycol	112-27-6	203-953-2	150,17 g/mol	$C_6H_{14}O_4$

3. Hazards Identification

Precautionary statements:	**Prevention**: Wash hands thoroughly after handling. **Response**: Get medical advice/ attention if you feel unwell. **Storage**: Store in accordance with local regulations.
Other hazards:	None known.

4. First Aid Measures

In case of eye contact:	Rinse with plenty of water. Get medical attention if symptoms occur.
In case of skin contact:	Wash off with soap and plenty of water. Get medical attention if symptoms occur.
If swallowed:	Rinse mouth. Get medical attention if symptoms occur. Contact the Poison's Information Centre (eg Australia 13 1126; New Zealand 0800 764 766).
If inhaled:	Get medical attention if symptoms occur.
Protection of first-aiders:	In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
Notes to physician:	Treat symptomatically.
Most important symptoms and effects, both acute and delayed:	See Section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting Measures

Suitable extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media:	None known.
Specific hazards during firefighting:	Not flammable or combustible.
Hazardous combustion products:	Decomposition products may include the following materials: Carbon oxides.

Special Protective Equipment for firefighters:	Use personal protective equipment.
Specific extinguishing methods:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:	Refer to protective measures listed in sections 7 and 8.
Enviromental Precaution:	No special environmental precautions required.
Methods and materials for containment and cleaning up:	Stop leak if safe to do so. Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

7. Handling and Storage

Advice on safe handling:	For personal protection see section 8. Wash hands after handling.
Conditions for safe storage:	Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
Suitable material:	Keep in properly labelled containers.
Unsuitable material:	Not determined.

8. Exposure controls and personal protection

Engineering measures: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Eye protection:	Safety glasses.
Hand protection:	Wear the following personal protective equipment: Nitrile-rubber, Butyl-Rubber and Neoprene gloves. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection:	Wear suitable protective clothing.
Respiratory protection:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.If the occupational exposure limit is likely to be exceeded, an approved respirator must be selected and used in accordance with AS/NZS 1715 and AS/NZS 1716.
Hygiene measures:	Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance	Liquid
Colour	Clear colourless
Odour	Mild
Odor Threshold	No data available
pH	7.0
Melting point/freezing point	No data available
Initial boiling point and boiling range	281.1 °C
Flash Point	154 °C, Method: Pensky-Martens closed cup
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper explosion limit	9 V%
Lower explosion limit	0.9 V%
Vapour pressure	0.0133333 hPa, (20 °C),
Relative vapour density	5.17(Air = 1.0)
Relative density	1.1100 - 1.1400, (20 °C),

Density	1.1227 g/cm3
Water solubility	Soluble
Solubility in other solvents	No data available
Partition coefficient: n- octanol/water	No data available
Auto-ignition temperature	370 °C
Thermal decomposition	No data available
Viscosity, dynamic	30 - 60 mPa.s (20 °C)
Viscosity, kinematic	26.4 mm2/s (40 °C)
Molecular weight	No data available
VOC	No data available

10. Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Stable under normal conditions.
Possibilityof hazardous reactions:	No dangerous reaction known under conditions of normal use.
Conditions to avoid:	None known.
Incompatible materials:	No data available.
Hazardous decomposition products:	Decomposition products may include the following materials: Carbon oxides.

11. Toxicological information

Information on likely routes of exposure	Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes:	Health injuries are not known or expected under normal use.
Skin:	Health injuries are not known or expected under normal use.
Ingestion:	Health injuries are not known or expected under normal use.
Inhalation:	Health injuries are not known or expected under normal use.
Chronic Exposure:	Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact:	No symptoms known or expected.
Skin contact:	No symptoms known or expected.
Ingestion:	No symptoms known or expected.
Inhalation:	No symptoms known or expected.

Toxicity Product

Acute oral toxicity	LD50 rat: 16,800 - 22,060 mg/kg
Acute inhalation toxicity	LC50 rat: > 4.5 mg/l Test atmosphere: dust/mist
Acute dermal toxicity	LD50 rabbit: 18,016 mg/kg
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive effects	No toxicity to reproduction
Germ cell mutagenicity	Contains no ingredient listed as a mutagen
Teratogenicity	No data available
STOT - single exposure	No data available
STOT - repeated exposure	No data available

Aspiration toxicity	No aspiration toxicity classification

Human Hazard Characterization: Based on our hazard characterization, the potential human hazard is: Low

12. Ecological information

Toxicity:

Environmental Effects:	This product has no known ecotoxicological effects.

Product:

Toxicity to fish:	No data available.
Toxicity to daphnia and other aquatic invertebrates;	No data available.
Toxicity to algae;	No data availabl.e

Persistence and degradability: No data available.

Mobility: No data available.

Bioaccumulative potential: No data available.

Other information: No data available.

ENVIRONMENTAL HAZARD AND EXPOSURE CHARACTERIZATION.

Based on our hazard characterization, the potential environmental hazard is: Low.

13. Disposal considerations

Disposal methods:	Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
Disposal considerations:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. Transport information

Land transport:

Proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION .

Air transport (IATA):

Proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION.

Sea transport (IMDG/IMO):

Proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations:	No data available.
Chemical Safety Assessment:	A Chemical Safety Assessment was not carried out for this substance.

16. Other information

Other Information:	The information above is believed to be accurate and represents the best information currentlym available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, how so ever arising, even if Rx Marine International has been advised of the possibility of such damages.