1. Product and Company Identifaction

Porduct Name	Tri Ethylene Glycol
Part Number	RXSOL-19-1207-025

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

Phone	+91 22 20871200 - 1400
Fax	+91 22 27612100 :::AOH :0091 9821214367
Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / Information on ingredients

Chemical Name	Cas No	EC No	Whight	Formula
Tri Ethylene Glycol	112-27-6	203-953-2	150,17 g/mol	$C_6H_{14}O_4$

No components need to be disclosed according to the applicable regulations.

3. Hazards Identification

Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Label elements	No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required
Other hazards	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

4. First Aid Measures

If inhaled	After inhalation: fresh air.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.
In case of eye contact	After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed	After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.
Further information	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Enviromental Precaution	Do not let product enter drains.
Methods and materials for containment and cleaning up .	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for safe handling	For precautions see section 2.2.
Storage conditions	Tightly closed. Recommended storage temperature see product label.
Storage class	Storage class (TRGS 510): 10: Combustible liquids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

Eye/face protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses
Body Protection	Flame retardant antistatic protective clothing.
Skin protection	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 (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

	Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L 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 (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L
Respiratory protection	Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds The entrepeneur 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.
Control of environmental exposure	Do not let product enter drains.

9. Physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	Odorless
Melting point/freezing point	Melting point/range: -7 °C
Initial boiling point and boiling range	286,5 °C at 1.013 hPa
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	Upper explosion limit: 9,2 %(V) Lower explosion limit: 0,9 %(V)
Flash point	166 °C - closed cup
Autoignition temperature	347 °C
Decomposition temperature	> 200 °C
pH	6,5 - 7,5 at 100 g/l at 20 °C
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: 47,8 mPa.s at 20 °C
Water solubility	1.000 g/l at 20 °C - completely miscible
Partition coefficient: n-octanol/water	log Pow: -1,98 at 25 °C - Bioaccumulation is not expected., (Lit.)

Vapor pressure	< 0,1 hPa at 24,7 °C
Density	1,13 g/cm3 at 15 °C
Relative density	No data availab
Relative vapor density	No data availab
Particle characteristics	No data available
Explosive properties	During processing, dust may form explosive mixture in air
Oxidizing properties	None
Relative vapor density	5,18 - (Air = 1.0)

10. Stability and reactivity

Reactivity	Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of Hazardous reactions	Exothermic reaction with: Bases Strong acids hydrogen peroxide Oxidizing agents Oxygen Violent reactions possible with: Isocyanates permanganates Peroxides halogen oxides persulfates
Conditions to avoid	Strong heating.
Incompatible materials	Zinc
Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - > 2.000 mg/kg (ATC METHODE) Inhalation: Respiratory disorder Symptoms: slight mucosal irritations, Cough Dermal: No data available
Skin corrosion/irritation	Skin - Rabbit Result: No skin irritation - 4 h

	(Draize Test)
Serious eye damage/irritation	Eyes - Rabbit Result: No eye irritation - 24 h (Draize Test) Eyes - Rabbit Result: Mild eye irritation
Respiratory or skin sensitization	No data available
Carcinogenicity	No data available
Germ cell mutagenicity	Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	**Endocrine disrupting properties** **Product:** Assessment **:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Rat - male - Oral - 13 Weeks - NOAEL (No observed adverse effect level) - 1.522 mg/kg prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Possible symptoms:

After absorption:

Headache

Nausea

Vomiting

After absorption of large quantities:

Damage to:

Liver

Kidney

However, when the product is handled appropriately, hazardous effects are unlikely to

occur.

Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

Toxicity	Toxicity to fish static test LC50 - Lepomis macrochirus (Bluegill sunfish) - > 10.000 mg/l - 96 h Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 10.000 mg/l - 48 h (DIN 38412) Toxicity to bacteria static test EC10 - activated sludge - > 1.995 mg/l - 30 min Remarks: (ECHA) Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) mortality NOEC - Daphnia magna (Water flea) - 15.000 mg/l - 21 d Remarks: (ECOTOX Database) mortality LOEC - Daphnia magna (Water flea) - 30.000 mg/l - 21 d Remarks: (ECOTOX Database)

Persistence and degradability	Biodegradability aerobic - Exposure time 28 d Result: 25 - 92 % - Readily biodegradable. (OECD Test Guideline 301C) Theoretical oxygen demand 1.600 mg/g Remarks: (Lit.) Ratio BOD/ThBOD 1,4 - 32 % Remarks: (Lit.)
Bioaccumulative potential	