Material Safety Data Sheet

Heat Transfer Cool 50 (RXSOL-27-1210-025)

1. Product and Company Identifaction

Product Name	Heat Transfer Cool 50
Part Number	RXSOL-27-1210-025

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 / informationon ingredients

Chemical Name	CAS No	Concentration
Ethanediol	107-21-14	50
DEIONIZED WATER	7732-18-5	30-40
Proprietory CORROSION INHIBITORS AND pH BUFFERS	Trade Secret	10
LIQUID DYE	Mixture	1

3. Hazards Identification

Signal Word	Warning
Hazard Statements	H302 - Harmful if swallowed
Precautionary statements	P264 - Wash hands, forearms and face thoroughly after handling P270 - Do not eat, drink or smoke when using this product P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell P330 - Rinse mouth P501 - Dispose of contents/container to a hazardous or special waste collection point, an approved waste disposal plant, an authorized waste collection point, an industrial incineration plant, hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

4. First Aid Measures

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Allow victim to breathe fresh air. Allow the victim to rest
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.
Most important symptoms and effects, both acute and delayed	Swallowing a small quantity of this material will result in serious health hazard.
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
Special hazards arising from the substance or mixture	No data available.
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	For non-emergency personnel:: Emergency procedures : Evacuate unnecessary personnel. For emergency responders:: Protective equipment : Equip cleanup crew with proper protection Emergency procedures : Ventilate area.
Enviromental Precaution	Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters
Methods and materials for containment and cleaning	Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Reference to other sections	See Heading 8. Exposure controls and personal protection.

7. Handling and Storage

Advice on safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.
Incompatible materials	Sources of ignition. Direct sunlight.
Precautions for safe handling	For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	
Storage conditions	Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

8. Exposure controls and personal protection

Personal protective equipment	Avoid all unnecessary exposure.
Hand protection	Wear protective gloves.
Eye protection	Chemical goggles or safety glasses.
Respiratory protection	Wear appropriate mask.
Other information	Do not eat, drink or smoke during use.

9. Physical and chemical properties

Physical state	Liquid
Appearance	Clear, Pink Liquid.
Color	Pink
Odour	No data available
Odor Threshold	No data available
pH	8 (? 9.5)
Melting Point	0
Freezing point	-36 deg C
Boiling Point	223 °F
Flash Point	No data available
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	15 mm Hg (At 68°F)
Relative vapor density at 20 °C	1.92
Relative density	1.08 (Water=1 at 68°F)
Density	No data available
Vapour Density	No Data Available
Freezing point	No data available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive limits	3 - 15 vol %
Solubility	Soluble in water
Ignition temperature	No information available.
Particle characteristics	No data available
Viscosity	Viscosity, kinematic : 18.86 mm²/s (20 °C) Viscosity, dynamic : 0.021 Pa.s (20 °C)

10. Stability and reactivity

Reactivity	No additional information available
Stability	Not established
Possibility of hazardous reactions	Not established
Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	fume. Carbon monoxide. Carbon dioxide.

11. Toxicological information

Acute toxicity:: Oral: Harmful if swallowed.

Skin corrosion/irritation : Not classified pH: 8 (? 9.5)

Serious eye damage/irritation : Not classified pH: 8 (? 9.5)

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met. Harmful if swallowed.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

12. Ecological information

Persistence and degradability	K KOOL-E 50% PINK Persistence and degradability Not established. ethylene glycol (107-21-1) Persistence and degradability Readily biodegradable in water. Biodegradable in the soil. Biochemical oxygen demand (BOD) 0.47 g O?/g substance Chemical oxygen demand (COD) 1.24 g O?/g substance ThOD 1.29 g O?/g substance BOD (% of ThOD) 0.36 % ThOD
Bioaccumulative potential	K KOOL-E 50% PINK Log Pow -1.34 (Experimental value) Bioaccumulative potential Not established. ethylene glycol (107-21-1) BCF fish 1 10 (72 h; Leuciscus idus) BCF other aquatic organisms 1 0.21 - 0.6 (Procambarus sp.; Chronic) BCF other aquatic organisms 2 190 (24 h; Algae) Log Pow -1.34 (Experimental value) Bioaccumulative potential Low potential for bioaccumulation (BCF 500).
Toxicity	ethylene glycol (107-21-1 LC50 fish 1 53000 mg/l (96 h; Pimephales promelas; Static system) EC50 Daphnia 1 > 10000 mg/l (24 h; Daphnia magna) LC50 fish 2 40761 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Static system) Threshold limit algae 1 > 10000 mg/l (168 h; Scenedesmus quadricauda) Threshold limit algae 2 2000 mg/l (192 h; Microcystis aeruginosa)

Mobility in soil	ethylene glycol (107-21-1) Surface tension 0.048 N/m (20 °C)
Toxicity to algae	Growth inhibition EC50- Selenastrum capricornutum(green algae)–2.6mg/l -72 h (OECD Test Guideline 201)
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life

13. Disposal considerations

Waste disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to ...
Ecology - waste materials	Avoid release to the environment.

14. Transport information

UN number	UN3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s.
Transport hazard class(es)	9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Packaging group	III
Environmental hazards	Yes

15. Regulatory information

Safety, health and environmental regulations specific for the product in question	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Other regulations	No data available
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out.

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume 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.