Material Safety Data Sheet

TOTAL CHLORINE BUFFER SOLUTION 500 ml (RXSOL-60-6206-050)

1. Product and Company Identifaction

Product Name	: TOTAL CHLORINE BUFFER SOLUTION 500 ml
Part Number	: RXSOL-60-6206-050

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

Stock Point : Mumbai, Kandla, Kolkata, Chennai, Vizag, Fujairah, Muscat, Nairobi

Phone	+91 22 20871200-1400
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Email	**123@rxmarine.com**
Website	**www.rxmarine.com**

2. Composition / informationon ingredients

Name of Substance	Cas Number	Wt.%
Deionized Water	7732-18-5	>75%
Trisodium Citrate Salt	68-04-2	15%
Potassium Iodide	7681-11-0	10%
EDTA	6381-92-6	1%

3. Hazards Identification

Signal Word	Warning
Hazard Statements	H373 May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral
Classification	GHS08 health hazard. The product is classified and labelled according to the GB CLP regulation.
Precautionary statements	P264 Wash hands thoroughly after handling. P314 Get medical advice/attention if you feel unwell.
Other hazards	The main intake pathways of potassium iodide are: inhalation of dust and solution aerosols, as well as oral ingestion.
Results of PBT and vPvB	This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very
Determination of endocrine-disrupting properties	The product does not contain substances with endocrine disrupting properties.

4. First Aid Measures

General information	Instantly remove any clothing soiled by the product.
Eye Contact	Rinse opened eye for several minutes under running water (at least 15 min). If symptoms persist, consult doctor.
Skin Contact	Instantly wash with water and soap and rinse thoroughly.

Inhalation	Supply fresh air; consult doctor in case of symptoms.
Ingestion	Rinse out mouth and then drink 1-2 glasses of water. In case of persistent symptoms consult doctor.
Notes to Physicians	Absorption: in case of iodine hypersensitivity, even after relatively low doses, acute respiratory and cardiovascular disorders (possibly shock), skin and mucous membrane reactions possible. (GESTIS) Symptoms of poisoning may even occur after several hours.
symptoms and effects	irritations, after swallowing of large amounts, headache, vomiting, absorption, weakness, disorder of electrolyte balance.

5. Fire-fighting Measures

Suitable extinguishing media	Use fire fighting measures that suit the environment.
Protective Equipment	Wear self-contained breathing apparatus.
Advice for firefighters	Wear full protective suit.
Specific extinguishing methods	The product is not combustible. Formation of toxic gases is possible during heating or in case of fire. Can be released in case of fire: Hydrogen iodide (HI) Carbon monoxide (CO) and carbon dioxide (CO2).
Addition information	Collect contaminated fire fighting water separately. It must not enter drains. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Ambient fire may liberate hazardous vapours.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Advice for emergency responders: Protective equipment:
Enviromental Precaution	Do not allow product to reach sewage system or water bodies. Dilute with much water.
Methods and materials for containment and cleaning up	Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, universal binders). Dispose of contaminated material as waste according to item 13.

7. Handling and Storage

Advice on safe handling	Prevent formation of aerosols.
Storage	Store in cool location. Protect from heat and direct sunlight. Protect from the effects of light. Protect from humidity and keep away from water.
Advice on general occupational hygiene	Take off immediately all contaminated clothing. Wash hands during breaks and at the end of the work. Do not eat, drink or smoke when using this product.

8. Exposure controls and personal protection

Engineering Control	The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Personal Protection	Eye protection: Safety glasses, use against the effects of fumes / dust, Use safety glasses that have been tested and approved in accordance with government standards such as EN 166. Hand protection : Preventive skin protection by use of skin-protecting agents is recommended. After use of gloves apply skin-cleaning agents and skin cosmetics. Skin protection :Protective work clothing. Use breathing protection against the effects of fumes/dust/aerosol. personal protective equipment Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.
Hygiene measures	Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.





Gloves Suit

9. Physical and chemical properties

Physical State	Fluid
Colour	Colourless
Odour	Odourless
Boiling point and boiling range	Not determined.
Flash Point	Not determined.
Freezing Point	No data available
pH	6.7
Evaporation rate	No data available
Flammability (solid, gas)	The product is not combustible.
Upper explosion limit	No data available
Lower explosion limit	No data available
Explosive properties	Product is not explosive
Vapor pressure	Not determined.
density at 20°C	~1.1 g/cm³
Relative density	Not determined.
Water solubility	80%
Water	Fully miscible
Solids content	10-20%
Corrosive to metals	void
Solubility in other solvents	No data available
Partition coefficient: octanol	No data available
Autoignition temperature	No data available
Thermal decomposition	No data available
Viscosity, kinematic	No data available
Explosive properties	No data available
Organic solvents	0%
Oxidizing properties	None
Molecular weight	No data available
VOC	No data available

10. Stability and reactivity

Recativity	None
Stability	Stable at ambient temperature (room temperature).
Possibility of hazardous reactions	Reacts with oxidizing agents.
Condition to Avoid	Strong heating (decomposition)
Polymerization	No further relevant information available.

11. Toxicological information

Route of Exposure	At workplaces, intake of potassium iodide (KI) is most likely to occur via the respiratory tract. Outside the workplace, iodides are ingested with food (essential) and sometimes with medications. Respiratory tract: KI can be inhaled as dust or aerosol from solutions. Inhalation studies were conducted with particulate aerosols containing sodium iodide using various animal species (monkey, mouse, sheep). Rapid and effective absorption via the respiratory tract was observed. This is also assumed for KI as its solubility is comparable. Skin: From tests on volunteers who had an aqueous KI solution applied to their forearms (12.5 cm^2), the amount of iodine absorbed was estimated at 0.1%. Absorption through the skin is therefore considered to be of little relevance. Gastrointestinal tract: Soluble iodide is absorbed almost entirely via the gastrointestinal tract. This has been proven by results of studies with KI on adult volunteers.
Eyes	Based on available data, the classification criteria are not met.
Skin	Based on available data, the classification criteria are not met.
Ingestion	Causes digestive tract burns
Chronic Exposure	Health injuries are not known or expected under normal use.
classification	Based on available data, the classification criteria are not met. May cause damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.e
additional information	Other dangerous properties can not be excluded. According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

12. Ecological information

Environmental Effects	No data available
Toxicity to fish	No data available
Toxicity to daphnia and others	No data available
Toxicity to algae	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
additional information	Water hazard: Do not allow product to reach ground water, water bodies or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into soil.

13. Disposal considerations

Waste Disposal	Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to disposers of hazardous waste.

14. Transport information

Hazard Pictograms:

UN Number	Void
Proper shipping name	Void
Transport hazard class(es) 8	
ADR/RID	Void
Subsidiary risk IMDG	Void
Subsidiary risk IATA	Void
Packing group	

Packing group	Not applicable.
Environmental hazards	
Environmental hazards	Not applicable.
Marine pollutant	Not applicable.
ADR/RID	
Hazard ID	Not applicable.
Tunnel Category	(E)
IMDG	
EmS Code	Void
IATA	
Packing Instruction (Cargo)	Not applicable.
Maximum quantity	
Packing Instruction (Passenger)	void
Maximum quantity	

15. Regulatory information

Regulations	None of the ingredients is listed.
Chemical safety assessment	A Chemical Safety Assessment has not been carried out.
Further information	Employment restrictions concerning young persons must be observed (94/33/EC).

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, howsoever arising, even if **Rx Marine International** has been advised of the possibility of such damages.