Material Safety Data Sheet

Electrolyte Liquid (RXSOL-16-1024-025)

1. Product and Company Identifaction

Product Name	Electrolyte Liquid
Product Type	RXSOL-16-1024-025

Company Details:

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

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

Phone	+91 22 65113333 / 5555 / 9999
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

SARA 313 Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
Potassium Hydroxide	1310-58-3	25-36%	W/V	OSHA PEL 2mg/m*f*
Lithium Hydroxide	1310-65-2	0.5-1.0%	W/V	OSHA PEL 2mg/m*f*
Water, Deionized ASTM Type II	CAS# 7732-18-5	60-70%	V/V	N/A
Proprietary Blend of Electrolytes	-	15-20%	W/V	N/A

3. Hazards Identification

Causes severe irritation and burns. May be harmful if swallowed. May be harmful if absorbed through the skin. Avoid breathing vapor or dust.Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

Emergency Overview:POISON! DANGER! CORROSIVE. LIQUID AND MIST CAUSE SEVERE BURNS TO ALL BODY TISSUE. MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. INHALATION MAY CAUSE LUNG AND TOOTH DAMAGE. FLAMMABLE LIQUID AND VAPOR. CORROSIVE!

Inhalation:Inhalation of Vapors can cause Coughing, Choking, Inflammation, of the Nose, Throat, and Upper Respiratory Tract, and in Severe Cases, Pulmonary Edema, Circulatory Failure, and Death.

Ingestion:CORROSIVE! Swallowing can cause Immediate Pain and Burns of the Mouth, Throat, Esophagus, and Gastrointestinal Tract. May cause Nausea, Vomiting, and Diarrhea, and in Severe Cases, Death.

Skin:CORROSIVE! Can cause Redness, Pain, and Severe Skin Burns. Concentrated Solutions Cause Deep Ulcers and Discolor of Skin.

CORROSIVE! Vapors are Irritating and May cause Damage to Eyes. Contact May cause Severe Burns and Permanent Eye Damage.

chronic Exposure:Eye Contact:Long-Term Exposure to Concentrated Vapors May cause Erosion of Teeth. Long-Term Exposures Seldom Occur due to the Corrosive Properties of the Acid.

Aggravated by Exposure:Persons with Pre-Existing skin Disorders or Eye Disease May be more Susceptible to the Effects of this Substance.

4. First Aid Measures

Causes severe irritation and burns. May be harmful if swallowed. May be harmful if absorbed through the skin. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

SKIN:	Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention.

EYES:	Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid.
INHALATION:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen
INGESTION:	Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person

5. Fire-fighting Measures

Fire Extinguisher Type:	Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards:	Negligible fire hazard when exposed to heat or flame.
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

6. Accidental Release Measures

ventilate area of leak or spill. Take up with sand or other inert material and place in conatier for later disposal. Neutralize with weak acid.

Ventilate area or Leak or Spill. Remove all Sources of Ignition. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering. Contain and Recover Liquid when Possible. Use Non-Sparking Tools and Equipment. Neutralize with Soda Ash or Limt and Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and Place in a Chemical Waste Container. Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

7. Handling and Storage

Store in a cool dry place. Store above 60 deg F to prevent freezing. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Keep.

8. Exposure controls and personal protection

Respiratory Protection	None required containers tightly closed
Ventilation	Local
OTHER	Mechanical
Protective Gloves	Neoprene or nitrile gloves are recommended.
EYE PROTECTION	Goggles and Face Shield
Other Protective Equipment	Wear appropriate clothing to prevent skin exposure as boots, gloves, apron or coveralls

9. Physical and chemical properties

BOILING POINT	213° F (101° C)
VAPOR PRESSURE	not available
MELTING POINT	27° F (-3° C)
VAPOR DENSITY	not available
EVAPORATION RATE	information not available
Appearance /Odors	Clearless liquid,odorless
Flash Point	Not applicable
Specific Gravity	1.2 (+/- 0.01)
Percent Volatile by Evaporation Standard	~75%

Auto Ignition Temp	Not applicable
Lower Flamm. Limit in Air	Not applicable
Upper Flamm. Limit in Air	Not applicable
Solubility in Water	Soluble

10. Stability and reactivity

STABILITY	Stable
CONDITIONS TO AVOID	Moisture, may ignite combustibles.
MATERIALS TO AVOID	Acids, Acrolein, alcohols, aluminum, Tin,zinc, Chlorine, Acetone
HAZARDOUS DECOMPOSITION PRODUCTS	potassium oxide Not reported to occur under normal conditions
HAZARDOUS POLYMERIZATION	will not occur
Conditions to Avoid	None known

11. Toxicological information

Carcinogenic Reference: NTP Carcinogen - Known: No, IARC Category- None

12. Ecological information

Environmental Fate:No information found

Ecological Toxicity:Potassium Hydroxide: TL m: 80 ppm/Mosquito fish/ 24 hr./ Fresh water

13. Disposal considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements..

14. Transport information

DOT Classification: UN1814, Potassium Hydroxide Solution,8, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

15. Regulatory information

Chemical Inventory Status –
Part 1:Ingrdient
Potassium Hydroxide (1310-58-3)
Water (7732-18-5)
TSCA Yes Yes
EC Yes Yes
Japan YES Yes
Australia Yes Yes

Chemical Inventory Status –
Part 2:Ingredient
Potassium Hydroxide (1310-58-3)
Water (7732-18-5)
Korea Yes Yes
DSL Yes Yes
NDSL No No
Phil. Yes Yes

Federal, State & International Regulations –
Part 1: Ingredient.
Potassium Hydroxide (1310-58-3)
Water (7732-18-5)
RQ NO No
TPQ No No
List NO No
Chemical Catg No No.

Federal, State &
International Regulations –
Part 2:Ingredient
Potassium Hydroxide (1310-58-3)
Water (7732-18-5)
CERCLA 1000 No
261.33 No No
8(d) No No

Chemical Weapons Convention: No
TSCA 12 (b):No
CDTA:No MIXTURE/LIQUID
SARA 311/312: Acute: YES
Chronic: YES
Fire: No
Pressure: No
Reactivity: No

Australian Hazchem Code: 2R
Poison Schedule: S6

16. Other information

This material **causes severe burns** to the skin, eyes, respiratory tract, and gastrointestinal tract. It is **corrosive** via skin contact, eye contact, inhalation,
and ingestion, and **toxic if ingested**. Contact with mucous membranes may result in serious damage, potentially leading to **perforation of the esophagus and stomach**.

At-Risk Populations
Individuals with pre-existing **skin or eye conditions** may be at increased risk from exposure.

Chronic Exposure Effects
Prolonged or repeated contact with **potassium hydroxide** may result in the development of **defatting dermatitis**. Continued irritation can lead to further complications.

NFPA Hazard Ratings

Health- 3

Flammability- 0

Reactivity- 1

The information herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of the information whether originating from the above mentioned company or not. Users of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material