Material Safety Data Sheet

Glyphocide Herbicide RXSOL (RXSOL-94-9453-006)

1. Product and Company Identifaction

Porduct Name	Glyphocide Herbicide RXSOL
Part Number	RXSOL-94-9453-006

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

Product name	Cas No	Weight
Glyphosate,isopropylamine salt	38641-94-0	41.0%

3. Hazards Identification

Signal Word	WARNING
Hazard Statements	Harmful if inhaled
Precautionary statements	Avoid breathing dust/mist. Use only outdoors or in a well-ventilated area. IF INHALED Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

4. First Aid Measures

If inhaled	Move person to fresh air. If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice
Eye Contact	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person
Most important symptoms both acute and delaye and effects,	Direct contact with eyes may cause temporary irritation. Ingestion may cause symptoms of gastrointestinal irritation including abdominal discomfort, nausea, vomiting, and diarrhea.

5. Fire-fighting Measures

Suitable extinguishing media	Foam, dry chemical, carbon dioxide or water spray
Unsuitable extinguishing media	Water jet

Hazardous combustion products	Thermal decomposition may produce toxic oxides of carbon, nitrogen and phosphorous.
Protective Equipment	Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear selfcontained breathing apparatus and full fire-fighting turn-out gear (Bunker gear).
Specific Hazards Arising from the Chemical	No data available

6. Accidental Release Measures

Personal Protection	Personal Protective Equipment
Enviromental Precaution	Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.
Methods and materials for containment and cleaning	Isolate the spill area. Keep unnecessary and unprotected personnel from entering. Absorb small spills with sand, vermiculite or other inert absorbent. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal.
Merhod of cleaning	Place contaminated material in appropriate container for disposal. After removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not put spilled material back in the original container.

7. Handling and Storage

Incompatible materials	Oxidizing agents, alkalis, calcium hypochlorite. May react with metals such as galvanized or mild steel to produce hydrogen gas which could form a highly combustible gas mixture.
Handling	RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes
Storage	See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals. If allowed to crystallize, place in a warm room at 68°F (20°C) for several days to re-dissolve and roll or shake container or recirculate container to mix well before using
Storage Temprature	Store above 10°F

8. Exposure controls and personal protection

Engineering Control	Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred
Eye/face protection	Chemical goggles or safety glasses and full-face shield
General safty measures	Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
Protective gloves	Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC) or Viton.
Respiratory protection	In areas of poor ventilation, use a NIOSH approved respirator with cartridges/canisters approved for pesticides.
Other Protection clothing	Long-sleeved shirt, long pants and chemical resistant footwear plus socks.

9. Physical and chemical properties

Physical state	Liquid
Colour	Light Yellow
Odour	Amine-like
Odor Threshold	No data available
pH	4.5 – 5.5
Melting Point	No data available
Boiling Point	No data available
Flash Point	>100°C (>212°F)
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data Available
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	No data available
Viscosity	No data available
Density	No data available
Relative Density	1.171 (typical)
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	No data available
Solubility	No data available
Ignition temperature	No data available
Particle characteristics	No data available

10. Stability and reactivity

Reactivity	May react with metals such as galvanized or mild steel to produce hydrogen gas which could form a highly combustible gas mixture.
Chemical stability	Stable under normal storage and handling conditions.
Possibilityof hazardous reactions	No potential for hazardous reactions known
Conditions to avoid	No data available
Incompatible materials	Oxidizing agents, alkalis, calcium hypochlorite
Hazardous decomposition products	Thermal decomposition may produce toxic oxides of carbon, nitrogen and phosphorous

11. Toxicological information

Likely Routes of Exposure	Eye contact, Skin contact, Inhalation, Ingestion
Oral LD50	>5,000 mg/kg (Based on similar composition)
Symptoms of Exposure	Eye irritation
Dermal LD50	>5,000 mg/kg (Based on similar composition)
Inhalation LC50	>2.5 mg/L (4-hr)(rat)(Based on similar composition)
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available

12. Ecological information

Enviornmental hazardus statement	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.
Toxicity to fish	Data presented below is on Glyphosate acid. Rainbow trout 96 hour LC50 = 8.2 mg/L Bluegill 96 hour LC50 = 5.8 mg/L
Avian Toxicity	Bobwhite quail (oral) LD50 >3,800 mg/k
Products Biodegradation	No data available
Mobility in soil	No data available
Other adverse effects	No data available

13. Disposal considerations

RCRA Characteristics	It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.
Container Disposal	Refer to the pesticide label for full information on disposal. When possible, triple rinse the container and offer for recycling if available.
Waste treatment Method	Refer to the pesticide label for full information on disposal. Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods

14. Transport information

UN number	ADR/RID:-	IMDG:-	IATA:-
UN proper shipping name	ADR/RID:-	IMDG-	IATA :-
Transport hazard class(es)	ADR/RID:-	IMDG:-	IATA:-
Packaging group	ADR/RID:-	IMDG:-	IATA:-
Environmental hazards	ADR/RID:No	IMDG Marine pollutant:No	IATA:No
Special precautions for user	No data available		
Further information	No data available		

15. Regulatory information

Labeling Requirements Under FIFRA	This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide labe
TSCA Inventory	This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

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