Material Safety Data Sheet

Copper Stain Remover (RXSOL-67-8967-005)

1. Product and Company Identifaction

Porduct Name	Copper Stain Remover
Part Number	RXSOL-67-8967-005

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

Branch : Kandla, Mumbai, Chennai, Vizag, Kolkata, Fujairah, Muscat

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2. Composition / informationon ingredients

Chemical Name	Cas No	Weight Percentage
Ammonium Nitrate	6484-52-2	10-20
Monoethanolamine	141-43-5	5-10
EthyleneDiAmine	107-15-3	5-10
Ammonium hydroxide solution	1336-21-6	5-10
Proprietory Blend	---	30-45

Ethylenediamine forms a chelate bis-complex with copper II

3. Hazards Identification

Signal Word	Danger
Hazard Statements	H314 Causes severe skin burns and eye damage H318 Causes serious eye damage
Precautionary statements	P260 Do not breathe dust/fume/gas/mist/vapours/spray P264 Wash hands thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face protection P310 Immediately call a POISON CENTER or doctor/physician P321 Specific treatment (see Section 4 on this label) P363 Wash contaminated clothing before reuse P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing P405 Store locked up P501 Dispose of contents/container in accordance with local/ regional/ national/, regulations
Classification of the substance or mixture	No data available
Supplemental Hazard Statements	No data available
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

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	No data available

Eye Contact	In case of eye contact, flush the eyes with water for fifteen (15) minutes. If contact lenses are worn, quickly remove them, then flush the eyes with water. Have a physician examine the eyes
Swallowed	No data available
Skin Contact	Immediately remove any clothing soiled by the product. Immediately wash with water and soap and rinse thoroughly. Rinse until skin no longer feels slippery. If skin irritation continues, consult a doctor.
Inhalation	Take affected persons out into the fresh air. Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of unconsciousness place patient stably in side position for transportation.
Ingestion	If material is ingested, rinse out mouth with water and seek immediate medical attention. Do not induce vomiting but if vomiting occurs spontaneously, keep the head below the hips to prevent aspiration of liquid into the lungs. If victim is conscious drink large quantities of water to dilute stomach contents. Notes to Physician:If swallowed, gastric irrigation with added, activated carbon. If swallowed or in case of vomiting, danger of entering the lungs. If necessary oxygen respiration treatm
Most important symptoms and effects, both acute and delaye	No data available
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

Flammability	No data available
Suitable extinguishing media	This product is not inherently flammable. Use media appropriate for surrounding fire.
Unsuitable extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Unusual Fire or explosion hazard	Product contains a strong oxidizer. If heated enough to evaporate the water, and explosive mixture could remain. Keep containers cool with water. Vapors are heavier than air and may travel a great distance to a source of ignition and flashback.
Further information	No data available
Hazardous combustion products	See section 10 for a list of hazardous decomposition products for this mixture.
Advice for firefighters	If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.
Protective Equipment	Firemen and emergency responders wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus (SCBA).
Specific Hazards Arising from the Chemical	No data available

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	No data available
Spillage	Spill supervisor Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Keep nonessential personnel away from the contaminated area. Spilled product may be very slippery!
Small spills	Ventilate the contaminated area. Mix the appropriate sorbent into the spilled material. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

Large spills	Prevent this material from entering sewers and watercourses by diking or impounding the spilled material. Advise authorities if the product has entered or may enter, sewers, watercourses, or extensive land areas. Ventilate the contaminated area. Mix the appropriate sorbent into the spilled material. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Collect the saturated sorbent and transfer it into a covered container. Steel containers are acceptable for all wastes except wastes which contain acid. Use suitable plastic containers for acid-bearing wastes. Label the waste container. Dispose of the waste in compliance with all Federal, state, regional, and local regulations.
Methods and materials for containment and cleaning	No data available
Reference to other sections	No data available

7. Handling and Storage

Advice on protection against fire and explosion	No data available
Incompatible materials	No data available
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Safe handling	Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Avoid aerosolizing product. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Store at room temperatures, i.e., 40 to 95 F (4 to 35 C). Do not allow product to come in contact with aluminum
Conditions for safe storage, including any incompatibilities	No data available
Storage conditions	Store in a cool location. Provide ventilation for receptacles.Store away from foodstuffs. Do not store together with acids.Store in cool, dry conditions in well sealed receptacles. Keep container tightly sealed.
Storage class	No data available
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	No data available

8. Exposure controls and personal protection

Exposure controls	Use only with adequate ventilation, i.e., ventilation in compliance with occupational exposure limits. Use mechanical ventilation to reduce buildup of vapors in enclosed areas.
Eye/face protection	No data available
Body Protection	No data available
Protective equipment	Wear splash goggles. If extra protection is required, wear a face shield over the splash goggles. Face shields are effective only if worn in addition to splash goggles. Wear a chemical-resistant, butyl-rubber apron and other protective clothing, as deemed appropriate, to avoid skin contact with material. Wear chemical-resistant gloves (butyl rubber or neoprene). Protective gloves should be inspected frequently and discarded when they exhibit cuts, tears, pinholes, or signs of excessive wear. Respiratory protection may still be needed even if the local exhaust is sufficient to maintain levels of hazardous ingredients below occupational exposure limits. If needed, use a NIOSH/MSHA approved respirator equipped with a full facepiece, organic vapor cartridges (ammonia, ethanolamine), and high-efficiency, particulate air (HEPA) filters. Do not use respirators beyond their capabilities. FOR EMERGENCIES AND UNKNOWN CONCENTRATIONS, use supplied-air respiratory protection or a positive-pressure, self-contained breathing apparatus (SCBA)
Contaminated equipment	Dispose of the waste in compliance with all Federal, state, regional, and local regulations.
Other Protection Measure	No data available

9. Physical and chemical properties

Physical state	Liquid
Colour	Colorless
Odour	Strong ammonia
Odor Threshold	No data available
pH	Alkaline
Melting Point	No data available
Boiling Point	38°C
Flash Point	95C
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	3% - 27%
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Vapour pressure	25.3 mmHg
Viscosity	No data available
Density	No data available
Relative Density	No data available
Specific Gravity	1.06
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	No data available
Chemical stability	Hazardous polymerization will not occur. STABLE
Possibilityof hazardous reactions	No data available
Conditions to avoid	Warming.
Incompatible materials	Acids and soft metals like aluminum. .
Hazardous product dicomposition	Oxides of carbon and nitrogen

11. Toxicological information

Acute toxicity	Oral Toxicity LD50: 2,864mg/kg Inhalation Toxicity LC50: 274mg/LMonoethanolamine Oral LD50: 1,515 mg/kg (Rat, male & female) Dermal LD50: 1,025 mg/kg (Rabbit) Inhalation LC
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Carcinogenicity	The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing). CAS Number Description % Weight Carcinogen Rating
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity-single exposure	No data available
Additional Information	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

12. Ecological information

Persistence and degradability	No data available
Toxicity to fish	LC50 (Carp (Cyprinus carpio carpio)): 349 mg/l, Exposure time: 96 h, Test Type: semi-static test, GLP: yes
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 65 mg/l, Exposure time: 48 h, Test Type: Immobilization, Analytical monitoring: yes, Method: static, GLP: yes
Toxicity	No data available
Toxicity to bacteria	No data available
Toxicity to algae	EC50 (Pseudokirchneriella subcapitata): 2.8 mg/l, End point: Growth rate, Exposure time: 72 h, Test Type: static test, Analytic monitoring: yes, Method: OECD Test Guideline 201, GLP: yes
Products Biodegradation	No data available
Mobility in soil	No data available
Results of PBT av PvB assessment	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.
Endocrine disrupting properties	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.
Other adverse effects	No data available

13. Disposal considerations

Disposal considerations	As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA)
Waste treatment Method	No data available

14. Transport information

UN number	ADR/RID:1760	IMDG:1760	IATA:1760
UN proper shipping name	ADR/RID:Corrosive liquids, n.o.s. (ethanolamine)	IMDG:Corrosive liquids, n.o.s. (ethanolamine)	IATA:Corrosive liquids, n.o.s. (ethanolamine)
Transport hazard classess	ADR/RID:8	IMDG:8	IATA: 8
Packaging group	ADR/RID:III	IMDG:III	IATA:III
Environmental hazards	ADR/RID:No	IMDG:No	IATA:No
Special precautions for user	No data available		
Further information	No data available		

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Other regulations	Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	For this product a chemical safety assessment has been 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 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.