Material Safety Data Sheet

Buffer Cleaner (RXSOL-20-2032-210)

1. Product and Company Identifaction

Product Name	RXSOL-20-2032-210
Product Type	Buffer Cleaner

Company Details:

RX MARINE INTERNATIONAL
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2. Composition / informationon ingredients

Ingredientname	CAS number	%	EC number	Classification
Citric acid monohydrate	5949-29-1	5-10	201-069-1	Xi;R36
Fatty Alcoholalcoxylate Mixture	---	1-5	---	Xi;R38
Ammonia...%	1336-21-6	5	215-647-6	C;R34 **N;R50**
Proprietroy Blend	---	27-37	---	---

See section 16 for the full text of the R-phrases declared above

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classifiedas hazardous to health or the environment and hence require reporting in this section.

[1]Substance classified with a health orenvironmental hazard
[2]Substance with a work place exposure limit

Occupational exposure limits, if available, are listed in section 8.

3. Hazards Identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amen dments.

Classification	Not classified
Physical/ c hemical hazards	Not applicable.

Human health hazards	Not applicable.
Environmental hazards	In cases of severe exposure, irritation may develop.

4. First Aid Measures

Inhalation	Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Obtain medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Ingestion	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.
Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting Measures

Suitable	Use an extinguishing agent suitable for the surrounding fire.
Notsuitable	None known.
Special exposure hazards	In a fire or if heated, a pressure increase will occur and the container may burst. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

Specialprotectiveequipmentfor fire-fighters	Fire-fighters should wearappropriate protective equipment and self-contained breathing apparatus (SCBA)with a full face-pieceoperated in positive pressure mode.

6. Accidental Release Measures

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaningup

Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor
Large spill	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended	Use original container.

8. Exposure controls and personal protection

Exposure limit values

Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls	No special ventilation requirements.
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts
Skin protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

General information

Appearance

Physical State	Liquid.
Colour	Yellow. Light
Odour	Odourless. Slight

Important health, safety and environmental information

Boiling Point	100°C(212°F)
Melting Point	-3°C(26,6°F)
Flash Point	Closed cup: Not applicable.
Vapour Pressure	2kPa(15mmHg)
Density	1,06g/cm3[20°C(68°F)]

Solubility	Easilysoluble in the following materials: cold water and hot water.
Octanol/ water partition coefficient	Not applicable.

Other information

Auto-ignition temperature	Not applicable.

10. Stability and reactivity

Stability : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid : No specific data.

Materialsto avoid : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced

11. Toxicological information

Potential acute health effects

Inhalation	Exposure to decomposition products may cause a health hazard.
Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eyecontact	No known significant effects or critical hazards.

Product/ ingredient name	Result	**Species**	**Dose**	**Exposure**
Citric acid, monohydrate	LD 50 Dermal	Rat	885mg/kg	-
	LD50 Intraperitoneal	Rat	375mg/kg	-
	LD50 Oral	Rat	11700 g/kg	-
Fatty alcohol alcoxylate	LD50 Oral	Rat	>2000mg/kg	-
Ammonia	LD50Oral	Rat	350mg/kg	-

Conclusion /Summary Not available.

Potential chronic health effects Chronict oxicity

Conclusion/ Summary	Not available.

Irritation /Corrosion

Conclusion/ Summary	Not available.

Sensitiser

Conclusion/ Summary	Not available.

Carcinogenicity

Conclusion/ Summary	Not available.

Mutagenicity

Conclusion/ Summary	Not available.

Teratogenicity

Conclusion/ Summary	Not available.

Reproductive toxicity

Conclusion/ Summary	Not available.
Chronic effects	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Teratogenicity	No known significant effects or critical hazards.
Developmental effects	No known significant effects or critical hazards.
Fertilityeffects	No known significant effects or critical hazards.

Over-exposure signs / symptoms

Inhalation	No specific data
Ingestion	No specific data
Skin	No specific data
Eyes	No specific data
Target organs	Contains material which causes damage to thef ollowing organs: lungs, upper respiratory tract, eye, lens or cornea.

12. Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquaticecot oxicity

Product / ingredient name	Test	Result	Species	Exposure

Citric acid Monohydrate	Acute LC 50440 to 706 mg/l	Fish-Goldfish	96hours
Fatty Alcohol alco xylate	Acute LC50 1 to 10 mg/l	Fish- euciscusidus	96hours

Conclusion/ Summary : Not available.

Other ecologi calin form ation Bio degradability

Conclusion / Summary Not available.

Product / ingredient name	Aquati chalf- life	Photolysis	Biodegradability
Citricacid, monohyd rate	-	-	Readily
Fatty alcoholal coxylate	-	-	Readily

Bioaccumulative Potential	LogPow	BCF	Potential
Product/ ingredient name	-	-	
Tank Clean Buffer	-	-	low
Citricacid, monohydrate	-1.72		low

13. Disposal considerations

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers
Hazardous waste	Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additionalinformation
ADR/RID Class	Not regulated.	-	-	-	-	-
ADNR Class	Not regulated.	-	-	-	-	-

IMDG Class	Not regulated.	-	-	-	-	-
IATA Class	Not regulated.	-	-	-	-	-

PG*:Packing group

15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Risk phrases	This product is not classified according to EU legislation
Safety phrases	Not applicable.

VOC for Ready-for-Use Mixture

Productuse

Europe inventory

Other EU regulations

Additional warning phrases	Safety data sheet available for professional user on request
Child protection	Not applicable
Tactile warning of danger	Not applicable
Restrictionson the Marketing and Use Directive	Not applicable

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)	R34-Causes burns. R36-Irritating to eyes. R38-Irritating to skin. R50-Very toxic to a quatic organisms
Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)	C-Corrosive Xi-Irritant N-Dangerous for the environment
History	.
Tactile warning of danger	Not applicable

Indicates information that has changed from previously issued version.

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