

**Product Name:** Buffer Cleaner

**Part No / SKU:** RXSOL-20-2032-210

**Date of Issue:** September 11, 2026

**Document Type:** Material Safety Data Sheet (MSDS)

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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

### Company Details:

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

|       |                                                          |
|-------|----------------------------------------------------------|
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## 2. COMPOSITION / INFORMATION ON 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<br>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 classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental 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 amendments.

|                            |                                                      |
|----------------------------|------------------------------------------------------|
| Classification             | Not classified                                       |
| Physical/ chemical 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.<br><br>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:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides                                                                                                                                                                    |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <u>Methods for cleaning up</u> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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 / 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                                                    |
| <u>Important health, safety and environmental information</u> |                                                                      |
| 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                                                    | Easily soluble in the following materials: cold water and hot water. |
| Octanol/ water partition coefficient                          | Not applicable.                                                      |
| <u>Other information</u>                                      |                                                                      |
| 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.

Materials to avoid : No specific data.

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

## 11. TOXICOLOGICAL INFORMATION

|                                       |                                                               |
|---------------------------------------|---------------------------------------------------------------|
| <u>Potential acute health effects</u> |                                                               |
| 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.             |
| Eye contact                           | 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.                                                                                                      |
| <u>Potential chronic health effects Chronic toxicity</u> |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Irritation /Corrosion</u>                             |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Sensitiser</u>                                        |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Carcinogenicity</u>                                   |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Mutagenicity</u>                                      |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Teratogenicity</u>                                    |                                                                                                                     |
| Conclusion/ Summary                                      | Not available.                                                                                                      |
| <u>Reproductive toxicity</u>                             |                                                                                                                     |
| 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.                                                                   |
| <u>Over-exposure signs / symptoms</u>                    |                                                                                                                     |
| Inhalation                                               | No specific data                                                                                                    |
| Ingestion                                                | No specific data                                                                                                    |
| Skin                                                     | No specific data                                                                                                    |
| Eyes                                                     | No specific data                                                                                                    |
| Target organs                                            | Contains material which causes damage to the following organs: lungs, upper respiratory tract, eye, lens or cornea. |

## 12. ECOLOGICAL INFORMATION

Environmental effects : No known significant effects or critical hazards.

|                            |      |                            |                    |          |
|----------------------------|------|----------------------------|--------------------|----------|
| <u>Aquaticecot oxicity</u> |      |                            |                    |          |
| 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. |
| <u>Other ecologi calin form ation Bio degradability</u> |                |
| Conclusion / Summary                                    | Not available. |

|                                  |                           |                   |                         |
|----------------------------------|---------------------------|-------------------|-------------------------|
| <u>Product / ingredient name</u> | <u>Aquati chalf- life</u> | <u>Photolysis</u> | <u>Biodegradability</u> |
| Citricacid, monohyd rate         | -                         | -                 | Readily                 |
| Fatty alcoholal coxylate         | -                         | -                 | Readily                 |
| <u>Bioaccumulative Potential</u> | <u>LogPow</u>             | <u>BCF</u>        | <u>Potential</u>        |
| <u>Product/ ingredient name</u>  | -                         | -                 |                         |
| 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 | Additional information |
|------------------------|----------------|----------------------|---------|-----|-------|------------------------|
| 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                   |                                                              |
| Product use                                     |                                                              |
| Europe inventory                                |                                                              |
| <u>Other EU regulations</u>                     |                                                              |
| Additional warning phrases                      | Safety data sheet available for professional user on request |
| Child protection                                | Not applicable                                               |
| Tactile warning of danger                       | Not applicable                                               |
| Restrictions on the Marketing and Use Directive | Not applicable                                               |

## 16. OTHER INFORMATION AND DISCLAIMER

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

Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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