Material Safety Data Sheet

CITRIC ACID ANHYDROUS (RXSOL-41-8668-025)

1. Product and Company Identifaction

Product Name	CITRIC ACID CR20A
Product Type	RXSOL-41-8668-025

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

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

Phone	+91 22 65113333/ 5555 / 9999 / 27611360 / 27815540
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Email	mail@rxmarine.com

2. Composition / informationon ingredients

HAZARDOUS INGREDIENTS:	OSHA PEL	TLV
Citric Acid (CAS #77-92-9)	N/E	N/ESECTION 3:

3. Hazards Identification

IMMEDIATE HEALTH EFFECTS

PRIMARY ROUTES OF ENTRY: Eyes, skin contact/absorption, inhalation or ingestion.

SIGNS/SYMPTOMS OF OVEREXPOSURE: Irritation to the skin, eyes, nose, throat, and respiratory tract.

TARGET ORGAN EFFECTS: Irritation of the skin and eyes. Irritation of lungs possible if powder is inhaled.

REPRODUCTIVE/DEVELOPMENTAL INFORMATION: No data available.

CARCINOGENICITY:

NTP: Known – No; Anticipated – No OSHA: No IARC: No

LONG TERM EFFECTS: No data available.SECTION 4:

4. First Aid Measures

EYES: Flush eyes with water for at least 15 minutes. If irritation persists, consult a physician.

SKIN: If irritation occurs, flush skin with water for at least 15 minutes. If irritation persists, consult a physician

INHALATION: If symptoms of overexposure develop, remove to fresh air. If symptoms persist, consult a physician.

INGESTION: Give 8 to 16 ounces of water to dilute substance. Do not induce vomiting. Consult a physician or local Poison Control Center. Never give anything by mouth to an unconscious person.

5. Fire-fighting Measures

Flash Point: 128 ° F

Boiling Point: N/E

Extinguishing Media: Foam, CO2, dry chemical, water fog.

Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool area.

Unusual Fire and Explosion Hazards: Extinguish all nearby sources of ignition because vapors may be carried by air currents. Keep away from heat, sparks and open flame.

6. Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid contact with skin and eyes.

Environmental precautions: No special environmental precautions required.

Methods for cleaning up: Sweep up and shovel. After cleaning, flush away traces with water.

7. Handling and Storage

Handling

Technical measures/Precautions: Avoid dust formation.

Take precautionary measures against static discharges.

Safe handling advice: Use personal protective equipment.

Storage Technical measures/Storage conditions: Keep tightly closed in a dry and cool place.

Incompatible products: Strong oxidizing agents, strong bases.

8. Exposure controls and personal protection

Respiratory Protection: Not usually needed.

Protective Clothing: Rubber gloves, Safety glasses and clothing that will minimize skin contact.

Ventilation: Normal room ventilation is usually sufficient.

Storage: Store in dry place away from excessive heat, in original container. Reseal container after use.

9. Physical and chemical properties

Odor :	Mild acidic
Physical State:	Powder, crystalline
Appearance:	Clear, colorless
pH	1.8 in 5% solution
Bulk Density: :	1.665 g/cm3
Boiling Point:	N/A
Freezing/Melting Point:	N/E
Vapor Pressure:	N/E
Vapor Density:	N/E
Solubility in Water:	Complete

10. Stability and reactivity

Stability: Stable at normal conditions.

Conditions to avoid: Avoid dust formation. Take precautionary measures against static discharges.

Materials to avoid: Incompatible with strong bases and oxidizing agents.

Hazardous decomposition products: No decomposition if stored normally. Thermal decomposition can lead to release of irritating gases and vapors

Corrosion: May corrode metals. 316 Stainless steel recommended material for handling.

11. Toxicological information

Acute toxicity LD50/p.o./rat = 11.700 mg/kg (1)

LD50/i.p./rat = 883 mg/kg (2)

LD50/p.o./mouse = 5.040 mg/kg (1)

LD50/i.v./mouse = 42 mg/kg (17

LD50/i.p./mouse = 961 mg/kg (2)

Local effects: Irritating to eyes.

May cause skin irritation and respiratory tract irritation.

Chronic toxicity: None.

Human experience: Health injuries are not known or expected under normal use.

Carcinogenic Characteristic: This product does not contain any substances

that are considered by ACGIH, OSHA or NTP to be "probable" or "suspected" human carcinogens.

Reproductive toxicity: No data available

Teratogenicity: No data available

Mutagenic Characteristic: negative)

12. Ecological information

Mobility: completely soluble

Persistence / degradability

Chemical oxygen demand (COD) = 750 50 mg 02 /g

Biochemical oxygen demand within

5 days (BOD5) = 625 50 mg 02 /g

DIN 38412 Part 25 (DIN EN ISO 9888): Readily biodegradable (98 % after 2 days)*

Ecological toxicity

DIN 38412 Part 15 (DIN EN ISO 7346) Toxicity to fish 440 - 706 mg/L

DIN 38412 Part 5 Toxicity to bacteria >10.000 mg/L

Bioaccumulation None.

13. Disposal considerations

Do not dispose of on the land, in surface waters, or in storm drains. Small spills and waste may be flushed into a waste treatment sewer where local regulations permit. Larger quantities should be collected for reuse or consigned to a licensed hazardous waste hauler for disposal in accordance with federal, state and local regulations. All disposal must be in accordance with all federal, state and local regulations.

14. Transport information

No restrictions for Ground, Air, or Maritime Transportation in accordance with 49 CFR parts 100-185.

15. Regulatory information

All components are listed on TSCA.

16. Other information

This product has no established regulatory information. All regulatory information given is based on individual components of the mixture by component number. While this information and recommendations set forth herein are believed to be accurate and reliable, it is provided without warranty regarding its accuracy. RX MARINE INTERNATIONAL MAKES NO WARRANTY WITH RESPECT HERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON. Users must determine safe conditions for use and assume liability for any loss, injury, damage or expense resulting from use of this product.

N/A = Not applicable N/D = Not determined N/E = Not established