

Safety Data Sheet

Date Updated: 04/2014 Version: 1 MSDS #45

SECTION 1- IDENTIFICATION

Product Name Kreb's-Ringer Bicarbonate Buffer

Product NumberKRB-1000ManufacturerZenBio, Inc

Street Address 3200 East NC Hwy 54 Suite 100
City, State, Zip, Country Research Triangle Park, NC 27709 US

Technical Phone (919) 547-0692

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SECTION 2- HAZARDS IDENTIFICATION

	Health	Flammability	Reactivity
HMIS Rating	1	0	0
NFPA Rating	1	0	0

GHS Classification

Acute toxicity, Oral Category 5
Skin Irritation Category 3
Eye Irritation Category 2B

Target Organs

Heart

GHS Label Elements

Pictogram None
Signal Word WARNING
Hazard Statement

- H303 May be harmful if swallowed
- H316 Causes mild skin irritation
- H320 Causes eye irritation
- Precautionary Statements: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Potassium chloride CAS-No. 7447-40-7 1-5%

SECTION 4 FIRST AID MEASURES

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

If inhaled, remove to fresh air. If not breathing, give artificial respiration.

In case of skin contact, wash with soap and plenty of water for at least 15 minutes.

In case of eye contact, flush eyes with water as a precaution

SECTION 5 FIRE FIGHTING MEASURES

Flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Firefighting equipment

Wear self-contained breathing apparatus and protective clothing.

Hazardous decomposition products formed under fire conditions

Carbon oxides

SECTION 6 ACCIDENTAL RELEASE MEASURES

Inhalation

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Avoid inhalation.

Environmental

Do not let product enter drains

Methods for contamination and clean-up

Sweep up and shovel. Store in a suitable tightly closed container.

SECTION 7 HANDLING AND STORAGE

Safe Handling instructions

Avoid contact with skin and eyes. Provide appropriate exhaust ventilation in locations where dust is formed **Safe Storage Conditions**

Keep in tightly closed dry container in a well- ventilated area. Storage temperature 2-8°C.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal Protective Equipment

- -Respiratory protection- Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).
- -Hand protection- Handle with gloves. Use proper glove technique (without touching outer surface of glove) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with all applicable laws and good laboratory practices.
- -Eye protection- Use eye protective equipment tested and approved under appropriate government standards.
- Skin and body- The type of protective equipment must be selected according to the work-place regulations.
- -Hygiene- General industrial hygiene and good laboratory practices are to be used.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state is powder.

No data available for pH, melting point, boiling point, lower and upper exposure limits, water solubility or evaporation rate

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability

Stable under recommended storage and use conditions

Possible hazardous reactions

No data available

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions-Carbon oxides

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity

No data available for oral LD50, inhalation LC50, dermal LD50, skin irritation or sensitization

Germ cell mutagenicity/Reproductive toxicity- no data available

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

Specific target organ toxicity- single exposure (GHS)

No data available

Specific target organ toxicity- repeated exposure (GHS)

No data available

Aspiration hazard

No data available

Potential health effects

- -Inhalation- May be harmful if inhaled.
- -Ingestion- May be harmful if swallowed.
- -Skin- May be harmful if absorbed through skin. May cause skin irritation.
- -Eyes- May cause eye irritation

Signs and Symptoms of Exposure

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Vomiting, diarrhea, dehydration and congestion may occur in internal organs.

SECTION 12 ECOLOGICAL INFORMATION

No data available for toxicity, bioaccumulative potential or other adverse effects

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable Federal, State and Local regulations.

SECTION 14 TRANSPORT INFORMATION

IATA

This substance is considered to be non-hazardous for ground or air transport.

DOT (US)

This product is classified as not dangerous goods.

SECTION 15 REGULATORY INFORMATION

OSHA Hazard

No known OSHA hazards

<u>SARA 302:</u> No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302 <u>SARA 313:</u> No chemicals in this material are subject to reporting requirements of SARA Title III, Section 313.

SARA 311/312: Chronic Health Hazard

California Prop. 65 Components

This product does not contain any chemicals known to the State of California (USA) to cause cancer, birth defects, or any other reproductive harm.

Right To Know components

Disodium hydrogenothophosphate CAS-No 7558-79-4
Sodium Chloride CAS-No 7647-14-5
Glucose CAS-No 50-99-7
Potassium chloride CAS-No 7447-40-7
Sodium dihydrogenorthophosphate CAS-No 7558-80-7

SECTION 16 OTHER INFORMATION

Disclaimer:

For research use only. Not for clinical, drug, household or other uses.

Warranty:

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Zen-Bio shall have no liability for any direct, indirect, consequential or incidental damages arising out of the use, the results of use, the inability to use, the handling or contact with this product.

Glossary

CAS Number Chemical Services Abstract Number

DOT U.S. Department of Transportation

GHS Global Harmonized System

HMIS Hazardous Materials Identification System
IARC International Agency of Research on Cancer
IATA International Air Transport Association
NFPA The National Fire Protection Association

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration SARA Superfund Amendments and Reauthorization Act

TSCA Toxic Substances Control Act

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