RINGER SOLUTION, CRUSTACEAN

Section 1 - Product Description

Product Name: Ringer Solution, Crustacean
Product Code(s): 88-6513
Size: 1 L
Chemical Name: N/A
CAS Number: See Section 3
Formula: See Section 3
Synonyms: N/A
Distributor: Carolina Biological Supply Company, 2700 York Road, Burlington, NC 27215
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F) Chemtrec 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 - Hazard Identification

Emergency Overview: Non-Hazardous under normal use.
Potential Health Effects:
- Eyes: May cause irritation.
- Skin: May cause irritation to skin.
- Ingestion: May cause gastrointestinal discomfort.
- Inhalation: May cause irritation to respiratory tract.

Section 3 - Composition / Information on Ingredients

Principal Hazardous Components: Sodium Bicarbonate (CAS#144-55-8) 0.02%; Magnesium Chloride (CAS#7791-18-6) 0.040%; Calcium Chloride, Dihydrate (CAS#10035-04-8) 0.020; Potassium Chloride (CAS#7447-40-7) 0.021%; Sodium Chloride (CAS#7647-14-5 )0.832%
TLV units: N/A
PEL units: N/A

Section 4 - First Aid Measures

Emergency and First Aid Procedures:
- Eyes - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Skin - After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of ... (Water, unless specified as a water reactive material).
**Section 5 - Firefighting Procedures**

Flash Point (Method Used): N/A  
NFPA Rating:  
  - Health: 0  
  - Fire: 0  
  - Reactivity: 0  
Extinguisher Media: Use media suitable to extinguish surrounding fire.  
Flammable Limits in Air % by Volume: N/A  
Autoignition Temperature: N/A  
Special Firefighting Procedures: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
Unusual Fire and Explosion Hazards: N/A

**Section 6 - Spill or Leak Procedures**

Steps to Take in Case Material Is Released or Spilled: Ventilate area of spill. Eliminate all sources of ignition. Remove all non-essential personnel from area. Clean-up personnel should wear proper protective equipment and clothing. Absorb material with suitable absorbent and containerize for disposal.

**Section 7 - Special Precautions**

Precautions to Take in Handling or Storing: Keep container tightly closed in a cool, well-ventilated place.

**Section 8 - Protection Information**

Respiratory Protection (Specify Type): None needed under normal conditions of use with adequate ventilation. A NIOSH/MSHA chemical cartridge respirator should be worn if PEL or TLV is exceeded.  
Ventilation:  
  - Local Exhaust: Yes  
  - Mechanical(General): Yes  
  - Special: No  
  - Other: No  
Protective Gloves: Natural rubber, Neoprene, PVC or equivalent.  
Eye Protection: Splash proof chemical safety goggles should be worn.  
Other Protective Clothing or Equipment: Lab coat, apron, eye wash, safety shower.

**Section 9 - Physical Data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight:</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air=1):</td>
<td>N/A</td>
</tr>
<tr>
<td>Percent Volatile by Volume:</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>Soluble</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1):</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1):</td>
<td>N/A</td>
</tr>
<tr>
<td>Appearance and Odor:</td>
<td>Colorless, odorless solution.</td>
</tr>
</tbody>
</table>

**Section 10 - Reactivity Data**

Stability: Stable
Conditions to Avoid: N/A
Incompatibility (Materials to Avoid): Water-reactive Material,
Hazardous Decomposition Products: N/A
Hazardous Polymerization: Will not occur

**Section 11 - Toxicity Data**

**Toxicity Data:**
(Sodium Bicarbonate) orl-rat LD50 4220 mg/kg
(Magnesium chloride) orl-rat LD50 8100 mg/kg
(Calcium chloride, Dihydrate) orl-rat LD50 1000 mg/kg
(Potassium chloride) orl-rat LD50 2600 mg/kg
(Sodium chloride) orl-rat LD50 3000 mg/kg

**Effects of Overexposure:**

- **Acute:** See Section 2
- **Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

**Conditions Aggravated by Overexposure:** N/A
**Target Organs:** N/A
**Primary Route(s) of Entry:** N/A

**Section 12 - Ecological Data**

**EPA Waste Numbers:** N/A

**Section 13 - Disposal Information**

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

**Section 14 - Transport Information**

**DOT Proper Shipping Name:** N/A

**Section 15 - Regulatory Information**

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

**Name List:**
- Sodium Bicarbonate - No
- Magnesium Chloride - No
- Calcium Chloride, Dihydrate - No
- Potassium Chloride - No
- Sodium Chloride - No

**Chemical Category:**
- Sodium Bicarbonate - No
- Magnesium Chloride - No
- Calcium Chloride, Dihydrate - No
- Potassium Chloride - No
- Sodium Chloride - No

**CERCLA Section 103 RQ(lb.):** Sodium Bicarbonate - No
- Magnesium Chloride - No
- Calcium Chloride, Dihydrate - No
- Potassium Chloride - No
- Sodium Chloride - No

**RCRA Section 261.33:** Sodium Bicarbonate - No
Section 16 - Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH  American Conference of Governmental Industrial Hygienists
CAS Number  Chemical Services Abstract Number
CERCLA  Comprehensive Environmental Response, Compensation, and Liability Act
DOT  U.S. Department of Transportation
IARC  International Agency of Research on Cancer
N/A  Not Available
NTP  National Toxicology Program
OSHA  Occupational Safety and Health Administration
PEL  Permissible Exposure Limit
ppm  Parts per million
RCRA  Resource Conservation and Recovery Act
SARA  Superfund Amendments and Reauthorization Act
TLV  Threshold Limit Value
TSCA  Toxic Substances Control Act