

# MATERIAL SAFETY DATA SHEET

## **1. PRODUCT AND DOCUMENT IDENTIFICATION**

**Product Identity:** Lactated Ringers Solution      **Product Code:** LRS

**Manufactured by:** Radix Laboratories, Inc.  
1334 International Drive  
Eau Claire, WI 54701

Emergency Telephone: (800) 424-9300

Information Telephone: (715) 833-0644

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Contact: Radix Laboratories Inc.

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## **2. IDENTIFICATION OF SIGNIFICANT CHEMICAL COMPONENTS:**

<b><u>Component</u></b>	<b><u>CAS NO.</u></b>	<b><u>OSHA PEL</u></b>	<b><u>ACGIH TLV</u></b>	<b><u>mg/mL</u></b>
Sodium Chloride	7647-14-5	Not Listed	Not Listed	60.0
Sodium Lactate	72-17-3	Not Listed	Not Listed	31.0
Potassium Chloride	7447-40-7	Not Listed	Not Listed	3.0
Calcium Chloride	10035-04-8	Not Listed	Not Listed	2.0

## **3. FIRE/EXPLOSION HAZARDS:**

**Flash Point (Method Used):** N/A (water based)

**Flammable Limits:** N/A

**Extinguishing Media:** Usual fire fighting equipment including self-contained breathing apparatus.

**Special Fire Fighting Procedures:** None

**Unusual Fire and Explosion Hazards:** None

## **4. FIRST-AID MEASURES:**

**Signs and Symptoms of Exposure:** For prolonged exposure irritating to skin, nasal and respiratory tracts, and eyes. Ingestion of large amounts may cause nausea.

**Medical Conditions Generally Aggravated by Exposure:** None known

### **Emergency and First Aid Procedures:**

**SKIN:** Wash with soap and water, remove contaminated clothing.

**EYES:** Flush with water for 15 minutes.

**INGESTION:** Drink large quantities of milk or water to dilute.

Seek medical attention if symptoms persist. (Never give anything by mouth to an unconscious person.)

## **5. PRECAUTIONS FOR SAFE HANDLING AND USE:**

**Clean up of Released/Spilled Material:** Ventilate area of spill, collect material for disposal. Wear protective equipment during clean up. After clean up, flush area with water.

**Waste Disposal Method:** Dispose as non-hazardous waste at facility operating in compliance with applicable federal, state and local regulations.

**Handling and Storing Precautions:** Store at room temperature. Avoid extremes in temperature. Handle to avoid breakage or spillage.

**Other Precautions:** Avoid contact with skin and eyes. Avoid ingestion.

## **6. EXPOSURE CONTROL MEASURES:**

**Respiratory Protection:** Not normally required.

**Ventilation:** Local exhaust should be provided.

**Protective Clothing or Equipment:** Impervious gloves, goggles, lab coat or similar clothing.

**Work/Hygienic Practices:** Avoid contact with eyes, skin, mucous membranes. Avoid ingestion. Wash hands and face before eating, drinking or smoking.

## **7. PHYSICAL/CHEMICAL CHARACTERISTICS:**

**Boiling Point:** N/A

**Specific Gravity (H<sub>2</sub>O = 1):**N/A

**Vapor Pressure (mm Hg):** N/A

**Melting Point:** N/A

**Vapor Density (Air = 1):** N/A

**Evaporation Rate:** N/A

(Butyl Acetate = 1)

**Solubility in Water:** Complete (Product is an Isotonic Electrolyte Solution)

**Appearance and Odor:** Clear liquid with little to no odor.

## **8. REACTIVITY INFORMATION:**

**Stability:** Stable

**Conditions to Avoid:** None

**Incompatibility (Materials to Avoid):** None

**Hazardous Decomposition or Byproducts:** None

**Hazardous Polymerization:** Will not occur

## **9. TOXICOLOGICAL HAZARD INFORMATION:**

**Route(s) of Entry:** Ingestion, skin, eyes.

**Health Hazards (Acute and Chronic):** Irritation to skin/eyes may occur on contact. Ingestion may cause nausea and/or vomiting.

**Carcinogenicity:** None

**Oral Rat LD50:** See component MSDS in section 2. Calcium Chloride is 1000mg/kg  
Potassium Chloride is 2600 mg/kg. Toxicity of Lactated Ringers Solution: Not available.