



# Injection Ready 60% QRS-PL™ Potassium Lactate

## Quick Release Substrate

### For Aquifer Remediation and Conditioning

## SAFETY DATA SHEET

*Effective Date: 1/1/2020*

### 1. Product Identification

**Synonyms:** Quick Release Substrate (QRS™-PL); Potassium Lactate; Propanoic acid, 2-Hydroxy Monopotassium salt; L-Lactic Acid, Potassium Salt

**Recommended Use:** Treatment of groundwater contaminated with chlorinated solvents and other anaerobically degradable compounds.

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### 2. Hazards Identification

#### Emergency Overview

**Caution:** May cause eye irritation.

**Health Rating:** 1 - Slight

**Flammability Rating:** 0 - None

**Reactivity Rating:** 0 - None

**Contact Rating:** 1 - Slight

**Protective Equipment:** Goggles; Proper Gloves

**Storage Color Code:** Orange (General Storage)

**Potential Health Effects**

**Inhalation:** Not expected to be a health hazard

**Ingestion:** Not expected to be a health hazard via ingestion

**Skin Contact:** No adverse effects expected

**Eye Contact:** May cause irritation, possible reddening

**Chronic Exposure:** No information found

**Aggravation of Pre-existing Conditions:** No information found



### 3. Composition/Information on Ingredients

Ingredient	CAS #	Percent	Hazardous
Potassium Lactate	85895-78-9	60%	Yes
Water	7732-18-5	40%	No

**Molecular Weight:** 128.2.

**Chemical Formula:**  $KC_3H_5O_3$

### 4. First Aid Measures

- Inhalation:** Not expected to require first aid measures. Remove to fresh air. Get medical attention for any breathing difficulty.
- Ingestion:** If large amounts were swallowed, give water to drink and get medical advice.
- Skin Contact:** Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.
- Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

### 5. Fire Fighting Measures

- Fire:** Flash point: No data available. Not considered to be a fire hazard.
- Explosion:** Not considered to be an explosion hazard.
- Fire Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth) and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer. Containerized waste may be sent to an approved waste



disposal facility.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Avoid long storage times. Containers of this material may be hazardous when empty since they do retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

<b>Airborne Exposure Limits:</b>	None established.
<b>Ventilation System:</b>	Not expected to require any special ventilation.
<b>Personal Respirators (NIOSH Approved):</b>	Not expected to require personal respirator usage.
<b>Skin Protection:</b>	Wear protective gloves and clean body-covering clothing.
<b>Eye Protection:</b>	Use chemical safety goggles and/or a full-face shield where splashing is possible. Provide readily accessible eye wash stations and safety showers.
<b>Slips, Trips, and Falls:</b>	Material is slippery when spilled. Clean up with sand, paper towels, or other inert material.

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## 9. Physical and Chemical Properties

<b>Appearance:</b>	Colorless liquid.
<b>Odor:</b>	Sweet
<b>Solubility:</b>	100% soluble in water.
<b>Specific Gravity (water=1):</b>	1.33. (11.09 pounds per gallon)
<b>pH:</b>	6.5-8.5
<b>% Volatiles by volume @ 21C (70F):</b>	No information found.
<b>Boiling Point:</b>	No information found.
<b>Melting Point:</b>	No information found.
<b>Flash Point (F):</b>	No information found
<b>Autoignition Temperature:</b>	No information found
<b>Decomposition Temperature:</b>	No information found.
<b>Vapor Density (Air=1):</b>	No information found.
<b>Vapor Pressure (mm Hg):</b>	No information found.
<b>Evaporation Rate (BuAc=1):</b>	No information found
<b>Viscosity @ 23 C (73 F):</b>	100 centipoises
<b>Partition Coefficient (octanol/water):</b>	No information found



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## 10. Stability and Reactivity

<b>Stability:</b>	Stable under ordinary conditions of use and storage.
<b>Reactivity:</b>	Not reactive under ordinary conditions.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide, carbon monoxide, and potassium oxides may form when heated to decomposition.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Incompatibilities:</b>	Strong oxidizers, acids.
<b>Conditions to Avoid:</b>	Incompatibles. Isolate from heat and open flame.

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## 11. Toxicological Information

<b>Acute Toxicity:</b>	No data available.
<b>Inhalation:</b>	No data available.
<b>Dermal:</b>	No data available.
<b>Skin Corrosion/Irritation:</b>	No data available.
<b>Serious Eye Damage/Eye Irritation:</b>	No data available.
<b>Respiratory or Skin Sensitivity:</b>	No data available.
<b>Germ Cell Mutagenicity:</b>	No data available.
<b>Carcinogenicity IARC, ACGIH, NPT, OSHA:</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen.
<b>Reproductive Toxicity:</b>	No data available.

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## 12. Ecological Information

<b>Toxicity:</b>	No data available.
<b>Persistence and Degradability:</b>	Expected to be completely biodegraded under aerobic and anaerobic conditions.
<b>Bioaccumulative Potential:</b>	No data available.
<b>Mobility in Soil:</b>	Expected to be mobile in groundwater.
<b>Other Adverse Effects:</b>	No data available.

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## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may

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differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

Not regulated.

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## 15. Regulatory Information

**OSHA STATUS:** This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes from this product may be hazardous as noted in Section 10.

**TSCA STATUS:** No component of this product is listed on the TSCA inventory.

**CERCLA (Comprehensive Response Compensation, and Liability Act):** Not reportable.

SARA TITLE III (Superfund Amendments and Reauthorization Act)

Section 312 Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Non-hazardous Under Section 311/312

Section 313 Toxic Chemicals: None

**RCRA STATUS:** If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24).

**CALIFORNIA PROPOSITION 65:** The following statement is made in order to comply with the California safe Drinking Water and Toxic Enforcement Act of 1986. The product contains no chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. Other Information

**NFPA Ratings:** Health: **0** Flammability: **0** Reactivity: **0**

**Revision Information:** SDS Section(s) changed since last revision of document include:  
Updated to standard format.

**Disclaimer:**

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