

# MRC® Technical Description

Metals Remediation Compound (MRC®) removes metals such as dissolved Cr(VI) from groundwater via *in situ* immobilization (precipitation and/or sorption to soil particles). MRC consists of an organosulfur compound esterified to a carbon backbone. This organosulfur ester is embedded in a polylactate matrix, making MRC a thick, viscous liquid.

Upon injection into an aquifer, the organosulfur compound (the active metals immobilization agent) is released in a controlled manner when the ester bonds in MRC are cleaved via hydrolysis and microbial enzymatic action. Similar processes also cause MRC to release lactic acid, which provides a carbon source for naturally-occurring bacteria and creates the optimal conditions for metals immobilization by the organosulfur compound.



Example of MRC

For a list of treatable contaminants with the use of MRC, view the Range of Treatable Contaminants Guide.

### **Chemical Composition**

- Glycerol Tripolylactate- CAS #201167-72-8
- Glycerin- CAS #56-81-5
- Lactic Acid- CAS #50-21-5
- Sorbitol Cysteinate- CAS #444618-64-8

## **Properties**

- pH 2 (10% solution/water)
- Appearance Viscous gel/liquid. Amber color
- Odor Strong Amine/Sulfur

## Storage and Handling Guidelines

#### Storage

Store away from incompatible materials Store in original tightly closed container Store in a cool, dry, well-ventilated place

#### Handling

Wash thoroughly after handling
Wear appropriate personal protective equipment
Avoid contact with eyes, skin, and clothing
Provide adequate ventilation

Observe good industrial hygiene practices



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## **Applications**

- Permanent injection wells
- Direct-push injection points
- Soil mixing

Application instructions for this product are contained in the MRC Application Instructions.

## Health and Safety

Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Please review the MRC Safety Data Sheet for additional storage, usage, and handling requirements.

