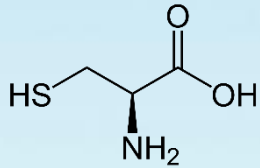


L-Cysteine



The right bacteria for dechlorination are strict anaerobes, L-Cysteine is a strong reducing agent that excludes oxygen to



Conditioned water:
 ORP <-75 mV, pH >5.5



Bioaugmentation Kit
 L-Cysteine in the White pail

- Rapidly prepare anoxic water from municipal water supplies
- Inject anaerobic bioaugmentation cultures and electron donor simultaneously
- Save money on lengthy tank rentals/incubation periods

Principle

L-Cysteine is an amino acid very susceptible to oxidation. When added at low concentrations to water, dissolved oxygen levels and ORP readings rapidly drop while keeping the pH circumneutral. Adding this product makes water suitable to carry and protect anaerobic bioaugmentation cultures while subsurface conditions become suitable. This conditioned water can also be used to disperse electron donors. Instead of having a drawn-out, lengthy process that often requires filtration and pH adjustment, simply add 0.1% L-Cysteine to a batch of water before injecting.

Advantages

- Conveniently packaged in 5 or 25 kg drums
- Easily soluble: no need to filter water
- Works within hours of application in most water types
- Prepare anoxic water even at low temperatures

Field Application Design

Add at least 250-gallons of conditioned water before and after injecting dechlorinating cultures in the subsurface. ORP readings should be less than -75 mV, and pH should be above 6. Add sodium bicarbonate if necessary to increase the water's pH.

Product Content

Chemical Name	CAS Number	Composition (% wt)
L-Cysteine	52-90-4	99.5
Other byproducts (sulfate, iron, chloride)	mixture	<0.5

Product Characteristics

Parameter	Specification
Bulk Density	300 kg/m ³
Solubility in water	280 g/L
Flash Point	420 °C
Appearance	White crystalline powder

Packaging Options

- 5-kg pail
- 25-kg drum

Safety

Harmful if swallowed.