# AmeriWest Water Services Export Water Quality Solutions

# **KlearWell 186 BioMin Dispersant**

## **BIOFILM AND MINERAL DISPERSANT**

### Description

KlearWell 186 BioMin Dispersant is a unique acid based polymeric biofilm and mineral chemistry. It is unparalled in its ability for breaking down biofilm and dispersing mineral salts. KlearWell 186 BioMin Dispersant provides a critical and effective boost to any acid-cleaning operation. KlearWell 186 BioMin Dispersant is readily biodegradable and may be used to treat potable water systems and related equipment.

- KlearWell 186 BioMin Dispersant maintains the acid cleaning reaction seen at pH's of 1 to 2, and continues to hold minerals in suspension at pH levels of 3.0 and higher so all debris can be flushed out.
- KlearWell 186 BioMin Dispersant controls sludging by preventing re-precipitation or adhesion of debris in screens and gravel packs for thorough removal of both mineral and biological material during flushing.
- KlearWell 186 BioMin Dispersant penetrates, dislodges and kills biofilm masses associated with IRON-OXIDIZING, SULFATE-REDUCING and SLIME-FORMING bacteria, which are all resistant to mineral acids alone.
- KlearWell 186 BioMin Dispersant sequesters iron and inhibits corrosion on metal surfaces. Its unique sequestering ability allows the chemical solution to remove and suspend iron compounds.
- KlearWell 186 BioMin Dispersant protects all forms of metal in the system and will not attack plastic, neoprene or other synthetic materials.
- KlearWell 186 BioMin Dispersant provides passivation of metals when used with phosphoric acid.
- KlearWell 186 BioMin Dispersant is NSF Standard 60 Certified and approved for cleaning potable water wells, pipelines and filter systems.

### **Application**

KlearWell 186 BioMin Dispersant is designed for mixing with acid solutions when both mineral and biological fouling is a concern to improve the acid cleaning reaction. Standard dosage is 3% (1 to 2% for maintenance). Dosage of KlearWell 186 BioMin Dispersant can range from 0.5 to 5% (by weight) of treatment volume depending on the construction, chemistry and biological characteristics of the well. AmeriWest Water Services Inc recommends that you do comprehensive well research including camera inspection and water samples for lab analysis, to properly determine dosage on large municipal, agricultural and industrial wells.

- 1. Prepare a Total Treatment Volume (TTV) solution of water, acid, and KlearWell 186 BioMin Dispersant in an appropriately sized tank above ground, equal to approximately 1.5 times the Standing Water volume (SWV) of the well.
- 2. First add water, then acid, then KlearWell 186 BioMin Dispersant. Note: NEVER add water to acid! DO NOT mix the KlearWell 186 BioMin Dispersant directly into concentrations of undiluted liquid acid as polymer destruction may occur.
- 3. Place 80% of the cleaning mixture evenly across the intake zones, with the remaining 20% added to the rest of the water column. Apply vigorous agitation with the cleaning solution to enhance the effectiveness of cleaning.
- 4. Depending on the congestion of the well and the water chemistry, the solution should remain in contact for 18 to 48 hours. Monitor the pH and keep it below 3.0 during treatment. If additional acid is needed to lower pH, add an amount necessary to drop pH to 3 or lower.
- 5. Discharge the acid cleaning solution from the well, neutralize at the surface and dispose in accordance with local regulations.

### **Physical Properties, Shipping and Handling**

Appearance: Clear to Amber Liquid Solubility: Complete in water Freeze Temp.: 26° F (-3.3° C)

Density: 10.1 lbs/gal pH: 2.3

- KlearWell 186 BioMin Dispersant is an acid-based liquid. Avoid contact with concentrated alkaline materials or oxidizers. Use protective clothing, especially where the possibility of inhalation exists. Most acids and alkaline materials will not negatively affect KlearWell 186 BioMin Dispersant at concentrations below 20%.
- Not regulated as a hazardous material under 49CFR 172.101, RECRA, SARA and CERCLA.
- 1 gallon and 5 gallon containers can be shipped by UPS ground delivery.
- Additional physical and handling data are available in the product MSDS.
- KlearWell 186 BioMin Dispersant is available in 1, 5, 30, and 55 gallon containers.