DESIGN WATER TECHNOLOGIES

Unicid

Catalyst
Specification Sheet

Product Description

The "Unicid" Catalyst is a liquid organic, slightly acidic formulation with polymer dispersants. It has been used in over 24,000 wells since 1991. If proper development has been performed by the contractor during treatment, not a single potable water well has returned with a slime problem. Recovery wells with massive contaminants provide nutrients for bacterial growths and pumping simply draws bacteria to the bore hole for continued blockage. Treatments may have to be repeated, depending upon severity of the growth, to keep wells operational. The frequency of these treatments however, has been much longer than other chemistries available on the market.

Market Advantages

This product used in conjunction with the "Unicid" Granular acid effectively: 1.) dissolves blockage in wells, systems, and water tanks due to mineral scale, slime forming bacteria and the oxides created by the decaying bacteria. 2.) suspends the debris to be pumped from the well or system. 3.) protects metal surfaces from corrosion. As a single product, it can be used as an effective bio-cleaner for all forms of bacteria (Coliform included) without the production of tri-halomethanes.

Product Usage

It can be used in conjunction with the "Unicid" Granular acid to effectively penetrate and disperse the slime and the decayed oxides produced by bacteria in wells and systems. This combination effectively dissolves both the organic and inorganic deposits that can cause blockage, suspends the dissolved material to enhance the removal from the wells and systems, and passivates all metal surfaces which adds additional protection to the cleaning process.

Safety Information

The formulation is patentable but we have chosen to keep the formulation a secret. If there are further environmental concerns, we would be happy answer whatever questions you may have. Safety issues in the field would include the use of safety goggles to prevent splashing in the eyes. Wash if chemicals directly contact skin but no deterioration of skin will occur. See MSDS sheets.

All products are totally biodegradable, of which 85% is degradable in 9 days, and the remainder in 27 days. Normal environmental breakdown is small amounts of acetate with some acidic products which are degradable to carbon dioxide and water. The molecules that make up the polymers do not have a long term life after splitting and will natural degrade into basic carbon, oxygen and nitrogen.

Testing residual chemistry as a single product or used with the "Unicid" Granular product	
Time	**Field Test Residual**
Before breakdown (< 27 days or with chemistry),	phosphate *
After chemical breakdown (> 27 days)	ortho phosphate *

* You will need to know natural phosphates and ortho phosphates of the natural water from the aquifer, as a baseline.

All products are packaged in D.O.T. approved containers and can be shipped via normal freight, even UPS, without hazardous labeling required under 40CFR 172.101, Hazardous Materials Table. For further safety information, see the MSDS sheets. This product is certified under NSF Standard 60, Drinking Water Treatment Chemicals.

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