

Difference between Inorganic and Organic Polymer Reactions

This journal entry addresses the misconception regarding the differences between bacteria and enzymes. As you may know, MetaCrete uses a proprietary compound. This compound is a blend of several strains of bacteria that thrive between the sheets of aluminosilicate rocks. The compound also contains other molecular sized particles “active ingredients” that allow MetaCrete to be formed into a solid and to operate in the environment for which it is intended, i.e., soils, liquid containment, paving and dwelling enclosures. By utilizing bacteria - MetaCrete can offer its product as a “green” alternative or in addition to other high pH natural detergent chemicals, such as Borax, lyes, etc.

Geochemical bacteria and enzymes, have vast differences between them. Many believe that bacteria and enzymes are interchangeable or merely a different word for one another, but that is incorrect unless viewed from the Pauling Perspective. Bacteria are live organisms. They live, multiply and die and their fossilized remains are found in carbonaceous rocks. Bacteria’s natural enzymes act to breakdown and consume various contaminants found in soils. Their excrement as a result of this natural decomposition is water and carbon dioxide which are completely green and purely natural. One version of MetaCrete contains solid-state manufactured enzymes that are reactive at ambient temperature, another does not. The same “synthetic inorganic polymers” that can break down rock into colloidal mineral solutions can recombine molecules into new compounds. However, these synthetic enzymes are not live and cannot multiply (like a mule). These inorganic enzymes are unique in that they mimic their carbon filled live counterparts but produce no carbon dioxide waste during manufacture or during introduction into the polymerization process. (when powered by clean energy) MetaCrete is formed by reactive ingredients that are permanent in solid state form within a prescriptive amount of time after introduction, which is much more beneficial than a live bacteria or enzyme that continues to multiply and divide gaining strength with age as measured in geologic time.

Probably, most important is that MetaCrete’s proprietary composition is designed to give specific performance for scientists and engineers engaged in “building things” that last a long time and are resistant to the elements of change. i.e. “Solid like a Rock”!

Note:

An important difference between enzyme-based products and bacterial products is that the enzymes can't repair themselves or reproduce. Living bacteria, however, produce fresh enzymes on a continuous basis and can bounce back following mild environmental threats. MetaCrete is a synthetic stone designed to meet the energy and waste challenges of a growing human populace and a diminishing supply of backyard natural resources.