MICROBIAL PRODUCT INFORMATION

PHase III, Inc. produces and sells a variety of all natural microorganisms (bacteria). None of the microbe products are genetically altered and all of them are naturally occurring to the earth. Each specific product contains different microbes that are particularly suited to the intended purpose.

BETTER BACTERIA / BETTER RESULTS

The scientist and engineers who developed PHase III, Inc.'s bacteria have been successful in isolating and growing specific bacteria with superior degradation and kinetic characteristics. PHase III, Inc. bacteria are highly efficient strains that consistently produce better results in biological treatment systems. The bacteria breaks down a broader spectrum of organic compounds at higher rates than naturally occurring bacteria and provide a higher quality treatment plant effluent. Significantly, PHase III, Inc. bacteria come in a variety of strains that can be used to treat very specific chemicals or organics.

SELECTIVE ADAPTATION

PHase III, Inc. products are developed through techniques of selection and adaptation that has been widely used by the pharmaceutical and food technology industries. These techniques known cumulatively as selective adaptation have been used to produce increased yields of penicillin and highly active yeast cultures. Generally, selective adaptation consists of several steps. First, organisms are isolated from an environment where they have had the opportunity to acclimate naturally to a specific organic substance such as oil or phenol. Second, the dominant species is isolated and subjected to increasing concentrations of specific compounds. This results in a strain of the species that is not only capable of withstanding what might normally be toxic concentrations of a specific compound, but also demonstrates the ability to break down these compounds at an accelerated rate. The search for the right species and the development of a viable strain takes many trials over a long period of time. Third, a colony of the desired strain is established and stock cultures are maintained. Finally, several different cultures are blended together to form standard product blends that are highly active for commonly found combinations of waste compounds.

DRY & LIQUID PRODUCTS

Some of PHase III, Inc. cultures are produced as both dry and liquid preparations. For shipping, storage, and use, dry or liquid choices gives the end user maximum flexibility. It also is an important factor in product quality and control and demonstrates the company's commitment to customer satisfaction.

WHY PHase III, Inc. BACTERIA?

In any catalytic process system, the better the catalyst, the more efficiently the system will operate. In biochemical processes like biological wastewater treatment systems, the bacteria function as the catalyst. So the same fact holds true for the bacteria as for the catalyst: The better the bacteria, the more efficiently the system will operate. Catalytic process and biochemical process systems differ in an important way. With catalysts, the process works with inert chemicals that are relatively easy to duplicate and produce highly predictable results. With bacteria, the process operates with a living organism - a biological "subsystem" that varies with species, and strains within a species. Pure, specific strains produce predictable results, but the strains are difficult to duplicate. In procuring a catalyst, the user simply specifies the chemical compound and purity level. It makes no difference who manufactures the catalyst as long as it is the proper chemical with the correct purity. For bacteria, the user must know the species required and the strain. Different biotechnology firms produce different strains and the efficiency of a strain can vary significantly so it makes a great deal of difference in who manufactures the bacteria used in the biochemical process.

TECHNICAL SUPPORT

Perhaps the best reason for selecting PHase III, Inc. products is our technical support. PHase III, Inc. technical staff has an in-depth understanding of biochemical treatment processes that you will not find at other biotechnology firms. Our knowledge of specific species and strains of bacteria is unsurpassed in the industry. Most important, our technical people are accessible by phone to answer questions and solve problems in the event of operational problems.