



MICROBE ADDITIVES or ‘Bugs in Bags’

Oil will naturally degrade over time and become harmless to the environment, bioremediation is simply the speeding up of this process.

Commercially bioremediation consists of 2 main approaches, these are:

1. Bioaugmentation - adding oil degrading bacteria to supplement existing microbial population,
2. Biostimulation – stimulating the growth of existing oil degraders by the addition of nutrients or altering the spill areas existing environment.

Bioremediation is now a popular selling point for organic absorbents, many companies now claim to add microbes and nutrients to their products to speed up the remediation process. In reality it is simply a selling gimmick.

The US EPA published their finding on bioremediation in June 2004. They found that there was no real evidence that the infusion of extra microbes in the organic absorbent made any difference to the speed of oil degradation, and that the additional nutrients may simply be replaced by the application of agricultural fertilizer (altering the ph levels) and watering.

The report titled “Literature Review on the use of Commercial Bioremediation Agents For Cleanup of Oil-Containment Estuarine Environments” EPA/600/R-04/075 July 2004, claimed that “.. in the case of commercial bioremediation products, the literature is virtually completely lacking in supportive evidence of success...”
(<http://www.epa.gov/ord/NRMRL/pubs/600r04075/600r04075a.htm>)

It is now considered that the simple process of using an non-leaching organic absorbent (humus) watering and air rating the soil will alter the environment sufficiently to encourage degradation, regardless of so called ‘additives’. The most crucial aspect of the process is the application of a truly non-leaching 100% organic absorbent.

Sokerol is a 100% organic non-leaching absorbent and as such is considered an ideal product for the remediation of hydrocarbons. Sokerol will retain the hydrocarbon until it naturally degrades, making it safe for the environment and preventing the need for bacterial additives.

The natural time for degradation may be shortened by simply applying small quantities of an agricultural fertilizer and water.

Sokerol Australia will provide a bacteria additive product when and only when there is firm evidence that such additives will increase the speed of the hydrocarbons natural degradation.

It is always worth considering

- Would microbes survive for long periods in sealed plastic bags?
- Could you contain a microbe that breaks down hydrocarbons in “plastic”?
- The sudden change in the environment when opening the container would most likely cause a serious decline in any surviving microbe population.
- All living matter uses nutrients, air (oxygen) and creates waste over time, this consumption and excretion must alter the container/packaging over time.

It is important to be careful of those claiming to be ‘Bioactive’, ‘Bioefficient’, ‘Biomass Generation’ ‘Biomaintenance’ or ‘Environmental Additives’. It is simpler safer to use a non-leaching absorbent.