



## ENVIROnutri

### Description

ENVIROnutri is a bio-stimulant solution containing nutrients that accelerate the growth and biological activity of indigenous soil microorganisms to support the biodegradation processes of contaminated soils.

### Features

ENVIROnutri solution contains an ideal proportion of nutrients to compensate for possible nitrogen (N) and phosphorus (P) deficiency in the environment (soil and groundwater).

The nutrients act by bioactivating the biodegradation processes, facilitating bacterial growth and activity, preventing the processes from stopping due to a deficiency of essential elements.

<b>Composition</b>	Solution of mineral salts
<b>Appearance</b>	Slightly white, opaque liquid
<b>Odor</b>	Mild and barely perceptible
<b>Relative density</b>	0,99-1,04
<b>Solubility in water</b>	Soluble in water
<b>pH</b>	6,5 – 8,5 at 2% solution
<b>Radius N/P</b>	10/1
<b>Shelf life</b>	18 months

## Operation

It is used in in situ processes, injecting the soil washing solution into the piezometers or on site in bioremediation projects in bio-piles. Its formulation based on food grade active components means that its application in the subsoil makes it easier for pollutants to be more miscible in the aqueous phase, which allows the mobilization of

pollutants adsorbed in the matrix from the unsaturated zone to the saturated zone, increasing the concentration of pollution in the aquatic environment and allowing its elimination through mechanical processes such as pumping and treatment or through in situ treatment using oxidizing agents in chemical oxidation processes (ISCO).

## Applications

The application of ENVIROsurf is effective in soils and waters in a great variety of pollutants such as:

- TPH (all hydrocarbons derived from petroleum), as well as light or heavy fuels.
- Chlorinated: PCE, TCE, Vinyl chloride, etc.
- Volatile solvents such as methanol, ethanol, acetone, ethyl acetate, etc ...
- Various pesticides and herbicides.

## Advantages

- It is a biodegradable and non-toxic product. No trace of the product persists after its use
- Facilitates and improves on-site treatment processes, (e.g. pumping and treatment, biodegradation, chemical oxidation / reduction, etc.).
- Does not affect downstream water treatment systems (e.g. hydrocarbon separator, activated carbon filters, membrane filtration, biological treatments, etc.)
- Reduces treatment time in processes combined with other technologies (e.g. chemical oxidation / reduction, bioremediation, pumping and treatment, etc).
- Works well on all types of soils (silty sands, silts, silty clays, clays and fractured rocks).

## Format

20 L containers, 200L drums or 1000L



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