

# BioRem-2000

8611-055

## BioRem-2000 Oil Digester - Ground Water™

### Description

- ◆ A powerful blend of 12 strains of microbes, enzymes and natural botanical nutrients designed to digest hydrocarbons in groundwater remediation applications.
- ◆ Treats a wide range of hydrocarbons, such as crude oil, gasoline, fuels oils, diesel and multiple aromatics.
- ◆ Biologically converts hydrocarbons into carbon dioxide and water.
- ◆ Available in a ready-to-use liquid formula.
- ◆ Highly effective on free-product.
- ◆ Injected directly into groundwater.
- ◆ All-natural ingredients that FDA-GRAS listed as safe for plants, animals, aquatic life and humans.

### Technology

Number of Different Microbial Strains:	12
Microbial Count:	50 Billion/gram
Microbial Characteristic:	All GRAS Listed
Number of Enzyme Species:	7
Enzyme Activity:	6,000 u/mg.
pH Activity Range:	5-11 pH
Appearance:	Amber Liquid
Bioluminescence Test:	Positive for Living Cells
Salmonella:	Negative
Listeria:	Negative
Phosphorous:	Non-Detect

### Technical Information

Usage	Dilution Ratio	Ready to use
Physical Properties	Appearance	Liquid
	Color	Amber
	Fragrance	None
	pH	7
	Phosphate Content	None
	Shelf Life	Minimum 3 Year

## PRODUCT SALES SHEET

### Advantages

BioRem-2000 Oil Digester - Groundwater™ is a mixture of 12 strains of naturally-occurring microbes and seven enzymes coupled with adapted microbial nutrients used to remediate hydrocarbons. The microbes have the capability to produce extracellular enzymes which lead to the breakdown of hydrocarbons compounds, which transform them into carbon sources for the microbes.

The BioRem-2000 Oil Digester - Groundwater™ use all-natural Nano-Technology to break down the adsorption of hydrocarbons in groundwater and aquifer matrix. The Nano Technology breaks down macroscopic clumps of petroleum into smaller units while increasing the surface area.

### Usage Guide

*n-situ* groundwater bioremediation can effectively degrade organic constituents which are dissolved in groundwater. *In-situ* bioremediation of groundwater can be combined with other saturated zone remedial technologies (e.g., air sparging).

To accomplish this, extraction wells are drilled and the groundwater is pumped into tanks. The contaminated water is inoculated with BioRem-2000 Oil Digester - Groundwater™ along with nutrients and air sparging and treated before it is pumped back into the ground. The added nutrients and air assist the microbes in bioremediating the MTBE contaminated groundwater. Groundwater can also be treated underground by pumping BioRem-2000 Oil Digester Groundwater™, nutrients and air into the injection wells.

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