



PRODUCT BROCHURE

Bioxy's **Soil Restorer** utilizes a new approach to solving soil and water **hydrocarbon contamination** problems. Specifically formulated for safe, effective and environmentally friendly applications, **Soil Restorer** utilizes a blend of Activated Organic Polymers (AOPs), highly concentrated live, hydrocarbon-oxidizing bacteria, and a readily biodegradable, broad-spectrum, nutrient-rich package of amino acids and other proteins. This triple action product works synergistically to degrade hydrocarbons with minimal use of equipment, labor and cost. **Soil Restorer** is a low-cost liquid, making it an easy-to-use, cost effective means to eliminate hydrocarbon contamination problems in various industries. **Soil Restorer** is an excellent product to remediate hydrocarbons in soil and its sister product, **Aqua Restorer** is suited for water treatment. Both are effective on gasoline, jet fuels, diesel fuels, grease, tar, motor oils, crude oils, organic solvents, etc.

Benefits

- No Need to Excavate Soils
- No Dig-N-Dump Costs for Contaminated Soils
- Green and Safe Remediation Technology
- Significant Labor & Application Cost Savings
- Can be Used Through Multiple Application Methods



Application Methods

Soil Restorer is a liquid concentrate that must be diluted prior to use. **Soil Restorer** can be sprayed after dilution using standard spray application equipment including but not limited to hand sprayers, mechanical sprayers, water trucks, fire or emergency response equipment, pressure washers, aerial spray equipment, soil injection, well injection, wastewater injection, etc.

Soils Applications: Mix and saturate diluted mixture with contaminated soils thoroughly for maximum performance. For shallow/surface contamination, drench affected areas with enough dilution to fully saturate the soil using normal spray equipment or water trucks. For general contamination less than two feet, contaminated soil may require tilling or excavation to properly mix concentrate/water dilution into soils. For contamination deeper than two feet, product application can be applied through boring-n-pour method, soil injection, or on-site soil land farming and/or bio-piling.



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Water Applications: For contaminated water such as marshes, shorelines and open water with floating hydrocarbons, apply dilution directly to the contaminated areas using appropriate spray equipment or water cannons. For wastewater systems, contact Bioxy Research directly for appropriate treatment methods.

Application Rates

Soil Restorer must be diluted using 1 part concentrate to 10 parts clean water prior to use. Product can be diluted up to 100 parts water as directed for specific applications. Application rates are determined by level of contamination, area of application, and speed required for cleanup. Specific application rates are determined prior to sale by the manufacturer and/or distributor.

Soil: Standard application rate for contaminated soil is one gallon (4 liters) 10:1 diluted product per cubic yard (meter) of soil.

Water: Normal application rate for water applications is three gallons (12 liters) 10:1 diluted product per 1000 sq. feet (93 sq. meters) of contaminated surface area.

Wastewater systems will receive application rates between 5 and 100 PPM of the average GPD or system volume.

Product Effectiveness

The effectiveness and “speed” of this product is determined by several factors. In general, these factors are:

Temperature: Optimum performance temperatures range from 40°F (5°C) to 98°F (36°C).

pH: Maximum performance range is 5 – 9, acceptable range is 4 – 10.

Soil Moisture: Optimum soil moisture content is 15% to 20%.

Remediation Speed: Factors that influence speed of process include type, level, depth, and age of contaminants as well as method of applications, regulatory standards, and urgency.

Performance Tips: Various strategies may be used to maximize performance like application rate & frequency, the addition of aeration, and method of application.

Shelf Life: Properly stored unopened containers have a shelf life of 2 years, 1 year after opening.

For more information, please visit our website at www.bioxyresearch.com or contact us at info@bioxyresearch.com.