

# Bio-Regen Hydrocarbon



**Product Overview** **Bio-Regen Hydrocarbon** utilizes a new approach to solving soil and water hydrocarbon contamination problems with limited oxygen levels. Specially formulated for performance in aerobic, anaerobic and facultative environments, **BR Hydrocarbon** utilizes a special recipe of three distinct yet synergistic components, a blend of activated humic acid, a ultra high concentration of live synergistic bacteria, and a readily biodegradable natural amino acid complex consisting of a nutrient-rich extract with a broad-spectrum package of identifiable amino acids and other proteins. This triple action product is able to degrade hydrocarbons with minimal use of equipment, labor and cost. **BR Hydrocarbon's** liquid form and low cost make this an easy to use cost effective means for industries to eliminate hydrocarbon contamination problems themselves. **BR Hydrocarbon** is an outstanding product to remediate hydrocarbons in deep soil application, well, and wastewater applications. Use it on gasoline, jet fuels, diesel fuels, grease, tar, motor oils, crude oils, solvents, etc.

**Application Information** **BR Hydrocarbon** is highly concentrated and must be diluted with water prior to soil applications. Mixing must be done at 10 parts clean water to 1 part concentrate. Water between 42° and 120° F (6° and 50° C) gives you optimum performance. For applications to lakes, ponds, wells, or wastewater streams, product dilution is recommended.

**Well Contamination:** For well contamination, apply 10 to 100PPM of concentrate to the estimated water volume twice a month until levels of contamination are reduced to established thresholds. For maximum performance, it may be required to add air to the well. Extremely cold well water may increase remediation time due to reduced bio-activity.

**Wastewater Systems:** For wastewater systems, an initial shock treatment of the entire system will be required. Initial shock treatment will require calculating the total gallons in each part of the treatment system including holding tanks, treatment tanks, ponds, and lagoons. Each part of the system will receive a one-time inoculation dose. Thereafter, continuous dosing of 5 to 100PPM based on Gallons per Minute will be injected into the system. Contact a 3 Tier Technical Representative for a full system analysis and recommendation

**Deep Contamination:** Estimate total cubic yards (meters) to be treated. After determining the cubic yards (meters), plot out a grid every 5 to 10 sq. feet (1.5 to 3 sq meters) of the surface area. This grid will represent drill points and/or injection points for **BR Hydrocarbon**. Drill the wells to a depth that is within 12 inches above the deepest point of contamination. Insert 2 to 3 inch slotted PVC pipe into the drill wells. (Cap the bottom of the pipe prior to insertion) Mix **BR Hydrocarbon** at a 10 to 1 ration and fill all well pipes to the top. Periodically check pipes for liquid content (approximately every 5 days). Add diluted **BR Hydrocarbon** to maintain subterranean level. In approximately one month, there will be a drastic reduction in the contamination levels. Test the sites as dictated by local, state or federal requirements.

**Tank Cleaning-** For removal of volatile vapors and remediation of residual hydrocarbon tank fluids, dilute one gallon (4 liters) of concentrate in ten gallons (40 liters) of clean water. Through the top of the tank, liberally spray the inside of the tank. Let sit for 15 minutes and test tank air for volatile levels, repeat treatment if needed.

## Technical Information

**BR Hydrocarbon** is an active mixture of hydrocarbon-oxidizing, naturally occurring, single-celled micro-organisms with a complete amino acid packet delivered in an activated humic acid solution creating a triple action "bio-remediation catalyst and support system". It is specially formulated to be safe and environmentally enhancing while being effective.

**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.

**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. Contact 3 Tier for wastewater recommendations.

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

**For more information Contact:**

