

ENVIRO SOLUTION

Surface Remediation Cleaner

FEATURES & BENEFITS

- Ground-breaking Microbe Technology remediates hydrocarbons into water and carbon dioxide.
- Easily applied with mops, auto floor scrubbers and degreasing equipment.
- Excellent rinse-ability, dries quickly and removes all oily, slick film leaving a non-slip surface.
- Safe to use on any water-safe surface, including metal, concrete, plastic and rubber.
- Disposable in waste sewer drains whether or not facilities are private or municipal pre-treatment plants.
- Renders flammable liquids, such as gasoline, diesel and jet fuel, non-flammable.
- Non-toxic, non-pathogenic and is completely harmless to human, plant, animal and marine life.
- Compatible with oil/water separators, skimming units, evaporators, polymers and more.

BIOREMEDIATION TECHNOLOGY

Bioremediation is the application of biological microbes for the clean up of hazardous oil spills resulting in a safe, efficient and cost-effective solution. Bioremediation (Fig. 1) uses microbes, enzymes, oxygen and other nutrients to chemically transform oil into carbon dioxide and water. ENVIRO SOLUTION (Fig. 2) increases the surface area of the oil while the enzymes break down the contaminants into smaller molecules. The enzymes then attract the microbes (Fig. 3) and consume the oil leaving only water and carbon dioxide as by-products. Once the reaction is complete, the enzymes break free to attach to another hydrocarbon source in order to repeat the same reaction.

Fig. 1

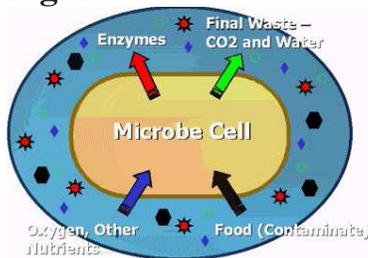


Fig. 2

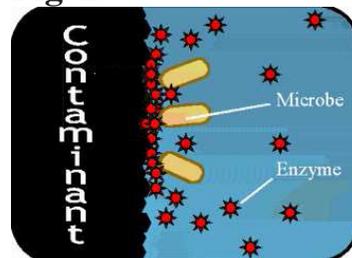
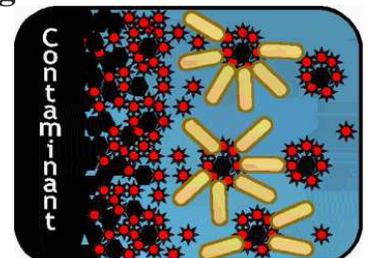


Fig. 3



SAFETY SOLUTIONS

ENVIRO SOLUTION has a pH of 7 and does not have any odor or contain any corrosives or butyls. These microbes are naturally-occurring, not genetically engineered, and are non-toxic and non-pathogenic. It prevents slip and fall accidents, which are 30% of all workplace accidents, by removing the oily film and leaving surfaces dry and oil-free. ENVIRO SOLUTION significantly reduces the ability of flammable hydrocarbons to ignite. First, the VOC's are inerted on contact eliminating the potential of ignition. Second, it removes the fuel and slickness resulting in reduction of future accidents and surface degradation.

FOOD PROCESSING SOLUTIONS

ENVIRO SOLUTION removes and degrades vegetable and animal oils and greases as well as proteins, starches and carbohydrates. This product is acceptable for use as a general cleaner (A1) on all surfaces in and around food processing areas, where its use is not intended for direct food contact. This product is also acceptable as a floor and wall cleaner (A4) in and around food processing areas, where its use is not intended for direct food contact. Use of this product in food processing or handling facilities requires that all food products and packaging materials be removed or protected prior to product use. A potable water rinse of cleaned surfaces is required after use of this product. When used according to manufacturer's instructions, the cleaner shall neither exhibit a noticeable odor nor leave a visible residue. Provides "deepcleaning" by penetrating the floor's surface and removing embedded oil/grease left in pores, cracks, grout and crevices by soap-based degreasers. Floor drains, normally clogged by soap-based cleaners, stay clean, free-running and odor-free.



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USES & APPLICATIONS

Mopping: Fill the container with properly diluted product (1:10 to 1:15 depending on soil type and concentration). Unlike degreasers, ENVIRO SOLUTION digests oil and grease. As a result, there will not be an oily film in the water of the mop bucket. The solution may be used for several days until a film begins to appear. Although the water may look dirty, it does not mean the solution has stopped working. If the solution does not seem to be “picking up” the oil very well, then it is time to change the solution. For best results, with oily floors or visible oil, allow the solution to remain on the surface for about 30 seconds before mopping. Liberally apply to floor with a wet mop, dip mop again into bucket and agitate solution into surface. If the grease and/or oil is very thick, use an old push broom to scrub the solution into the surface before mopping. ENVIRO SOLUTIONS will remove the oily film and leave the surface dry and clean preventing slip-n- fall accidents.

Auto Floor Scrubber: Fill scrubber with properly diluted product (1:20 to 1:40 depending on soil type and concentration). Start with a 1:25 dilution rate and adjust after testing. Add product to the solution tank full of clean water or dispense through a proportioner system. For best results, employ the double-scrub method. For the first auto floor scrubber pass, do not lower the squeegee. Spray solution while scrubbing. For the second pass, spray solution, scrub and lower squeegee for soiled water removal. ENVIRO SOLUTION will clean the auto floor scrubber by removing the hydrocarbon build up in the tanks therefore enhancing the overall performance. Leaves surface dry and oil-free without any residue and prevents slip-n-fall accidents.

Degreasing: Fill container with properly diluted product (1:2 to 1:8 depending on soil type and concentration). The dilution rate may be determined if the operator will be using rags to clean (stronger), scrub brush (medium) or rinsing with a power washer (weaker). When cleaning heavy oil/grease deposits, allow product to soak for 1-2 minutes before removing. Heavy deposits of synthetic grease may require additional dwell time. ENVIRO SOLUTIONS will remove the oily film leaving the surface dry and clean. It may be used on any water-safe surface.

Oil/Water Separators (OWS): Can be costly to maintain and, if not properly managed, can pollute surface and ground water and lead to costly violations. ENVIRO SOLUTION improves OWS operations and reduces costs and liabilities. Conventional degreasers disperse oil in wash water and make OWS's ineffective allowing oil to bypass the collection system straight to the sewer. ENVIRO SOLUTION added to an OWS breaks down petroleum products suspended or dissolved in the wastewater, floating oil, and/or sludge. Facilities using ENVIRO SOLUTION have eliminated wastewater violations and have reported reducing their sludge petroleum content by more than 80 percent. Such reductions lower the regulatory status of OWS sludge, which will affect the required disposal method and disposal costs.

Hydrocarbon Degrade Chart

Crude Oil	Gasoline	Diesel Fuel	Xylene
Kerosene	Fuel Oils	Jet Fuel	Toluene
Transmission Fluid	Motor Oil	Anti-Freeze	Glycols
Paraffin	Lubricating Oil	Grease/Tars	Carbon Black
Skydrol	Hydraulic	Cutting Fluids	Benzene
Acetone	Mineral Spirits	Paint Thinners	Animal Grease
Methanol	Vegetable Oils	Heating Oil	Solvents

Dilution Chart

Applications & Ratios	Heavy Duty	Medium Duty	Light Duty
Floor Scrubber	1:20	1:30	1:40
Mopping	1:5	1:10	1:15
Degreasing	1:2	1:4	1:8

FUEL REMEDIATION AND CLEANING POWER

The figure shown on the left shows a 1000 gallon underground fuel storage tank containing jet fuel residue and flammable vapors. Before this tank could be dismantled with cutting torches, the remaining fuel needed to be neutralized and the tank thoroughly cleaned to remove any flammable vapors. Two gallons of Enviro Solution were applied and circulated throughout the tank. The picture on the right shows that the remaining jet fuel was remediated, rendering the fuel non-flammable and neutralizing any flammable vapors. The tank was rinsed with pressurized water, leaving a clean, residue-free and vapor-free environment.



ENVIRO SOLUTION #2433

Surface Remediation Cleaner



Features:

- Outperforms other degreaser with EPA-recognized microbe technology
- Remediates oil, grease and other hydrocarbons into water and carbon dioxide.
- Replaces socks, pads and granular absorbents and eliminates disposal costs
- Quickly dissolves tough, oily soils
- Safe to use on any water-safe hard surface including metal, concrete, plastic, tile, urethane, VCT, epoxy and waxed floors and rubber
- Neutral pH, noncorrosive, no VOC's and odor free
- FPA: A1, A4



Description:

ENVIRO SOLUTION uses a revolutionary technology that remediates hydrocarbons into water and carbon dioxide eliminating 100% of disposal cost. It does not redeposit oil, grease and grime on other surfaces like most degreasers. Instead, it restores oily, slippery floors with a deep cleaning by dissolving embedded oil, grease and grime. You can use it to clean scrubber brushes, pads, squeegees and internal hoses and tanks allowing the scrubber to leave a cleaner surface. It extends the life of mop heads by up to 33%. ENVIRO SOLUTION reduces spill cleanup time and disposal costs. It dries quickly leaving surfaces non-slippery during and after application. Can be applied in wet or windy conditions. This product is compatible with skimming, evaporators, biological and polymer treatment systems. The preferred method of disposal is in an oil/water separator, pretreatment and/or wastewater treatment facilities. It reduces the frequency of pumping by dissolving sludge buildup and emulsified oils.

Applications:

- Crude Oil
- Gasoline/BTEX
- Cutting Fluids
- Ethanol
- Kerosene
- Aviation Fuels
- Synthetic Oils
- ATF & Brake Fluid
- Glycols/Antifreeze
- Lubricating Oil
- Diesel
- Methanol
- Solvents
- Naphtha
- Vegetable Oil
- Heating Oil
- Hydraulic Fluids
- Grease/Tar
- Skydrol
- Food-Grade Oil

Directions:

Dilution ratios depend on the soil type and concentration.

Application:	Heavy Duty	Medium Duty	Light Duty
Floor Scrubber	1:20	1:30	1:40
Mopping	1:5	1:10	1:15
Pressure Washing	1:25	1:50	1:75
Degreasing	1:2	1:4	1:8
Spill Control	1:2	1:5	1:10

***Product is activated by water. It will not work undiluted.**

Mopping: For best results with oily floors or visible oil, allow the solution to remain on the surface for about 30 seconds before mopping. Liberally apply to floor with a wet mop and agitate solution into surface.

Auto Floor Scrubber: For best results, employ the double-scrub method. For the first pass, do not lower squeegee. Spray solution while scrubbing. For the second pass, spray solution, scrub and lower squeegee for soiled water removal.

Degreasing: The dilution rate may be determined if the operator will be using rags to clean (stronger), scrub brush (medium) or rinsing with a power washer (weaker). When cleaning heavy oil/grease deposits, allow product to soak for 1-2 minutes before removing. Ratio depends on soil type and concentration.

Fuel Remediation: Use 2 gallons per 1000-gallon tank, circulate throughout the tank to render the fuel nonflammable and neutralize any flammable vapors. Rinse tank with pressurized water, leaving a clean, residue-free and vapor-free environment.

Golf Course De-oiling: Dilute 10:1 with water. Spray on infected area and let stand (1-2 hours), repeat three times then put on regular seeding and nutrient schedule.

DOT Placard:

None.

Product Characteristics:

Appearance:	Amber liquid
Odor:	Bland
Boiling Point:	212°F (100°C)
Freezing Point:	32°F (0°C)
Flash Point:	None
Solubility (water):	Soluble
Relative Density(H ₂ O=1):	1.079
Flammable Limits:	Nonflammable
VOC (%):	0
pH:	7
Storage:	Store in cool, dry area. Prevent product from freezing. Keep out of the reach of children.
Transport Information:	
Proper Shipping Name:	Nonhazardous liquid.
Hazard Class:	Not regulated.
Identification Number:	Not applicable.

Pictograms:

NOT A CONTROLLED



PRODUCT UNDER GHS

Signal Word:

None.

Personal Protective Equipment Required:

