



Bea-Munch Surface Cleaner

Features & Benefits

- Eliminates granular absorbents, socks, pads and caustic chemicals with ground-breaking microbe technology.
- Remediate (chemically transforms) a variety of hydrocarbons (oils & oil by-products) on a variety of surfaces into carbon dioxide and water.
- Eliminates 100% of disposal costs.
- Easily applied with mops, auto floor scrubbers, spray-n-wipe and parts washers.
- Fast-acting, dries quickly and removes all oily, slick residues *leaving a non-slip surface.*
- USDA-approved (A-1, A-4) NSF Reg. # 123558, biodegradable, with a neutral pH.
- Safe to use on any water-safe surface, including metal, concrete, plastic and rubber.
- Disposable in waste sewer drains whether the facilities are private or municipal pre-treatment.
- Renders flammable liquids such as gasoline and JP8 non-flammable.
- Non-toxic, non-pathogenic and is completely harmless to human, plant, animal and marine life.

How it Works

Bioremediation is the application of biological treatment to the cleanup of hazardous chemicals resulting in the destruction of organic wastes, eliminating environmental risk and liability. The process of bioremediation uses of microbes, enzymes, oxygen and other nutrients to chemically transform hydrocarbons into carbon dioxide and water. Bea-Munch Surface Cleaner (as shown in Fig.1) increases the surface area of the hydrocarbons while the enzymes break down the contaminants into material that the microbes can consume, finally transforming them into carbon dioxide and water. The enzymes used in Bea-Munch Surface Cleaner activate oxygen and covert it to a form in which the oxygen atom can be incorporated directly into the hydrocarbon compound, thus breaking the long-chain bonds. The enzymes then attract the microbes surrounding the cell surfaces to catalyze the breakdown reactions. As this process is repeated, the hydrocarbon compound is quickly broken down so that the microbes can then readily assimilate these simple hydrocarbons. Once the reaction is complete, the enzyme breaks free to attach to another hydrocarbon source in order to repeat the same reaction.



Applications & Uses

Mopping: Fill container with properly diluted product. For best results, use a double-scrub method. Apply with mop, agitating the solution into the surface and reapply. Bea-Munch Surface Cleaner will dissolve the hydrocarbons and leave the surface squeaky clean and dry without any film or residue preventing slip and fall accidents.

Auto Floor Scrubber: Fill container with properly diluted product. Using for the first time, employing the double-scrub method will give best results. Lay down solution with scrubbing action twice allowing the solution to remain on surface a few minutes. Then, lower the squeegee blade and vacuum the solution. For maintenance cleaning, use a single-scrub and vacuum method. Bea-Munch Surface Cleaner will clean the auto floor scrubber by removing the hydrocarbon build-up in the tanks and enhancing the overall performance as it works.

Spray-n-Wipe: Fill container with properly diluted product. Atomize the solution on machinery, equipment and/or tools and agitate the area loosening the oil, grease and grime. Rinse the machinery, equipment or tools with water and allow to air dry or wipe clean with a cloth. The surface will be dry and clean without any hydrocarbon residue or film and may be used on any water-safe surface. Some agitation may be required on heavy, stubborn hydrocarbon build-up.

Hydrocarbon Degrade Chart

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

Safety

Bea-Munch Surface Cleaner has a neutral pH and does not have any odor or contain any corrosives or butyls. These microbes are naturally-occurring, not genetically engineered, and are non-toxic, non-pathogenic and are completely harmless to human, plant, animal and marine life. It prevents slip and fall accidents by leaving surfaces squeaky clean and dry. Bea-Munch Surface Cleaner significantly reduces the ability of flammable hydrocarbons to ignite. Applying Bea-Munch Surface Cleaner to fuel and oil spills can eliminate several issues unlike foams which blanket the spill. First, the VOC's are inerted on contact eliminating the potential of ignition. Second, it removes the fuel and slickness reducing future accidents and surface degradation.



Bea-Munch Surface Cleaner vs. Conventional Methods

Bea-Munch Surface Cleaner offers several advantages over the conventional methods of handling hydrocarbon spills. First, Bea-Munch Surface Cleaner converts hydrocarbons into harmless carbon dioxide and water eliminating disposal costs. Granulars, socks and pads are just absorbents - once used to absorb hydrocarbons, these materials require proper expensive disposal. Second, granular absorbents can be messy to use and socks and pads require additional clean up to remove the slick, oily residues left behind. Bea-Munch Surface Cleaner is not a degreaser - it is a biological remediation product, which chemically transforms hydrocarbons into harmless products. Caustic chemicals (degreasers) simply move hydrocarbons from one location to another and, as a result, the hydrocarbons still exist whereas Bea-Munch Surface Cleaner chemically converts the hydrocarbons into carbon dioxide and water eliminating the problem. Since Bea-Munch Surface Cleaner is not a degreaser; it will not leave any oily residue or caustic film on floors, machinery or tools. Bea-Munch Surface Cleaner is compatible with oil/water separators, oil skimming units, evaporators as well as biological and chemical wastewater pretreatment facilities. Bea-Munch Surface Cleaner has a neutral pH, is USDA-approved and does not contain any butyls or harmful ingredients and can be applied to a variety of surfaces.



Bea-Munch Surface Cleaner vs. Other Remediation Products

Bea-Munch Surface Cleaner differs from the other so-called remediation products in several ways. First, Bea-Munch Surface Cleaner contains both enzymes and microbes whereas some products only contain enzymes. Enzyme-only products rely on "naturally occurring" microbes that are present to finish the process and only move the problem from one area to another without remediating the hydrocarbons. Second, some products require mixing a liquid with a dry powder and waiting 24 hours before using. Once mixed, the solution has a shelf life of 72 hours whereas Bea-Munch Surface Cleaner uses facultative microbes which have the ability to be placed in a dormant stage until ready to use and requires no mixing or waiting and is shipped in ready-to-use concentrate solutions.