

# BioRem 2000 SURFACE CLEANER™



*Reversing Years of Spills*

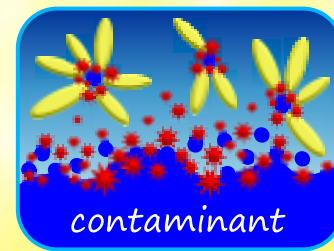
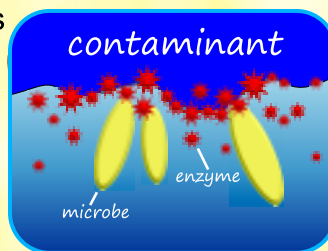
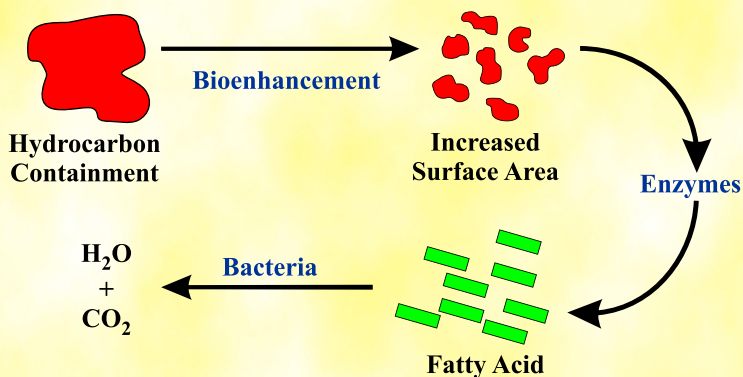


# BENEFITS

- ◆ **Powerful** - Microbe Technology remediates hydrocarbons into water and carbon dioxide.
- ◆ **Effective** - Eliminates 100% of disposal costs.
- ◆ **Superior** - Replaces granular absorbents, socks, pads and caustic degreasers.
- ◆ **Versatile** - Easily applied with mops, auto floor scrubbers and degreasing equipment.
- ◆ **Fast** - Removes all oily, slick film leaving a non-slip surface to prevent slip-and-fall accidents.
- ◆ **Advanced** - Safe to use on any water-safe surface, including metal, concrete, plastic and rubber.
- ◆ **Economical** - Disposable in waste sewer drains, reduces discharge figures and is compatible with skimming, evaporators and polymer systems.
- ◆ **Safe** - Non-hazardous, neutral pH and low toxicity to plant, animal and marine life.

## BIOREMEDIATION TECHNOLOGY

- ◆ Bioremediation uses microbes, enzymes and oxygen to biologically transform hydrocarbons into non-toxic substances carbon dioxide and water.
- ◆ It increases the surface area of the oil while the enzymes break down the contaminants into smaller molecules.
- ◆ The enzymes then attract the microbes which use oxygen to oxidize part of the carbon in oil to carbon dioxide.
- ◆ The rest of the carbon is used to produce new cells and the oxygen gets reduced, producing water.
- ◆ Once the reaction is complete, the enzymes and microbes break free to attach to another hydrocarbon source in order to repeat the same reaction.



## Certifications

- ◆ **Recognized** - By the EPA's DfE Program as a safe alternative to chemicals without sacrificing performance.
- ◆ **Listed** - On the U.S. EPA National Contingency Plan ("NCP") Product Schedule.
- ◆ **Approved** - For food processing and food service facilities (A-1, A-4).



BioRem-2000 Surface Cleaner™ is on the U.S. Environmental Protection Agency's NCP Product Schedule. This listing does NOT mean that EPA approves, recommends, licenses, certifies, or authorizes the use of BioRem-2000 Surface Cleaner™ on an oil discharge. This listing means only that data have been submitted to EPA as required by subpart J of the National Contingency Plan, Sec. 300.915. EPA/DfE recognition does not constitute endorsement of this product. The Design for the Environment logo signifies that the formula for this product, as CIRT Industries, Inc. has represented to the EPA, contains ingredients with more positive health and environmental characteristics than conventional cleaners. EPA/DfE relies solely on CIRT Industries, Inc.'s integrity and good faith, for information on the composition, ingredients, and attributes of this product. EPA/DfE has not independently identified, i.e., via chemical analysis, the ingredients in the product formula, nor evaluated any of the non-ingredient claims of CIRT Industries, Inc. EPA/DfE expresses its judgment and professional opinion only as to the environmental and human health characteristics of the product, based on currently available information and scientific understanding.

## USES & APPLICATIONS

### Hydrocarbon Degrade Chart

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

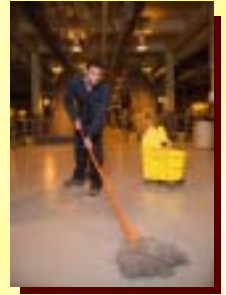
### Dilution Chart

Applications & Ratios	Heavy Duty	Medium Duty	Light Duty
Floor Scrubber	1:20	1:30	1:40
Mopping	1:05	1:10	1:15
Degreasing	1:02	1:04	1:08
Pressure Washing	1:50	1:75	1:100
Spill Control	1:1	1:5	1:10

# USES & APPLICATIONS

## Mopping:

- ◆ **Powerful** - Outperforms traditional “degreasers” which emulsify and re-deposit oil.
- ◆ **Effective** - Dries quickly and increases traction eliminating slippery, greasy floors.
- ◆ **Superior** - Cleans mop buckets and mop heads extending life and performance.
- ◆ **Economical** - Lasts 5 times longer and treats more area than traditional cleaners.



## Auto Floor Scrubber:

- ◆ **Powerful** - Performs better than “degreasers” which emulsify and re-deposit oil.
- ◆ **Effective** - Leaves oily, slippery floors clean, dry and residue-free.
- ◆ **Superior** - Cleans scrubbers brushes/pads, tanks, hoses and squeegees increasing performance.
- ◆ **Economical** - Dilute 3 ounces (1:40) - 6 ounces (1:20) per gallon of water.



## Degreasing:

- ◆ **Powerful** - Performs better than “degreasers” which emulsify and re-deposit oil.
- ◆ **Effective** - Leaves oily surfaces clean, dry and residue-free.
- ◆ **Economical** - Dilute 2.5 ounces (1:50) per gallon of water to full strength or pre-soak and rinse.
- ◆ **Safe** - On any water-safe surface (plastic, rubber, painted and metal).



## Pressure Washing:

- ◆ **Powerful** - Removes tough oil, grease and grime deposits on all types of surfaces.
- ◆ **Effective** - Significantly reduces wash water pollutant levels.
- ◆ **Versatile** - Effective with cold and hot-water pressure washers.
- ◆ **Safe** - Will not harm pressure washer seals or pumps.



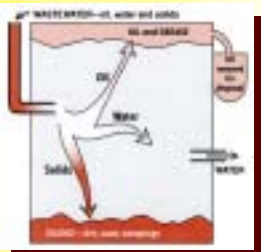
## Emergency Response/ Spill Control:

- ◆ **Powerful** - Suppresses odors and vapors from volatile spills.
- ◆ **Effective** - Reduces “cradle-to-grave” liabilities.
- ◆ **Versatile** - Gas pump, railroad spills and disconnects and tank cleaning.
- ◆ **Economical** - Reduces cost of spill response and treatment.



## Oil/Water Separators (“OWS”):

- ◆ **Powerful** - Reduces the frequency of pumping.
- ◆ **Effective** - Decreases sludge build-up and eliminates odors.
- ◆ **Versatile** - Dissolves the suspended or emulsified oils in the water.
- ◆ **Safe** - Complies with regulations and reduces violations.



## Parts Washing Solutions

### **BioRem-2000 Parts Cleaner - Liquid™** (8003-005/5-gal., 8003-055/55-gal.)

A powerful, concentrated water-based bio-remediating parts' cleaner with superior cleaning capabilities which eliminates waste disposal costs, as well as health and safety risks. Effectively degrades gasoline (BTEX), diesel, motor oils, fuel oils, grease, antifreeze, hydraulic, brake, ATF, cutting fluids, as well as animal and vegetable oils and heavy synthetic oils and greases. Contains corrosion inhibitors to prevent flash rusting.



- ◆ **Powerful** - Microbe-powered concentrated water-based formula with superior cleaning capabilities.
- ◆ **Effective** - Consistent performance with quick breakdown and removal of oils and greases.
- ◆ **Versatile** - Safe to use on all washable surfaces, including metal, rubber, plastic and painted surfaces.
- ◆ **Safe** - No VOC's, pH neutral, caustic and solvent-free, non-flammable and non-hazardous.
- ◆ **Economical** - Dilute 20:1 (6.4 ounces per gallon) with water.

### **BioRem-2000 Parts Cleaner - Powder™** (8002-005/5-gal., 8002-055/55-gal.)

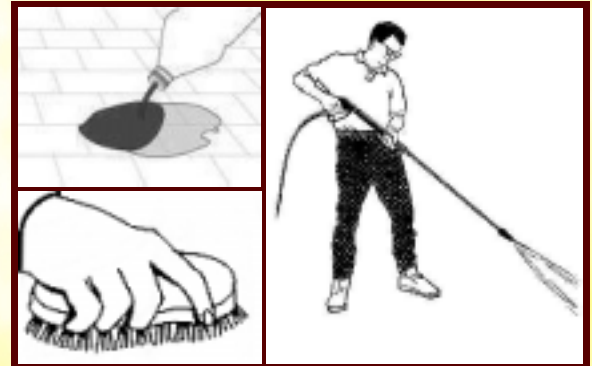
A powerful, concentrated bio-remediating parts' cleaner with superior cleaning capabilities which eliminates waste disposal costs, as well as health and safety risks. Effectively degrades gasoline (BTEX), diesel, motor oils, fuel oils, greases, antifreeze, hydraulic fluid, brake fluid, ATF, cutting fluids, as well as animal and vegetable oils and heavy synthetic oils and greases. Contains corrosion inhibitors to prevent flash rusting.



- ◆ **Powerful** - Microbe-powered concentrated formula with superior cleaning capabilities.
- ◆ **Effective** - Consistent performance with quick breakdown and removal of oils and greases.
- ◆ **Economical** - Dilute 16 ounces (1 pound) per every 5 gallons of water.
- ◆ **Versatile** - Designed for use in any automated spray cabinet.

## Oil Vanisher Ultimate Stain Remover™

- ◆ **Powerful** - Microbe-powered oil stain remover.
- ◆ **Effective** - Quickly removes stains regardless of age.
- ◆ **Versatile** - Removes stains from concrete, asphalt, pavers and more.
- ◆ **Safe** - Bio-based using only 100% all-natural ingredients.



### **How to Apply?**

**Concrete and Pavers:** Add product to the stained area. Then apply half the amount of water as product used on the stained area. Use a brush to agitate the stained area for 1 to 2 minutes. Make sure the solution does not dry. If necessary, add more product and water. Rinse the area completely with clean, high-pressure water. If necessary, repeat the application. The product may take longer to remove stains in cooler temperatures.

**Asphalt:** Use the above directions; however, only agitate the stained area for 30 seconds. A long dwell time is NOT RECOMMENDED because of the oil content in asphalt.

# BioRem-2000 Surface Cleaner™

## Material Safety Data Sheet

### I. PRODUCT IDENTIFICATION:

**Manufacturer For:** Maintenance Products, Inc.  
**ADDRESS:** 4820 Starcrest Drive, Monroe, NC 28110  
**PHONE:** 704-289-4494  
**EMERGENCY CONTACT:** CHEMTREC: 800-424-9300  
**CHEMICAL NAME:** MIXTURE  
**COMMON NAME:** BioRem-2000 Surface Cleaner  
**EFFECTIVE DATE:** December 31, 2010  
**H.M.I.S./NFPA Rating:** Health 1, Flammability 0, Reactivity 0, P.P.E. B

### II. HAZARDOUS INGREDIENTS:

Ingredients	CAS	%	OSHA PEL	ACGIH TLV
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DOES NOT CONTAIN ANY HAZARDOUS INGREDIENTS

### III. HEALTH HAZARDS:

Effects of Overexposure:

**Eyes:** May cause irritation to eyes.  
**Skin:** Non-corrosive. No effect under normal use.  
**Inhalation:** No effect under normal use.  
**Ingestion:** Non-toxic. No effect under normal use.

### IV. FIRST AID MEASURES

**Eyes:** Flush eyes for fifteen minutes with water.  
**Skin:** Wash exposed areas with soap and water.  
**Inhalation:** Move to fresh air.  
**Ingestion:** Drink two glasses of water. Do not induce vomiting.

### V. FIRE AND EXPLOSION HAZARD DATA:

**Flammability:** Non-flammable  
**Flash Point:** Equal to water  
**Extinguishing Media:** Dry chemical, water fog, CO<sub>2</sub>, sand.  
**Unusual Fire Hazards:** None Expected.  
**Products of combustion:** Carbon oxides.

### VI. ACCIDENTIAL RELEASE MEASURES

**Material Spillage:** Contain, retrieve spilled materials (absorb, pump, vacuum).  
Follow all local, state and federal regulations.

### VII. HANDLING & STORAGE:

**Precautions:** Store in cool, dry place. Prevent product from freezing.  
**Storage:** Store at room temperature.  
**Other precautions:** Keep closed when not in use. Keep out of reach of children.

### VIII. EXPOSURE CONTROLS & PERSONAL PROTECTIVE

**Engineering Controls:** No control measures are required under normal conditions.  
**Protective Equipment:** Wear safety glasses and gloves.

### IX. PHYSICAL/CHEMICAL CHARACTERISTICS:

<b>Boiling Point:</b>	212	<b>Appearance:</b>	Amber
<b>Specific Gravity:</b>	1.0031	<b>Form:</b>	Liquid
<b>Odor:</b>	Bland	<b>VOC (g/L)</b>	0
<b>Evaporation Rate:</b>	N/D	<b>Vapor Density:</b>	N/D
<b>Solubility:</b>	Soluble	<b>pH:</b>	7

### X. REACTIVITY DATA:

**Stability:** Stable  
**Conditions to Avoid:** None known  
**Incompatibility:** Acids, strong oxidizers  
**Hazardous Polymerization:** Will not occur  
**Corrosivity:** Non-corrosive

### XI. TOXICOLOGICAL DATA:

**Toxicity Data:** None as listed by OSHA, NTP, IARC or EPA

### XII. ECOLOGICAL DATA:

**Ecotoxicity:** Non-toxic to aquatic organisms

### XIII. DISPOSAL CONSIDERATIONS:

**Waste Disposal:** Dispose of in accordance with local, state and federal regulations.

### XIV. TRANSPORT INFORMATION:

**D.O.T. Hazard Classification:** N/A – NON-REGULATED

### XV. REGULATORY INFORMATION:

<b>S.A.R.A. III Sec. 311 &amp; 312:</b>	N/A
<b>S.A.R.A. III Sec. 313:</b>	NOT covered under SARA 313
<b>TSCA Registry:</b>	YES

### XVI. OTHER INFORMATION:

The information provided in this MSDS is believed to be reliable and accurate. However, the information is provided without any warranty or guarantee, express or implied, regarding its correctness. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of the use of this information. The buyer assumes all responsibility of using and handling the product in accordance with the federal, state and local regulations.