

SpillAway - Brands MICROBIAL HYDROCARBON REMEDIATION

## FORMULA

HC-100<sup>™</sup> is our professional product for the bio-remediation of deep soil and ground water hydrocarbon contamination. This formula was developed to help solve contamination situations

that demand minimal disruption to surrounding environments while maintaining economic feasibility. *HC-100*<sup>™</sup> affords you the ability to reach deep into contaminated areas, perform in-situ bio-remediation, realize dramatic material & labor savings and accomplish remediation goals in a short period. HC-100<sup>™</sup> is a blend of naturally occurring, live synergistic microorganisms that are chosen for their exceptional ability to bio-remediate hydrocarbons rapidly. SpillAway+ Brands can custom blend this product for your specific needs and unique contamination problems.

## HOW TO USE THIS PRODUCT

PRODUCT OVERVIEW

HC-100™ is highly concentrated. This product must be mixed in a 10:1 ratio with water. Changing this mixing ratio is generally not recommended. Each mixed gallon of *HC-100*<sup>™</sup> will remediate 1 cubic yard of soil or approximately 200 gallons of water.

The following is the general procedure for using this product.

- Determine the area that is contaminated. This can be done by multiplying the length x width x depth in ft.. Then divide by 27 to determine cubic yards.
- After you have determined the above, plot-out a "matrix" approximately every 3-10 feet on the surface area, depending on soil density. This matrix will be the drilling points for the "Injection Wells" for the  $HC-100^{TM}$ .
- Drill the "Injection Wells" to a depth that is approximately 1 foot above the deepest point of contamination. Cap the bottomn & insert 2" PVC pipe to this depth. This pipe should be "slotted-screened" pipe, generally found at "well supply companies". It is at these sections that the HC-100<sup>TM</sup> will enter the sub-surface of the terrain. If you are going to inject directly into
- ground water "pools", please consult the factory. Mix the *HC-100*<sup>™</sup> at the 10:1 ratio in sufficient quantity to fill all of the well pipes, from top to bottom.
- Fill each pipe with the mixture and put a temporary "cap" on each.
- If possible, insert a 1/4" plastic air tube, through the cap, to the bottom of the pipe.
- Connect all of the air tubes to a central compressor at a pressure of approximately 5-8 lbs. PSI. This air will help to accelerate the bio-remedial process.
- The pipes should be checked for liquid content after 7 days. Keep the pipe filled with HC-100<sup>TM</sup> for 2 weeks. Add mixture to maintain this level as needed.
- In approximately 30-45 days there will be significant reductions in the contamination levels.
- Test the site as dictated by local or managing authority requirements.
- CALL YOUR DISTRIBUTOR FOR ANY QUESTIONS YOU MAY HAVE ABOUT THE ABOVE PROCEDURES.

FOR OPTIMUM EFFECTIVENESS, A WATER TEMPERATURE BETWEEN 60° F. AND 90° F. SHOULD BE MAINTAINED. DO NOT EXCEED A WATER TEMPERTATURE OF 120° F.

APPLICATIONS
--------------

- DIESEL FUEL
- HEATING OIL
- GASOLINE
- BENZENE
- PARAFFIN
- LUBRICATING OIL
- PAINT THINNERS

TECHNICAL INFORMATION

The following is a partial list of the hydrocarbons that *HC-100*<sup>™</sup> can remediate. Please contact SpillAway+ Brands™ if you have any questions about its usage:

- MINERAL SPIRITS
- MOTOR OIL
- AROMATICS
- ETHYLBENZENE •
- JET FUEL ۲
- **CUTTING OILS** •
- GLYCOLS
- NAPHTHALENE CRUDE OIL . TOLUENE

.

ALCOHOL

- . KEROSENE
- . SOLVENTS .
  - ANTI-FREEZE
- ORGANIC PESTICIDES ORGANIC HERBICIDES .
- TRANSMISSION FLUID .
- XYI ENE .
- ORGANIC SOLVENTS .
- . GREASE

.

- TARS

HC-100<sup>™</sup> is an active mixture of hydrocarbon-oxidizing, naturally occurring, single-celled micro-organisms and water.

PHYSICAL PROPERTIES:		
Appearance:	Clear Liquid	
Odor:	Organic	
Boiling Point:	212° F.	
Soluble in Water:	Complete	
pH Concentrate"	6.9 to 7.2	
pH Diluted:	6.9 to 7.5	
Evaporation Rate:	Same as Water	

PRODUCT EFFECTIVENESS: The effectiveness of this product and the "speed" at which it works is determined by certain factors. In general these factors are as follows: TEMPERATURE: The warmer the temperature, the faster this product will work. The effective operating temperature is between 42° F. & 120° F. AERATION & PRESSURE: Aeration (air hose or "bubbler) & pressure speeds the process. TYPE OF HYDROCARBON: Some hydrocarbons take longer than others.

The bio-remedial process generally will begin immediately but may take longer to complete depending on the above factors.

PACKAGING INFORMATION

**5 GALLON "CUBITAINERS"** SHIPPING: 36 UNITS PER SKID BULK PACKAGING AVAILABLE