

# NavalKleen

CONCENTRATED MICROBIAL-ENZYMATIC HYDROCARBON REMEDIATION AGENT  
For

**OIL-WATER SEPARATORS - MARINE BILGES - OILY WASTE TANKS**

## PRODUCT INFORMATION BULLETIN

**EnviroLogic**  
BIO-BASED TECHNOLOGIES Inc.

### Product Overview

There has been an increasing mandate, from governmental environmental agencies, for the installation and use of Oil-Water Separators & Interceptors in Marine Industry. These new regulations have placed a heavy burden, both financial & operational, on all phases of Marine Industry. **NavalKleen™** can & will help to overcome many of these expenses. **NavalKleen™** has the ability to significantly reduce hydrocarbon contamination in Bilges, Oily Waste Tanks and Oil Water Separators. The added cleaning & degreasing bio-surface agent will help to keep your facility clean & safe for all personnel.

**NavalKleen™** is a blend of naturally occurring micro-organisms chosen for their ability to metabolize hydrocarbons in **Bilges, Oily Waste Tanks and Oil Water Separators**. When used in a routine maintenance program, **NavalKleen™** will eliminate hydrocarbon build-up, eliminating the need to clean **Bilges**, pump the **Oily Waste Tank** and clean the **Oily Water Separator**.

### How To Use This Product

**NavalKleen™** is highly concentrated and effective. The following suggested uses are a general guide to the use of the product. Call for additional questions you may have.

**GENERAL CLEANING:** In a sprayer, using a ratio of 15:1 (Water to **NavalKleen**) spray cofferdams, decks etc.

**DRY BILGES:** In a sprayer or pressure washer, using a ratio of 20:1, wash the bilges or deck area. Allow the **NavalKleen** to consume the hydrocarbon based compounds. Operate the bilge pumps and transfer to oily waste tanks.

**WET BILGES:** Mix **NavalKleen** using a ratio of 15:1 and pour mixture into the bilges. Treat as for general cleaning.

**OIL WATER SEPARATOR:** Add 1% of the "OWS" capacity to the separator. Allow to re-circulate and agitate.

### Where To Use This Product

**NavalKleen™** can be used to remediate all petroleum hydrocarbons. The following is only a partial list of the most common contaminants  
Contact: **EnviroLogic, Inc.**, if you have any questions about its usage:

#### COMMON FUELS

- NO. 2 DIESEL FUEL
- NO. 6 DIESEL FUEL
- BUNKER C
- GASOLINE
- KEROSENE
- AVGAS
- DF-A ARTIC
- DF-1 LOW TEMP
- DIESEL FUEL MARINE (DFM)
- NAVAL DISTILLATE FUEL NDF - MIL-F-16884H
- BURNER FUEL OIL - ASTM D396 STD SPEC FUEL OIL
- JP-5/JP-8 STANDARD - MIL-T-5624P AVIATION TURBINE FUEL
- JP-4 JET FUEL
- F-44 (JP-5)
- JP-5 JET FUEL
- JP-7 JET FUEL
- JP-8 AVIATION TURBINE
- DF-2 GENERAL
- NPD MGO
- F-76 DIESEL

#### COMMON LUBE & HYDRAULIC OILS

- 9250 L06 LUBE OIL DIESEL - MIL-L-9000H LUBE OIL, SHIPBOARD HIGH OUTPUT DIESEL
- 2190 TEP LTL LUBE OIL - MIL-L-17331H LUBE OIL STEAM TURBINE
- ANSI/SAE J1899-95
- MOTOR OIL AUTOMOTIVE
- MIL-H-5606- HYDRAULIC FLUID, SYNTHETIC
- MIL-L-23699- AIRCRAFT GAS TURBINE SYNTHETIC LUBRICANT
- MIL-H-17672D-HYDRAULIC FLUID PETROLEUM
- MIL-H-19457D-HYDRAULIC FLUID, FIRE RESISTANT
- TRANSMISSION FLUID
- TRANSFORMER OIL
- MINERAL OIL
- PARAFFIN

#### COMMON HAZARDOUS SUBSTANCES

- ETHYLENE GLYCOL
- GLYCOETHERS
- KETONE SOLVENTS
- ACETONE
- METHYL ALCOHOL
- ISOPROPYL ALCOHOL
- MINERAL SPIRITS
- BENZENE
- NAPHTHALENE
- N-HEXANE
- PAINT THINNER
- PETROLEUM DISTILLATES
- STODDARD SOLVENT (PD-860)
- TOLUENE
- TURCO SOLVENT
- XYLENE
- ETHYLBENZENE
- ORGANIC PESTICIDES

**CALL US FOR YOUR SPECIFIC NEEDS**

### Technical Information

**NavalKleen™** is an active mixture of hydrocarbon-oxidizing, naturally occurring, single-celled micro-organisms with a "bio-surface cleaning agent" and water. **It is specially formulated to be safe, environmentally enhancing and effective.**

#### PHYSICAL PROPERTIES:

Appearance: Pale Yellow Liquid  
Odor: Orange Citrus  
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. (Range 42° F. to 130° F.)

**AERATION & PRESSURE:** The use of an industrial sprayer or pressure washer speeds the process.

**TYPE OF HYDROCARBON:** Some hydrocarbons take longer than others.

**It has been our experience that the "cleaning" action of this product begins immediately. The bio-remedial process can begin almost immediately but may take longer depending on the above factors.**

### Packaging Information

**5 GALLON "CUBITAINERS"**  
**55 GALLON DRUMS**  
**BULK PACKAGING AVAILABLE**

