

# NavalKleen™

CONCENTRATED MICROBIAL-ENZYMATIC HYDROCARBON REMEDIATION AGENT

## INFORMATION

**NavalKleen** is a blend of naturally occurring micro-organisms that metabolize oil waste and other hydrocarbons. The **organisms simply digest the majority of hydrocarbons present in bilges, oily waste tanks and oil water separators with little disruption to surrounding, non-contaminated areas.** The by-product is water that meets environmental regulations and is ready for disposal. **NavalKleen is specially formulated to be easy to use, environmentally safe and cost-effective.**

This unique cleaning agent, utilizing bioremediation technologies, is a blend of naturally occurring micro-organisms chosen for their ability to metabolize hydrocarbons. 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. **The continual use of this product will result in lower levels off concentration of NavalKleen to maintain consistent expectations.** Routine use in preventative maintenance program can lead to increased cost savings provided by the bioremedial process.

## USES & APPLICATIONS

NavalKleen™ is an exception cleaning product for **COMMERCIAL OCEAN VESSELS.** Some of its key features and applications are:

- BILGES - BALLASTS - OIL/WATER SEPARATORS
- INTERCEPTORS AND OILY WASTE TANKS
- GENERAL CLEANING & DEGREASING IN ENGINE ROOMS
- REDUCES OVERALL MAINTENANCE COSTS
- REDUCE HEALTH & SAFETY ISSUES
- APPROVED BY US NAVY - USCG - MILITARY SEALIFT COMMAND
- ENVIRONMENTAL DIRECTIVE EIN 201

## DIRECTIONS & PROPERTIES

NavalKleen™ is highly concentrated and effective environmentally safe product. *The following suggested directions are a general guideline to the use of the product:*

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

### 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.

**PACKAGING:** 5 gal., 55 gal., 275 gal. tote containers and bulk packaging available, please call for details and options.

**NavalKleen** can be used to remediate all petroleum hydrocarbons. *The following is only a partial list of the most common contaminant's:*

### 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 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

*A partial listing of additional bioremedial products available through Environmental Solution, Inc.:*

• Bioremedial Absorbents • Light & Heavy Duty Multi-Use Cleaner/Degreaser • Bio Based Solvent Replacements • Soil & Water Remediation • Food Processing Plants • Bioremedial Parts Washer • Floating Absorbent • Oil Water Separators • Oil & Petroleum Processing, On/Off shore

FOR ADDITIONAL INFORMATION OR TO PLACE AN ORDER, PLEASE CONTACT ENVIRONMENTAL SOLUTION, INC.

**Bioremedial Cleaning Products for a Cleaner, Greener Planet.**

Environmental Solution, Inc.



**Environmental Solution, Inc.** is a distributor of bioremedial cleaning products that eliminate spills, contamination and environmental hazards utilizing eco-friendly solutions manufactured by EnviroLogic, Inc.

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