

# SEACLEAN

## 1. DESCRIPTION

Strong emulsifying cleaning agent for the removal of heavy crude oil, soot, asphalt and carbon black stains, by direct injection, Seaclean method, spraying and/or recirculation method. Based on aliphatic / aromatic hydrocarbons and non-ionic / anionic surface-active agents. Washing times are reduced by 50% and only slight agitation is normally required. The product is safe to use on common metals.

## 2. APPLICATIONS

### Tanks

UNI AMERICAS' SEACLEAN can be used for the removal of most mineral oils and fats in cargo and storage tanks.

### Double Bottom Tanks

SEACLEAN can be used for cleaning and gas freeing of double bottom tanks. Using the rolling motion of the ship will normally provide sufficient agitation.

## 3. DIRECTIONS FOR USE

### CLEANING OF CARGO AND STORAGE TANKS

#### Pre-wash:

Before cleaning with SEACLEAN, it is recommended to pre-wash tanks with hot water of approximately 50°C except for crude oil, drying and semi-drying oils where a prewash with cold water should be applied.

#### Direct Injection Method for Cargo Tanks:

Undiluted SEACLEAN should be injected at a predetermined rate into the pressure side of the automatic tank cleaning system line on deck by means of an air-operated drum (barrel) pump. Usually an injection rate of **0.1-0.2 liter SEACLEAN per 100 liters** of tank wash water is sufficient. Cleaning time **2-6 hours**. Subsequently rinse with water.

#### Hand Spraying Method:

Spray undiluted SEACLEAN on to bulkheads, frames, stringers, longitudinals etc. Using an air-operated drum pump connected with a delivery hose and hand spray gun. After a predetermined reaction time, tanks should be rinsed with water using the automatic tank washing machines. For spot cleaning only, use hand held hose for rinsing, for instance a fire hose with nozzle. Hand Spraying Method is the most economical system in terms of chemical consumption but requires tanks being gas free enabling men to enter tanks. However, Hand Spraying Method has a practical time limitation depending on tank sizes, i.e. total tank surface to be sprayed.

#### Recirculation Method:

A chemical solution is prepared in one of the after tanks near the pump room, circulated via the automatic tank washing system pump and heater to the tank to be cleaned, where-from the solution is returned to the chemical solution tank via the stripping line. Usually it is not possible to recirculate

### POWERFUL SOLVENT BASED CLEANING AGENT FOR TANK CLEANING AT SEA

(IMO APPROVED)

#### Product Highlights

- Removes heavy crude oil, soot, asphalt and carbon black stains.
- Washing times are reduced by 50%.
- Only slight agitation is normally required.
- Safe to use on common metals.

#### Product Characteristics

Appearance:	Clear liquid, amber
Corrosive action:	None
Specific gravity:	0.9(20°C)
Flash Point:	>80°C
pH:	7

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clean chemicals clean ships clean seas



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solution through the tank washing system heater (to maintain solution temperature) without making a temporary connection between the chemical solution tank and the tank-washing pump. Capacities of solution tank, pipelines and pumps etc. should be calculated carefully to ensure sufficient volumetric quantity for a continuous recirculation. Depending on size and condition of tanks to be cleaned and quantity of chemical solution, a drawback in this method is that usually only 3 (three) tanks can be cleaned with one solution after which a fresh solution should be made and heated before cleaning can continue. The required solution strength is **2-6% SEACLEAN**. After chemical cleaning the tanks should be rinsed thoroughly with seawater or fresh water depending on availability and requirements.

## At Sea Cleaning Method: (Double Bottom Tanks)

Time, temperature and agitation of chemical solution are important factors for the successful cleaning of Double Bottom Tanks.

### Procedure:

1. Heat tank to higher than normal temperature, pump out as much fuel as possible and trim vessel to ensure complete stripping.
2. Close all valves on engine room manifold.
3. Introduce first dose of **SEACLEAN**, through the sounding pipe, in accordance with the dosage table stated below and fill the tank to 25% of its capacity with sea water. For filling the tanks it is advised not to use the ballast lines as they may contain fuel oil making the cleaning more difficult.
4. Heat cleaning solution to minimum **60°C** and maintain temperature for **48 hours**. If heating coils are not available, live steam may be used for heating the solution and maintain temperature.
5. Empty tanks completely, fill to **50%** capacity and empty again. Where single stage cleaning is used the previous steps are ignored.
6. Add second dose of **SEACLEAN** and fill tank with seawater to **50%** of its capacity, continue heating and maintain at this level for **48 hours**.
7. Add further seawater to fill tank to **75%** capacity, continue heating and maintain for another **48 hours**.
8. Empty tanks and pressure rinse with clean water through sounding pipes for **1-2 hour** under continuous stripping. Pressure should be kept as high as safety permits.
9. When rinsing is completed stop discharge (stripping) pump and fill tank until clear water runs from sounding pipes on deck.
10. Stop water supply and empty (strip) tank. Trim vessel to ensure complete stripping.

**Note:** If tanks are not severely contaminated and/or the fuel oil viscosity is lower than **180 cst at 50°C** the cleaning process should be in one stage-using step **5-10** only.

## 4. OTHER INFORMATION

Highly concentrated blend of aromatic solvents, emulsifiers and surface-active ingredients. Emulsifiable with water to a maximum of **50%**. Undiluted at room temperature or in emulsions with water up to **6%** at a maximum temperature of **60°C** it can be used on plastic materials, epoxy and zinc silicate coatings.