

SEACLEAN

APPLICATIONS

SEACLEAN is used for cleaning and gas-freeing of cargo tanks contaminated with petroleum residues, double bottom tanks, deep tanks and bilges. Can be used neat or diluted with water. Can be used with most tank coatings. Cleaning methods: with machines, manual spraying, rock and roll, re-circulation.

DIRECTIONS FOR USE

CLEANING AND GAS FREEING OF DOUBLE BOTTOM AND DEEP TANKS AT SEA - ROCK AND ROLL METHOD

1. Strip tank of all possible fuel. Where possible, heat fuel to assist removal, and trim vessel to give maximum stripping suction.
2. Flush tank with seawater, while heating, stripping constantly. Ensure all other valves to and from the tank are closed.
3. After flushing add first dosage of SEACLEAN to tank. Use 10 to 20 lt. of SEACLEAN per 1000 lt. tank capacity. Fill tank to 25% capacity with seawater and apply heating where possible (up to 60°C maximum). Maintain for 24 hours.
4. Fill tank to 95% capacity with seawater. Apply heating to 60°C maximum, if available, and maintain for 48 to 72 hours. If the sea is calm fill up the tanks enough for the solution to be in contact with the overheads.
5. Discharge and strip tank. Fill 50% capacity with seawater. Maintain for 2 hours to allow rinsing.
6. Discharge tank and strip. Flush tank with seawater for 2 hours, stripping constantly.
7. Add second dosage of SEACLEAN to tank (10 to 15 lt. per 1000 lt. tank capacity). Fill tank with seawater to 90-95% capacity and apply heating to 60°C maximum, where available. Maintain for 48 to 72 hours.
8. To gas free, fill tank with seawater through the sounding or vent pipe, and press up tank in order to overflow. Discharge and strip completely by trimming the vessel for the complete removal of water.
9. Flush tank with seawater for 2 hours, stripping constantly.
10. Test tank atmosphere with gasmeter. If the tanks are to be ballasted do not use the cargo line but add ballast water with fire hose through sounding or vent pipe to prevent re-contamination.

CLEANING CARGO TANKS USING TANK CLEANING MACHINES

Apply SEACLEAN to tank surfaces using fixed and portable tank cleaning machines such as Butterworth type. SEACLEAN may be prepared in a solution tank or, if possible, injected by metering pump into the fresh water. Recommended concentration is 2 lt. SEACLEAN to 1000 lt. of water. The tanks should be stripped continuously while washing.

Continued on page 2

No. 4.5



SEACLEAN

Fast and effective tank cleaner containing petroleum solvents, emulsifying detergents and surface-active agents.

- High solvent power, rapid penetration
- Rapidly emulsifies in fresh or salt water
- Rapid rinsing leaving clean, oil free surface.
- Concentrated product, effective and economical in diluted solutions
- Non-corrosive to metal and paint finishes
- Simple and effective cleaning of tanks at sea
- Low toxicity when mixed with sea or fresh water as recommended.

PRODUCT CHARACTERISTICS

Appearance:	light yellow, amber or dark brown liquid
Corrosive action:	metal - none paints - none rubber - slight swelling
Specific gravity:	0,85 - 0,9 (20°C)
Flash point:	>63°C
IMO Class:	9 / III
UN Number:	3082
ADR:	9.11c)

UNIClean

CLEANING OF BILGE SPACES, PUMP-ROOMS, ETC. AT SEA ROCK AND ROLL METHOD

Depending on the state of soiling a concentration of 1 to 2 lt. of *SEACLEAN* for 1000 lt. of water is used as follows:

- 1. Calculate the volume of water required to fill the bilge to a depth that ensures all areas to be cleaned will be covered.
- 2. Determine the quantity of *SEACLEAN* needed to give required solution strength.
- 3. Apply *SEACLEAN* to the area to be covered then fill with water to give required depth.
- 4. Vessel's motion should ensure mixing of solution and will provide cleaning agitation. Allow at least 24 hours agitation time.
- 5. Pump bilge dry, flush down and repeat if necessary.

RECIRCULATION METHOD

The chemical solution is prepared in a cargo tank near the pump room. The strength of the solution depends on the quantity of water required for circulation: 10 - 20 lt. per 1000 lt. of water. Depending on the size and the condition of the tank to be cleaned, the solution can be used only for three tanks after which a new solution should be made. After cleaning rinse the tanks thoroughly with seawater or fresh water, depending on availability and requirements

HAND SPRAYING METHOD

Use Seaclean undiluted on the bulkheads, frames, stringers etc., using a spray gun. After pre-determined reaction time, rinse the tanks with water, using automatic tank-cleaning machines. For spotcleaning Seaclean can be used by hand, using a hose for rinsing.
When applying these methods, the tanks must be gas-free before entering the tanks.

Tank capacity (ton)	SEACLEAN proportion (liters)		
Condition	Min	Normal	Max
2.5	2	4	6
5	4	8	12
10	8	16	24
15	12	24	36
20	16	32	48
25	20	40	60
30	24	48	72
40	32	64	96
50	40	80	120
75	60	120	180
100	80	160	240
200	160	320	480
250	200	400	600
300	240	480	720
400	320	640	960
500	400	800	1200
600	480	960	1440
700	560	1120	1680
800	640	1280	1920
900	720	1140	2160
1000	800	1600	2400

NATURE OF SPECIAL RISKS AND SAFETY ADVICE

In accordance with the latest EEC Council directives this product is subjected to:

R51/53 : Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment

R65 : Harmful; may cause lung-damage if swallowed

S2 : Keep out of reach of children

S23 : Do not breathe gas, fumes, vapor and spray

S24 : Avoid contact with skin

S60 : The material and its container must be disposed of as hazardous waste

S61 : Avoid release to the environment. Refer to special instructions / safety data sheets

S62 : If swallowed do not induce vomiting; seek medical advice immediately and show this container or label