

CARECLEAN VOYAGE (SEACLEAN)

Strong emulsifying cleaning agent for the removal of heavy crude oil, soot, asphalt and carbon black stains, by direct injection, Voyage method, spraying and/or recirculation-METHOD.

- * Strong emulsifying cleaning agent based on aliphatic/aromatic hydrocarbons and non ionic/anionic surface active agent.
- * Especially suitable for the direct injection and Careclean Voyage method, as product contains a high percentage of surface active agent.
- * Washing times are reduced by 50% and only slight agitation is normal required.
- * The product is safe to use on common metals.

Application

Tanks

Careclean voyage can be used for the removal of most mineral oils and fats in cargo and storage tanks.

Double Bottom Tanks

Careclean Voyage can be used for cleaning and gas freeing of double bottom tanks, using the rolling motion of the ship which normally provides sufficient agitation.

Directions of use

Cleaning of cargo and storage tanks.

Prewash

Before cleaning with Careclean voyage, it is recommended to prewash 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 Careclean Voyage should be injected at a predetermined rate into the pressure side of the automatic tank cleaning system line on deck, by means of an airoperated drum pump. Usually an injection rate of 0.1 - 0.2 litre Careclean Voyage per 100 litres of tank wash water is sufficient. Cleaning time 2-6 hours. Subsequently rinse with water.

Hand Spraying Method

Spray undiluted Careclean Voyage directly on to bulkheads, frames, stringers etc. using an air-operated drum pump connected with a delivery hose and hand spray gun. After a pre-determined 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 fire hose with nozzle. Hand spraying method is the most economical system in terms of chemical consumption but requires tanks being gasfree 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, wherefrom the solution is returned to the chemical solution tank via the stripping line. Usually it is not possible to recirculate 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 % Careclean Voyage.

After chemical cleaning the tanks should be rinsed thoroughly with sea water or fresh water depending on availability and requirements.

Voyage Cleaning Method: (Double Bottom Tanks)

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

Tank

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 Careclean voyage, 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 Careclean voyage and fill tank with sea water to 50% of its capacity, continue heating and maintain at this level for 48 hours.
7. Add further sea water 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 1-1 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.

Properties

Highly concentrated blend of aromatic solvents emulsifiers and surface active ingredients. Light yellow coloured neutral liquid. 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 also be used on plastic materials, epoxy and zinc silicate coatings.

Specific gravity (at 20o C)	: 0,89
Flammable, flash point PM CC	: 69° C
pH (1% Solution)	: 7,0

For detailed information on safety and health, please refer to Material Safety Data Sheet and / or Product label.

Dosage table of Careclean voyage

Tank capacity in tons	Proportioning of T.A.S. in liters		
	Minimum	Normal	Maximum
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	1440	2160
1000	800	1600	2400

For detailed instructions on tank cleaning, refer to the Marine Care Voyage. A range of support equipment is also available.

The details of our products are given completely free of undertaking. Since their application lies outside our control we cannot accept any liability for the results.