

TankCare & Bilge

Description

TANK CLEANERS

Product Code: 110001

CONCENTRATED HEAVY-DUTY TANK CLEANER

- **Powerful Emulsifier:** Versatile for various cleaning and degreasing tasks
- **Cost-Effective:** Suitable for both machine and manual cleaning methods
- **Fast-Acting:** Quickly penetrates and removes grime
- **Time-Saving:** Reduces cleaning time significantly
- **Tank Cleaning:** Ideal for cleaning and gas-freeing crude and refined mineral oil cargo tanks
- **Versatile Applications:** Cleans double bottom, deep, and other fuel oil tanks at sea
- **Safe and Environmentally Friendly:** Non-toxic and eco-conscious formula
- **Composition conforming to MARPOL ANNEX V**

APPLICATION AREAS

Cargo tanks
General cleaning
Engine room
Deep & double bottom tanks
Fuel oil tanks
Bilges
Tank lines
Wing tanks
Zinc coated tanks

PROBLEMS SOLVED

Prolonged cleaning time and downtime
Cleaning and gas freeing
CPP cargo
DPP cargo
Vegetable, fish and animal oils and fats
Heavy mineral oils
Greases
Palm fatty acids
Styrene
Crude palm oil
Lubricants
Asphalt
Distillation residues
Coal tar
Synthetic resins
Paraffines

DESCRIPTION

TankCare & Bilge is a potent emulsifying tank cleaner designed to effectively remove heavy crude oil, soot, asphalt, and carbon black stains. Solvent-based cleaner, compatible with most common metal surfaces. This versatile product can be used in various applications, including cleaning cargo tanks, deep tanks, and bilges. Whether diluted or used neat, **TankCare & Bilge** can be applied using

standard tank cleaning methods like machine cleaning, rock-and-roll, or hand spraying.

APPLICATION

TankCare & Bilge is effective in removing most mineral oils and fats from cargo and storage tanks. It can also be used to clean and gas-free double bottom tanks, where the ship's rolling motion provides sufficient agitation. This cleaner is compatible with recirculation, direct injection, spraying, or rock-and-roll cleaning methods. For added convenience, **TankCare & Bilge** can be used for engine room and deck cleaning and degreasing, reducing the need for multiple cleaning detergents onboard.

USE AND DOSING

Instructions are based on experience and are meant only as a guide since circumstances for each tank cleaning operation vary. They are not intended to interfere with the judgment of the vessel's responsible personnel.

Before commencing tank cleaning, it is recommended to prewash the tanks with hot water. For drying or semi-drying oils, a cold water prewash should be conducted immediately after cargo discharge to prevent oil residue hardening. To enhance the effectiveness of the prewash, gradually increase the water temperature after one cycle.

To apply **TankCare & Bilge** with **Direct Injection**, inject undiluted product directly into the pressure side of the automatic tank cleaning system line on deck using an air-operated drum pump. A typical injection rate is 1 to 2 liters of **TankCare & Bilge** per ton of wash water. The cleaning process usually takes 2 to 6 hours, followed by thorough rinsing with fresh water.

Alternatively, you can use the **Spray Method**. Spray undiluted **TankCare & Bilge** directly onto bulkheads, frames, stringers, etc., using an air-operated drum pump connected to a delivery hose and hand spray gun. After allowing for a predetermined reaction time, rinse the tanks with water using the automatic tank washing machines. For spot cleaning, a hand-held hose, such as a fire hose with nozzle, can be used for rinsing. While the hand spraying method is the most economical in terms of chemical consumption, it requires tanks to be gas-free before entering. Additionally, the hand spraying method has a practical time limitation depending on tank sizes.

To clean tanks using the **Recirculation Method**, first prepare a solution of 1-2% **TankCare & Bilge** in one of the after tanks located near the pump room. This solution should be heated to a temperature between 20 and 50°Celsius, which can typically be achieved using the heating coils within the tanks being cleaned. Next, an automatic tank washing machine should be used to recirculate the cleaning solution throughout the tanks for a duration of 1 to 3 hours. It is important to ensure that the recirculating tank washing system has a sufficient volume to allow for continuous recirculation of the cleaning solution. Depending on the level of contamination, one cleaning solution may be able to effectively clean 2 to 3 tanks. After completing the chemical cleaning process, the tanks should be thoroughly rinsed with either sea or fresh water.

For **Cleaning Double Bottom Tanks at Sea**, time, temperature, and agitation of chemical solution are important factors for successful cleaning of the double bottom tanks. If tanks are not severely

contaminated and/or the fuel oil viscosity is lower than 180cSt at 50°C, the cleaning process should be in one stage, using steps 4 to 10 only.

1. Heat tank to a high temperature (higher than normal), pump out as much fuel as possible and trim vessel to ensure complete stripping.
2. Close all valves on engine room manifold.
3. Inject first dose of **TankCare & Bilge** through the sounding pipe, in accordance with the dosage information 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 a minimum of 60°C and maintain temperature for 48 hours. If heating coils are not available, live steam may be used for heating the solution and maintaining the temperature.
5. Empty tanks completely, fill to 50% capacity, and empty again.
6. Add second dose of **TankCare & Bilge**, fill tank with sea water to 50% of its capacity and continue heating and maintain at this level for 48 hours.
7. Add additional sea water to fill tank to 75% capacity, continue heating, and maintain at this level for 48 hours.
8. Empty tanks and pressure rinse with clean water through sounding pipes for 1-2 hours under continuous stripping. Pressure should be kept as high as safety permits.
9. When rinsing is complete, 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.

PRODUCT PROPERTIES

The product is compatible with all normally used metals and their alloys. Rubber/synthetic rubber may swell. It is recommended to test all cleaning chemicals on a small area of tank coating, before full scale application.

Appearance: Pale yellow liquid

pH (undiluted): N/A

Density: $0.80 \pm 0.07 \text{ g/cm}^3$

Flash Point: >61°C

General Instructions: Avoid spillage, splashing and mishandling. Precautionary measures for body protection are strongly recommended before and during use.