



TANK CLEANER-S™

DESCRIPTION

TANK CLEANER-S is similar to **TANK CLEANER-A** with regards to its applications and uses. However, **TANK CLEANER-S** is a more powerful, heavy duty concentrated cleaning solution, engineered to be used in the cleaning and gas freeing for double bottom tanks, wing tanks, tank lines, fuel oil tanks, etc. from oil and fuel contamination. Moreover, it is formulated with more advanced emulsifying agents, stronger surface-active agents, superior solvents and longer lasting corrosion inhibitors.

ADVANTAGES AND CHARACTERISTICS

A highly concentrated liquid blend of superior, innovative constituents which contribute to the efficient removal and cleaning of cargo tanks, deep tanks, wing tanks, tank lines, bilges, etc. from oil residues, petroleum based chemicals, heavy dirt, grime and old sludge deposits.

- ◆ Acts quickly and thoroughly.
- ◆ Non-corrosive and of low toxicity.
- ◆ When mixed with water, a milky white emulsion is formed.
- ◆ No known effect on rubber or plastic compounds.
- ◆ Can be used as a multi-purpose degreaser in extremely hard cleaning conditions.
- ◆ Safe to be applied to all kinds and types of metal parts and surfaces (painted or not).
- ◆ May be combined with a specific range of products.
- ◆ Cost effective, easy to apply and use.

▶ **According to MARPOL 73/78** chemical tankers are only permitted to use tank cleaning agents, which had been approved and evaluated by the International Maritime Organisation (IMO).

▶ **TANK CLEANER-S** was evaluated in accordance with MEPC.1/Circ. 590 through IMO's Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH Working Group) and found to meet the requirements of regulation 13.5.2 of Annex II of MARPOL 73/78.

PHYSICAL PROPERTIES

TANK CLEANER-S is a blend of superior aliphatic solvents, non-ionic and anionic surface agents, emulsifying agents and corrosion inhibitors.

Appearance/Color	: Clear, colorless liquid
Specific gravity	: 0.82 - 0.88 gr/cm ³ at 20°C
Flash Point	: >40°C
Odor	: Strong Aromatic Solvent odor

PACKAGING

Order Number	: 832530 (25 ltrs) 832130 (210 ltrs)
Container	: Steel drum

APPLICATION AND USE

A. Dosing Procedure

The quantity of **TANK CLEANER-S** to be used is proportional to the tank capacity, the level of contamination and the degree of cleaning required, as such; appropriate dosing can be decided by consulting the table found below.

▶ **NOTE:** The dosage to be used must be based on the total tank capacity and not on the water percentage to be ballasted in the tank.

BALLAST TANK CAPACITY (tones)	TANK CLEANER QUANTITY (litres)		
	MINIMUM	NORMAL	MAXIMUM
2.5	2	4	6
5.0	4	8	12
10.0	8	16	24
15.0	12	24	36
20.0	16	32	48
25.0	20	40	60
30.0	24	48	72
40.0	32	64	96
50.0	40	80	120
75.0	60	120	180
100.0	80	160	240
200.0	160	320	480
250.0	200	400	600
300.0	240	480	720
400.0	320	640	960
500.0	400	800	1,200
600.0	480	960	1,440
700.0	560	1,120	1,680



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800.0	640	1,280	1,920
900.0	720	1,440	2,160
1,000.0	800	1,600	2,400

B. Cleaning Procedure

Preparation: Before applying **TANK CLEANER-S**, prepare the tanks that are to be cleaned by washing them first (if this is possible), with a high-pressure warm water supply.

When not at sea: Determine the quantity of **TANK CLEANER-S** to be used and fill 75% of the tank capacity with seawater. In order to achieve optimum results, the emulsion formed must be warmed and maintained at 60°C for at least 3–5 days (if possible). At the end of the three days time, deballast the tanks of the cleaning solution and rinse clean with seawater by ballasting and deballasting until the water flow becomes clear.

► **Note:** In cases, where tanks are heavily stained or contaminated, the cleaning procedure must be repeated, as described above.

Rock and Roll method: This method is applicable for tank cleaning at sea. Fill the tank with 0.3–1ltr of **TANK CLEANER-S** per 1,000ltrs of water and let solution act for 2–6 hours. This will enable the solution to soften, penetrate and dissolve the hard bottom deposits.

Then fill the tank with seawater to 30% of total capacity and let the solution stand for approximately 1–2 days. During this period, cleaning will be initiated due to wave motion. After, fill the tank with seawater to 60% of total capacity and let the solution act for long enough, so that complete cleaning can be accomplished, due to wave motion/natural agitation. Afterwards, discharge solution from tank and then rinse off by filling tank 1–2 times its capacity with seawater.

► **Note** that **TANK CLEANER-S** must always be fed to the tank and then to the bunkers.

Recirculation Method: It is recommended to use the desired solution according to the degree of contamination and number of tanks to be cleaned with this solution. For this reason the dose rates and results of the cleaning may vary, but as minimum dosage a 0.5% solution of the product must be used. The best result is achieved around 70°C.

Slop water should be pumped ashore or should be pumped to ship's slop tanks after finishing with the cleaning procedure.

General Cleaning: For general cleaning applications, **TANK CLEANER-S** may be used by brushing, soaking/immersion or any other conventional method that the user believes to be suitable for the situation at hand.

! SAFETY AND HANDLING

HANDLING	Handle with care. Store in a dry, cool and well ventilated environment.
SAFETY	IMMEDIATE ACTIONS
Eye Contact	Avoid Eye contact. Otherwise, flush with plenty of water for a few minutes. Seek medical attention.
Skin Contact	Avoid Skin contact. Otherwise, wash contaminated area thoroughly with water. Seek medical attention.
Inhalation	Do not breathe gas/vapors. Otherwise, seek fresh air source at once. Seek medical attention. In case of insufficient ventilation, wear suitable respiratory equipment.
If Swallowed	Avoid ingestion. Otherwise, consume a considerable quantity of water. Do not induce vomiting. Seek medical attention.
GENERAL INSTRUCTIONS	Avoid spillage, splashing and mishandling. Precautionary measures for body protection are strongly recommended before use.

 **Read the Material Safety Data Sheet before using this product.**

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

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