

# IMO Approved Tank Cleaning Chemicals

## TC1 Aquamarine Aquawash T1080A

Suitable for the removal of fatty acids, fish oils and other drying or semi-drying oil deposits.

### Usage Instructions

#### Tank Recirculation Method

Aquamarine Aquawash is added to a mixing tank containing a fresh water quantity of 1% of the capacity of the tank to be cleaned. Using a cleaning solution of 0.2-2% heated to 60-80°C, wash the tanks by circulation for 2-6 hours, after which the solution can be recycled to the mixing tank for reuse.

One solution can normally be used to wash several tanks.. After circulation rinse thoroughly with water.

#### Direct Injection Method

Inject 1-2 litres of Aquamarine Aquawash per 100 litres of wash water directly into the tank washing system. Heat to 60-80°C. After cleaning rinse thoroughly with water.

## TC3 Caustic-Free Alkaline Cleaner

Suitable for the removal of fatty acids, fish oils and other drying or semi-drying oil deposits.

### Usage Instructions

#### Tank Recirculation Method

Aquamarine Caustic-Free Alkaline Cleaner is added to a mixing tank containing a fresh water quantity of 1% of the capacity of the tank to be cleaned. Using a cleaning solution of 0.1-1% heated to 60-80°C, wash the tanks by circulation for 2-6 hours, after which the solution can be recycled to the mixing tank for reuse.

One solution can normally be used to wash several tanks.  
After circulation rinse thoroughly with water.

#### Direct Injection Method

Inject 0.5- 1 litre of Aquamarine Caustic-Free Alkaline Cleaner per 100 litres of wash water directly into the tank washing system. Heat to 60-80°C. After cleaning rinse thoroughly with water.

## TC4 Neutral HCF

A neutral degreaser for the removal of vegetable, animal oils and fats from zinc silicate coated or aluminium tanks.

### Usage instructions

#### Prewash

First before using Aquamarine Neutral HCF it is necessary to prewash tanks with hot water at 50°C.

#### Tank Recirculation Method

Aquamarine Neutral HCF is circulated in a 1-2% solution heated to 20-60°C depending on the cargo 2-6 hours..

One solution can normally be used to wash several tanks.  
After circulation rinse thoroughly with fresh water.

## TC5 Natural Zest T1335A

Suitable for the removal of mineral oils and greases, lubricants, asphalt, coal tar, fatty acids, fish oils and other drying or semi-drying oil deposits.

### Usage Instructions

#### Prewash

First before using Aquamarine Natural Zest it is necessary to prewash tanks with hot or cold water as appropriate.

#### Tank Recirculation Method

Aquamarine Natural Zest is added to a mixing tank containing a fresh water quantity of 1% of the capacity of the tank to be cleaned. Using a cleaning solution of 0.2-1% heated to 20-80°C depending on the cargo, wash the tanks by circulation for 2-6 hours, after which the solution can be recycled to the mixing tank for reuse.

One solution can normally be used to wash several tanks.  
After circulation rinse thoroughly with water.

#### Direct Injection Method

Inject 0.1-0.2 litres of Aquamarine Natural Zest per 100 litres of wash water directly into the tank washing system. Heat to 20-80°C. After cleaning rinse thoroughly with fresh warm water.

## TC6 Rust Remover

- Acidic liquid product for the cleaning of aluminium, copper and removal of rust stains on paint work.
- It may be used for the removal of lime staining in tank cleaning operations
- Cleans and brightens aluminium and copper.
- Removes rust stains without risk to paintwork.
- Safe on most common metals.

### **Usage Instructions for tank cleaning applications**

If lime scale stains are present after completion of tank cleaning operations, inject 0.5 litres Aquamarine Rust Remover per 100 litres washing water directly into the automatic washing system for approx. 20 minutes. The recommended temperature is 75°C -85°C.

## TC7 Strong Alkaline Cleaner T1108A

Suitable for the removal of fatty acids, fish oils and other drying or semi-drying oil deposits.

### Usage Instructions

#### Tank Recirculation Method

Aquamarine Strong Alkaline Cleaner is added to a mixing tank containing a fresh water quantity of 1% of the capacity of the tank to be cleaned. Using a cleaning solution of 0.1-1% heated to 60-80°C, wash the tanks by circulation for 2-6 hours, after which the solution can be recycled to the mixing tank for reuse.

One solution can normally be used to wash several tanks, after circulation rinse thoroughly with water.

#### Direct Injection Method

Inject 0.5- 1 litre of Aquamarine Strong Alkaline Cleaner per 100 litres of wash water directly into the tank washing system. Heat to 60-80°C. After cleaning rinse thoroughly with water.

## TC8 Tank Cleaner HD

Heavy duty concentrated solvent emulsion cleaner.

### Usage Instructions

#### Tank Recirculation Method

Use a solution of 0.5-3% wash water mixed in the tank to be cleaned, 5-30 litres of Tank Cleaner HD per tonne of wash water. The washing solution should be heated to 60°C.

After cleaning the solution should be pumped ashore or to the ship slop tanks.

#### Direct Injection Method

Inject 0.1-0.2 litres of Tank Cleaner HD per 100 litres of tank wash water directly into the tank washing system. Allow a cleaning time of 2-6 hours. After cleaning rinse with water.

## TC2 Buffer Clean

A gentle cleaner for removing traces of lead and iron stains from zinc silicate coated tank surfaces.

### Usage Instructions

Cleaning agent for zinc-silicate coated tank surfaces

1. Suitable for the removal of traces of lead and iron stains from zinc silicate coated tank surfaces after transport of leaded gasoline.
2. Suitable for the removal of traces of chloride and sulphide.
3. Safe buffered pH of 5.5 for application on zinc-silicate coated tank surfaces.
4. Gives a good cleaning result with a reduced cleaning time.

### Application

The ordinary cleaning method with a synthetic soap takes a lot of time and is insufficient. A mild complexing acid solution in combination with synthetic soap gives a much better cleaning result.

Aquamarine Buffer Clean is used as a final cleaning procedure when leaded gasoline must be removed or when the tank has to be completely chloride or sulphide free, e.g. for shipping pure chemicals.

### Directions of use

After the normal cleaning depending on the nature of the last cargo and subsequent rinsing with water, the cleaning with Aquamarine Buffer Clean can start. Never dilute with river or seawater. Fill a tank for 1/100 part with water and add 5% Aquamarine Buffer Clean at maximum. The solution is heated by means of heating coils in the tanks. The tanks are washed with a loading pump, after which the used solution is recycled to the mixing tank. Usually, one solution is used to wash 2 - 3 tanks.

Aquamarine Buffer Clean is circulated with a limited contact time of 30 - 45 minutes before rinsing at a temperature not to exceed 45°C.

Of essential importance for passing the chloride test is a final rinse with chloride free, if possible hot, water.

If necessary, repeat this cleaning procedure.