



## **HOLD BARRIER**

- Water soluble cargo hold barrier – easily removable with water
- Saves cleaning time
- Ideal when cleaning after coal, pet coke and other difficult cargoes.
- Completely safe on all coatings.
- Prevents even the most difficult cargo to adhere to the coating
- Easy to apply – easy to remove
- Provides temporary protection against corrosion
- Water based - free from hydrocarbon solvents.
- Complies with all environmental regulations

HOLD BARRIER is a water based liquid product specially formulated to leave a thin, temporary film on cargo hold surfaces. The film provides a barrier between the cargo and the cargo hold surfaces making the cleaning operation after unloading quicker and easier, and optimal cleaning result is achieved. HOLD BARRIER is safe to the environment and to the personnel handling it, and will not contaminant the cargo. It is non-corrosive and safe on all coatings.

### **Directions for use**

After drying, HOLD BARRIER creates a thin, non-sticky film on the cargo hold surfaces. The film substantially facilitate the cleaning before next cargo in two ways:

1. The film fills the minute pores in the surface, and prevents that small particles are trapped in the pores.

2. Small, solid particles can be very difficult to remove especially from organic coatings, even with the use of effective cleaning agents and high pressure water jets.

The reason is the built up of electromagnetic forces, and sometimes the only way to remove the particles is by scrubbing.

HOLD BARRIER provides a barrier between the particles and the surface that minimize this problem, and the particles may now be removed with high pressure water only.

The film is completely water soluble and is easy to remove even with cold sea water. To avoid re-deposition of contaminants a cleaning agent should be used, but at lower dosage rates than what normally is required. HOLD BARRIER may also be sprayed on deck, superstructure and other areas exposed to dust during loading and unloading operations.

### **Dosing method**

The cargo hold surfaces should be as clean and dry as possible before treatment. HOLD BARRIER is supplied at ready-to use concentration and may be applied directly from the drum. Spray the liquid on the cargo hold surfaces by the use of suitable low-pressure spraying equipment. As soon as the surface appears water wet, a proper film is created; do not apply more than necessary.

1 liter HOLD BARRIER will cover 15-20 m<sup>2</sup>. Allow the film to dry completely before loading the cargo. Depending on air temperature and humidity this will take 1 to 2 hours. After reloading, apply a 2 – 5% solution of a cleaning agent in water to avoid re-deposition of contaminants, and finally flush with clean, high pressure water. Suitable cleaning agents are: Starmarine Special or Multicleaner. After flushing with water, let the surfaces dry and then repeat the treatment with applying HOLD BARRIER before next cargo.

### **Properties.**

Specific gravity (20°C)	: 1.01
pH (1% solution)	: 5.0 – 7.0
Flash point	: none