

DESCRIPTION

AMERSTAT HD-H2S heavy-duty microbiocide is a proprietary blend of biocides with a secondary effect as H2S scavenger for use in oilfield applications, especially for the control of sessile and planktonic bacteria typically found in cargo tanks and slop tanks. The specific combination of actives in AMERSTAT HD-H2S behaves on a synergistic way to eliminate aerobic and anaerobic bacteria and to remove H2S from cargo tanks and slop tanks.

Offshore crude reservoirs typically contain a mixture of hydrocarbons, present as oil and gas, salt, inorganic solids, and organic compounds, including bacteria. With oil for food and plenty of water, bacteria continue to reproduce every fifteen to twenty minutes and create a biofilm at the oil-water interface that allows other microorganisms to grow and thrive.

Without treatment, a diverse consortium of bacteria and fungi form a large biomass generating slimy waste and sludge. Moreover, certain types of sulfate-reducing bacteria generate hydrogen sulfide (H2S), which is a toxic and flammable hazard.

SAMPLING AND MONITORING

Where applicable, it is essential to sample and monitor H2S content as produced water properties and volumes from offshore production processes can vary over time. While sampling frequency and H2S limits requirements will vary from different sections, the level of H2S will also depend on the fluid removal and inflow. Samples can be tested for microbial contamination using the onboard test kit – Sulfate Reducers Test Set (PCN 1701019). Consult your local Drew Marine representative for further discussion on sampling bottles, onboard test kits, and analytical services.

APPLICATION AND USE

Based on the severity of bacterial contamination, greater or lesser amounts of the AMERSTAT HD-H2S microbiocide may

be required. AMERSTAT HD-H2S can be added upstream of bacterial contamination or directly to the application area to control microbiological contamination and prevent spoilage.

AMERSTAT HD-H2S microbiocide is typically applied in batch operation to control microbial growth in cargo tank and slop tanks after determining the amount and severity of H2S because of microbiological activity. The relatively low to moderate corrosive properties of AMERSTAT HD-H2S allows semi-continuous or continuous biocide treatment program dependent upon specific application needs.

For treating tanks with produced water, typically a mixture of oil and water, AMERSTAT HD-H2S microbiocide can be dosed to the tank bottoms. This is achieved by feeding through a tank bottom drain valve or pouring down a tank sounding pipe prior to loading. If feeding to the tank bottom is not practical, slug dose through the tank top access ports or continuously feeding during the filling operations is recommended to achieve the required concentration to achieve long term control. Adjust AMERSTAT HD-H2S dosage rate to maintain the proper concentration based on additional fluid inflow.

The growth of SRB and facultative acid-producing bacteria are often responsible for the generation of H2S and acid components which can be very corrosive to surface equipment and tanks. AMERSTAT HD-H2S microbiocide is an effective treatment to maintain control of sessile and planktonic bacteria in cargo tanks and slop tanks.

The dosage of AMERSTAT HD-H2S microbiocide will depend on several factors such as the type of system being treated, the nature and extent of microbial contamination, and the degree of control required. The typical batch dosage range is 1:15,500 (1 liter per 15.5 tons) to 1:12,500 (1 liter per 12.5 tons). Subsequent treatment of AMERSTAT HD-H2S should be repeated every 15 to 20 days after initial treatment to maintain control.

FEATURES

- Single, cost-effective blend of biocides with H2S scavenger
- Optimized formulation for treating sessile and planktonic bacteria typically found in cargo tanks and slop tanks
- Easy-to-feed liquid formulation
- Relatively low to moderate product corrosivity
- Inhibits microbially induced corrosion (MIC)

BENEFITS

- No need to use multiple biocides for effective treatment and H2S control
- Extremely effective against aerobic and anaerobic bacteria
- No complex blending equipment or mixing required
- Ensures uninterrupted production of oil and gas
- Improves operator safety concerns over H2S generation



Contact your Drew Marine representative for more information

For initial treatment, always start with the highest concentration dosage rate of 1:12,500. Once microbial control is achieved, subsequent treatment may be reduced to 1:15,500. Subsequent treatment and dosage rate may depend on fluid medium removal and inflow. Additional treatment may be necessary in certain cases to achieve the desired level of microbial control.

TYPICAL PHYSICAL PROPERTIES

Appearance:	Colorless to slightly yellow
Flash Point (PMCC):	> 100°C
pH:	5.5 - 8.0
Density @ 25°C:	1.20 g/cm ³
Viscosity @ 25°C:	10.5 mm ² /s
Solubility:	Complete at use concentration

NOTE: Always wear the appropriate personal protective equipment when using this product.

PACKAGING

AMERSTAT HD-H2S microbiocide is available in 200-liter drums (240 kg net) (PCN 6979423).

IMPORTANT INFORMATION

Drew Marine maintains Safety Data Sheets on all of its products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees.

Our Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



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