MAXIGARD®



DESCRIPTION

MAXIGARD diesel engine water treatment is a nitrite-based, liquid, multi-functional treatment designed to prevent corrosion and mineral scale in recirculating cooling water systems for mediumand high-speed marine diesel engines.

MAXIGARD treatment is colored for ease of visibility. It is suitable for treating chilled water and many other recirculating systems.

MAXIGARD treatment is approved by many engine manufacturers. Listed here are the manufacturers and government agencies that approve or see no objection to the use of MAXIGARD treatment.

ABC Diesel Aktiebolaget Hedemora Verkstader Alco Power Inc. APE Allen Ltd. APE-Crossley Ltd. A.S. Bergens Cooper Bessemer Department of Trade-U.K. **Detroit Diesel** Diahatsu Diesel Ltd. **Electro-Motive Division General Motors** Fairbanks-Morse Division Colt Industries General Electric Company Grand Motori Trieste SPA Japan Association of **Corrosion Control** Jenbacher Werke A.G.

Kelvin Diesel Ltd. KHD Duetz MAN B&W Diesel Mirrless Blackstone Nohab Diesel Norwegian Institute of Health Paxman Diesels Ltd. Perkins Engines Ltd. Ruston Diesel Ltd. SACM Mulhouse S.E.M.T. Pielstick Stork Werkspoor Diesel BV Transamerica Delaval Wartsila NSD Waukesha Engine Division **Dresser Industries** Yanmar Diesel Engine

MAXIGARD diesel engine water treatment has received approval from the North Atlantic Treaty Organization and has been assigned NATO number 6850219201144.

APPLICATION & USE

System Preparation

In order to ensure the maximum benefits from a MAXIGARD treatment program, the system should be inspected for deposits and corrosion. If the system is found to be contaminated, it must be chemically cleaned before the treatment program begins. Your Drew Marine representative can provide specific cleaning recommendations.

Sacrificial anodes (magnesium or zinc) in the cooling system should be removed prior to adding MAXIGARD treatment. These materials are not necessary with the complete chemical program in effect and, in fact, may cause undesirable deposits in circulating water systems.

Although MAXIGARD treatment is effective in multi-metal systems, certain aluminum alloys may be difficult to protect because they are highly anodic. The use of MAXIGARD treatment with these systems should be discussed with a Drew Marine representative prior to starting treatment.

DOSAGE

The system should be filled with distilled or fresh water and, where freeze protection is necessary, the proper amount of glycol-based antifreeze should be added. Begin circulating the system and add MAXIGARD treatment at an initial dosage of 16 liters per ton of system capacity. Circulate for 30 minutes after addition to insure good distribution and the establishment of a protective film.

MAXIGARD® diesel engine water treatment may be used with waters that have hardness contamination, provided the total hardness levels are less than 170 ppm or as otherwise recommended by the engine manufacturer, whichever is less. The chloride level in the cooling system should be limited to 100 ppm or as otherwise recommended by the engine manufacturer, whichever is less.



TESTING AND CONTROL

The proper level of MAXIGARD treatment can be maintained using CWT TITRETS1 (PCN 0367012). Tests should be conducted to confirm that a minimum MAXIGARD treatment concentration of 19,000 ppm is present. Testing once each week is satisfactory. However, when makeup addition to the system is large or unusual changes are noticed, testing frequency should be increased.

Testing for chloride may be conducted to check makeup water quality. Chloride levels should not exceed 100 ppm or the engine manufacturer's recommendations, whichever is less. Before testing for chloride using the CHLORIDE LMP TEST KIT (PCN 0373019), pretreat the sample with SAMPLE PRETREATMENT (PCN 0374025). Use TOTAL HARDNESS TITRETS (PCN 0378019) for determining hardness level.

Contact your Drew Marine representative for the Cooling Water Treatment Testing Control and Dosage chart which applies to your engines/system.

TYPICAL PROPERTIES

Appearance: Clear red-violet liquid

Specific Gravity @25° C: 1.26
pH Undiluted: 12.0
Freeze Point: -23.3° C
Freeze-Thaw Stability: Complete
Flash Point (PMCC): None

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

PACKAGING

MAXIGARD diesel engine water treatment is available in 25-liter containers (PCN 0034405).

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 undervstood by all of your supervisory personnel and employees before using Drew Marine products.

FEATURES

- Multi-component inhibitor
- Contains a scale modifier
- Buffered
- Liquid

BENEFITS

- · Protects against variable metal corrosion
- · Reduces corrosion due to cavitation
- Maintains heat transfer effectiveness
- Helps prevent overheating caused by sludge and mineral scale deposits
- Reduces cleaning and maintenance costs
- · Stabilizes cooling water pH
- Easy to dose
- · Cost effective

Drew Marine maintains Safety Data Sheets on all of its products. These documents contain health and safety information for the development of appropriate product handling procedures to protect your employees. Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Drew Marine products.



100 South Jefferson Road Whippany, NJ 07981 USA 1-973-526-5700 Drew-Marine.com

Copyright © Drew Marine. All Rights Reserved. All statements, information and data presented herein are believed to be accurate and reliable but are not to be taken as a guarantee, express warranty or implied warranty of merchantability or fitness for a particular purpose, or representation, express or implied, for which seller assumes legal responsibility, and they are offered solely for your consideration, investigation and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe on any patent.