

## PRODUCT DATA

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CWT-PDS-AP-Maxigard-R1

# MAXIGARD™ corrosion and/or scale inhibitor

## **Product Description**

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

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

MAXIGARD 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.

ABC Diesel AktiebolagetHedemora Verkstader Alco Power Inc. APE Allen Ltd. APE-Crossley Ltd.

A.S. Bergens Cooper Bessemer

Health Department of Trade-U.K.

Detroit Diesel
Diahatsu Diesel Ltd.
Electro-Motive Division
General Motors

Fairbanks-Morse Division
Diesel BV Colt Industries
General Electric Company
Grand Motori Trieste S.p.A
Division 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 Paxman Diesels Ltd. Perkins Engines Ltd. Ruston Diesel Ltd. SACM Mulhouse S.E.M.T. Pielstick Stork Werkspoor Transamerica Delaval Wartsila NSD Waukesha Engine **Dresser Industries** Yanmar Diesel Engine

MAXIGARD corrosion inhibitor has received approval from the North Atlantic Treaty Organization and has been assigned NATO number 6850219201144.

## **Application**

### **System Preparation**

In order to ensure the maximum benefits from a MAXIGARD corrosion inhibitor 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 Solenis representative can provide specific cleaning recommendations.

Sacrificial anodes (magnesium or zinc) in the cooling system should be removed prior to adding MAXIGARD. 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 is effective in multi-metal systems, certain aluminum alloys may be difficult to protect because they are highly anodic. The use of MAXIGARD with these systems should be discussed with a Solenis 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 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 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 manufac- turer, whichever is less.

#### **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

## **Feeding and Control**

The proper level of MAXIGARD treatment can be main- tained using CWT Titrets1 (P/C #0367012). Tests should be conducted to confirm that a minimum MAXIGARD treat- ment concentration of 19,000 ppm is present. Testing will also confirm that you have not exceeded the recommended maximum of 36,000 ppm of MAXIGARD treatment. 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 (P/C #0373019), pretreat the sample with Sample Pretreatment (P/C #0374025). Use Total Hardness Titrets (P/C #0378019) for determining hardness level.

Contact your Water Technologies representative for the Cooling Water Treatment Testing control and dosage chart (#CW-CS-1) for more detailed information.

#### **Features**

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

## **Packaging**

This product is available in a variety of packaging sizes. Your Solenis representative will recommend the appropriate packaging for the application.

## **Important Information**

Typical Properties: Refer to MSDS.

**Regulatory Information:** Please refer to the MSDS or contact your sales representative for any additional regulatory and environmental information.

**Safety:** Solenis maintains Material Safety Data Sheets on all of its products. Material Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers.

Our Material Safety Data Sheets should be read and understood by all of your supervisory personnel and employees before using Solenis products in your facilities.