

CorrShield* MD4159

Closed System Corrosion Inhibitor

- Prevents corrosion for extended equipment life
- Prevents deposits to minimize maintenance expense
- Highly buffered
- Not susceptible to biological degradation
- Low solids extends pump seal life expectancy
- Easy-to-apply and control

Description and Use

CorrShield MD4159 provides superior corrosion and scale protection in chill water circuits, hot water heating systems and other closed systems using softened water or condensate as makeup. CorrShield MD4159 is a highly buffered product for use in systems that are subjected to air ingress contamination and/or trace acidic contaminants.

A new component to the CorrShield MD4159 is the Halogen Resistant Azole (HRA). HRA is used for copper and copper alloy corrosion protection. Unlike former azole technologies, HRA is stable in the presence of halogens such as chlorine and bromine. Most importantly, at the pH level of a typical closed system, the activity of HRA is far superior to any other azole (Figure 1). This improved protection extends the life of mild steel equipment that is susceptible to pitting caused by copper corrosion products that cause galvanic corrosion cells.

The proprietary HPS-1 polymer in CorrShield MD4159 prevents accumulation of deposits by dispersing inorganic foulants such as silts, clays and insoluble iron. Prevention of deposits and scale results in improved heat transfer for improved production rates and reduced energy consumption.

Treatment and Feeding Requirement

CorrShield MD4159 can be added directly, as received, to your closed heating or cooling system. In systems using soft water (less than 100 ppm (100 mg/L) total

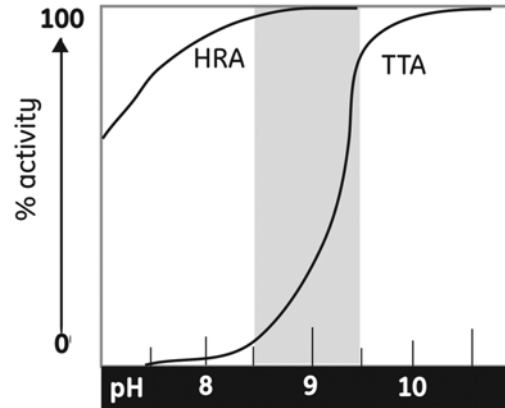


Figure 1 - Dissociation curves showing activity of HRA versus TTA.

hardness CorrShield MD4159 should be dosed at a rate of 3.5 L (0.92 gal) per 1,000 L (264 gal) of system volume. Systems using hard water will require somewhat higher dosages. Your GE representative will determine the optimum dosages based on your system's requirements.

General Properties

Physical properties of CorrShield MD4159 are shown on the Material Safety Data Sheet, a copy of which is available upon request.

Packaging Information

CorrShield MD4159 is available in a variety of containers and delivery methods. Contact your GE representative for details.

Storage

Protect from freezing. If this product is frozen during shipment or storage, slight mixing may be required to ensure homogeneity.

Safety Precautions

A Material Safety Data Sheet containing detailed information about this product is available upon request.



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