8820 Old Hwy 99 SE, Tumwater, Washington 98501, USA 360-943-6063 800-562-6184 FAX 360-352-4813 www.ch2o.com **Product Bulletin**

6431 HYDRO-TREAT

HYDRONIC LOOP TREATMENT

APPLICATION

CH₂O HYDRO-TREAT products are designed to reduce iron and copper corrosion related to oxygen attack in closed loop hydronic systems. While no water treatment product can repair corrosion damage once it has occurred, continuous treatment can extend equipment life.

HYDRO-TREAT performance is dependent upon system operation, design, cleanliness, metallurgy, leaks, and water chemistry. For optimal results, the following actions should be taken by operational personnel:

- Pre-cleaning to prepare system for treatment;
- Routine inspection to ensure no ingress of oxygen;
- Periodic biological testing and addition of biocides;¹
- Daily testing and recording of chemical residuals.

If problems are encountered maintaining product residuals, additional analytical testing may be required. request a CH₂O water treatment specialist may assist in performing these services.

Product 6431 uses a molybdate-based inhibitor system, which yields a lower contribution of conductivity in system water. Organic azole salts have also been included. This product incorporates a vapor-phase corrosion inhibitor, so it has application in "open" systems. This product is compatible with many glycol antifreeze solutions.

FEEDING TECHNIQUE

Inject directly into the system or add via a bypass feeder.

SAFETY & HANDLING PROCEDURE

This product is a mildly alkaline material. considered hazardous; however, it is recommended that safe handling procedure associated with industrial chemicals of this type be practiced. Read and thoroughly understand the MSDS before handling this product.

DOSAGE

Initially charge the system at the rate of 2 gallons of product 6431 per 1,000 gallons of system water.

CONTROL

Maintain a residual of at least 200 to 300 parts per million sodium molybdate (Na₂MoO₂.2H₂O) in the treated water. Higher residuals may be desired under certain conditions. Consult your CH₂O water treatment specialist for further information on testing. Daily testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage. In addition to monitoring and maintaining treatment levels, it is the customer's responsibility to ensure the product is fit for its intended application.

 $Mo \times 1.68 = MoO_4$; $Mo \times 2.55 = Na_2MoO_4.2H_2O$ $MoO_4 \times 0.59 = Mo; MoO_4 \times 1.51 = Na_2MoO_4.2H_2O$ $Na_2MoO_4.2H_2O \times 0.39 = Mo, Na_2MoO_4.2H_2O \times 0.66 =$ MoO_4

PHYSICAL PROPERTIES

pH of 1% Solution	9.0-11.0
Pounds per Gallon	9.3-9.8
Physical Appearance	Yellowish Liquid
Odor	Mild
Flash Point	NA

Seller Warranty

CH₂O brand test reagent refills are available through your sales representative at no charge. Customers are required to confirm product compatibility via a control test for their specific application. CH2O recommends that you perform regular/daily testing to control chemical levels and cycles of concentration within established limits. Additional tests may be performed at your request. Test reports reflect conditions at the point when the analysis was performed. Results will change over time and with varying operating conditions.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the product data sheet. Buyer is responsible to ensure that products and product dosages are appropriate for Buyer's particular application. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Jurisdiction for any issues arising from or relating to this product shall be in the courts of the State of Washington and the venue shall be Thurston County. Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the rules and procedures as stated in RCW 7.06 and shall be binding upon both parties without right to appeal, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

Applies to all products sold by CH2O, Inc., and is hereby communicated to all of its customers as a condition of sale. Use of CH2O products is subject to the Standard Terms and Conditions as listed on CH₂O, Inc.'s website at: www.ch2o.com





¹ Cooling Water Treatment Principles & Practice, Colin Frayne