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Product Bulletin

6253

VOLATILE OXYGEN CONTROL

APPLICATION

Oxygen attack on return condensate lines and heat-transfer surfaces is a common contribution to metal-loss. Metal-loss (especially pitting) eventually leads to a rupture causing a loss of condensate and energy. It is vital that oxygen presence in condensate be controlled to prevent such metal-loss. The oxygen control components of product 6253 work together to control oxygen corrosion of return condensate lines and heat exchanger metal.

The advantage of volatile oxygen scavengers is oxygen removal throughout the steam generating system. Other types of scavengers contact oxygen only in feed and boiler water. Volatile scavengers are carried by the vapor phase into steam distribution and condensate return lines. Such permeation of the entire system leads to better overall protection. Oxygen is contacted for longer periods of time and is thoroughly eliminated.

Product **6253** is a blend of volatile oxygen scavengers. It effectively removes oxygen with high reaction rates at temperatures between 70°F and 500°F. The resulting benefit is rapid and complete removal of dissolved oxygen. With oxygen removed, internal metal components of the steam generation and utilization system are protected from this source of corrosion.

SAFETY & HANDLING PROCEDURE

This product is mildly irritating by all means of exposure; inhalation, skin, ingestion, and eye. Refer to <u>Material Safety Data Sheet</u> for protection measures when handling this material. Follow MSDS storage and handling procedure.

FEEDING TECHNIQUE

This product may be added by chemical metering pump directly from the shipping container or diluted in water in a chemical feed tank fitted with an agitator. The chemical is best added directly to the storage tank of the deaerator. Semi-modulating the feed may be achieved by using the feedwater pump control signal. Other feeding methods include addition to boiler feedwater or steam. Do not use transfer equipment with PVC or rubber parts.

DOSAGE

Initially charge the system at the rate of 8 ounces per 1,000 gallons of system capacity. Maintain system by feeding product **6253** at the rate of 4 to 8 ounces per 1,000 gallons of makeup water.

CONTROL

Maintain a residual of 0.2 to 0.5 parts per million of active hydroquinone in the system at all times. 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.

PHYSICAL PROPERTIES

pH of 1% Solution	7.0-9.0
Pounds per Gallon	8.1-8.6
Physical Appearance	Brown-Yellow Liquid
Odor	
Flash Point	>200°F

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.



