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**Product Bulletin** 

# **PRO-TECH**

## **BOILER WATER TREATMENT**

### **APPLICATION**

Natural water contains gasses and minerals that can cause corrosion and deposit formation in steam boiler systems. This leads to loss of efficiency and damage from leakage or overheating. CH<sub>2</sub>O Boiler Treatment Products are designed to reduce many of the inherent problems associated with steam boiler applications.

No chemical product can completely eliminate waterrelated problems; results are dependent on several factors including maintaining proper chemical residuals, system operation, design, cleanliness, metallurgy, and water quality. For optimal results the following actions should be taken by qualified operational personnel:

- initial system cleaning and passivation;
- maintaining feedwater free of contaminants and particulate matter;
- insuring proper chemical feed rates and system blowdowns;
- verifying proper operation of chemical control and pretreatment equipment; and
- · daily testing and recording of chemical residuals.

If problems are encountered maintaining product residuals, additional analytical testing may be required. At your request a CH<sub>2</sub>O representative may assist in performing these services.

**PRO-TECH** is a one-drum boiler compound that incorporates organic inhibitors with additional sulfite for chemical deaeration. It is well suited for use in feedwater with low to moderate alkalinity.

### **SAFETY & HANDLING PROCEDURE**

This is an extremely alkaline product! Contact with product will cause severe burns; prolonged contact with product will destroy tissue. Complete safety equipment must be worn when handling.

#### SAFETY & HANDLING PROCEDURE (CONT'D)

Wear impervious gloves, safety goggles and face shield, as well as protective clothing, boots, and respiratory protection as necessary to minimize contact with product.

### **FEEDING TECHNIQUE**

Pump directly into the makeup water line of the boiler or add via a one-shot or bypass feeder.

### **DOSAGE**

Add **PRO-TECH** into the boiler feed system at the rate of 8 to 12 ounces per 10 boiler horsepower per day. Follow established addition and blowdown procedures until treatment and blowdown levels are within the recommended ranges, then contact your local PRO-TECH representative to arrange for a water analysis.

### **CONTROL**

Maintain a residual of 350 to 800 ppm of P-alkalinity in the system at all times as tested by CH<sub>2</sub>O **APA-50** test kit. Consult your local CH<sub>2</sub>O representative to arrange for a water analysis. 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	11.0-12.5
Pounds per Gallon	
Physical Appearance	Clear Liquid
Odor	
Flash Point	NA

#### **Seller Warranty**

CH<sub>2</sub>O 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. CH<sub>2</sub>O 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 CH<sub>2</sub>O, Inc., and is hereby communicated to all of its customers as a condition of sale. Use of CH<sub>2</sub>O products is subject to the Standard Terms and Conditions as listed on CH<sub>2</sub>O, Inc.'s website at: <a href="www.ch2o.com">www.ch2o.com</a>.



