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6747 HYBAR BOILER WATER TREATMENT

APPLICATION

Mineral crystallization and deposition on heat-transfer surfaces of a steam generating system are the chief causes of tube failure. The insulating effect of the mineral deposition on the heat transfer surfaces yields a loss of heat conduction, which in turn causes excessive metal temperature. The heat-transfer efficiency will decline. Eventually, the increase of temperature reaches the soft point for the metal and a tube rupture can occur. If deposit buildup is neglected, a complete system shut down will occur.

Many different polymer and copolymer synthetic organic dispersants have been developed to treat suspended solids. These products inhibit deposit formation on the system surfaces by imparting an anionic charge to the water, thus maintaining suspension of the anionic particles. Using the proper size of dispersant is critical to proper suspension of the particles.

While each synthetic organic dispersant has its strength for dispersing a unique type of material, not any one dispersant has outstanding performance for all materials. This limitation can be overcome by creating a blend of two or more dispersants. Where one dispersant is deficient the other is proficient, thus allowing a wide range of effectiveness.

Product **6747** is especially formulated for high-pressure and temperature operations. Its component ratios have been selected to provide outstanding mineral and debris control. The ability of product **6747** to hold high concentrations of minerals (such as calcium, magnesium and iron in suspension minimizes damage due to mineral deposit formation.

SAFETY & HANDLING

This product is a neutral liquid. It can be safely handled using the standard precautionary procedures associated with industrial chemicals of this type. Avoid prolonged or repeated skin contact. Read material safety data sheet before handling this product.

FEEDING TECHNIQUE

Feed product **6747** directly into the makeup line of the boiler or add via a bypass feeder. It can also be added to chemical feed tanks. It is not recommended to use natural organic compounds in conjunction with this product.

CONTROL

The chemical residual depends upon the suspended solids content of the water to be treated. Typical conditions require 10 to 20 ppm of active polymer. Contact your local CH₂O water treatment specialist for further information on suggested product residual. Daily testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage. It is the customer's responsibility to monitor and maintain treatment levels.

DOSAGE

Initially add product **6747** at the rate of 8 ounces per 1,000 gallons of system capacity. Maintain system treatment by feeding at the rate recommended by your CH₂O water treatment specialist.

PHYSICAL PROPERTIES

pH of 1% Solution.....	6-9
Pounds per Gallon.....	8.2-8.7
Physical Appearance.....	Clear, Colorless Liquid
Odor.....	Mild
Flash Point.....	N/A

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 directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions. 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.



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