



SUBJECT: Water Treatment – Antifreeze and Inhibitor Recommendation for W-M Condensing Boilers

Sentinel products are the preferred brand of anti-freeze and chemicals to be used with Weil-McLain products. The use of these products provides several benefits including restoring and maintaining the performance of the entire hydronic system and not just the boiler alone.

Sentinel X100 Inhibitor is a product that is included with all Ultra Gas, Ultra Commercial, WM97+, and GV90+ boilers from the factory.

Sentinel X500 Antifreeze is a multi-metal safe propylene glycol based anti-freeze that is preferred due to the fact it contains the same inhibitor package as X100. This allows use of the same X100 Quick Test Kit to check the inhibitor levels during normal maintenance procedures, and does not require the use of additional X100 when the system is filled with an X500 Antifreeze mixture. Also, Sentinel provides additional water analysis in any system in which its products are used, they can recommend the proper cleaning and treatment products to insure maximum boiler and system efficiency over a long product life. Water system analysis is highly recommended, as antifreeze solutions tend to become more acidic and provide less protection over time.

Although we encourage the use of Sentinel products with Weil-McLain water boilers, we recognize that there are situations where other chemical brands are used. This includes situations such as existing systems that have already been treated with other inhibitor products or filled with Aluminum safe (or multi-metal safe) anti-freeze blends. We recommend that these systems still get treated with the entire amount of X100 that would be needed as if it is the only inhibitor within the system. Depending on the color of the other products contained in the system, this may leave the Sentinel X100 Quick Test Kit unable to determine if there is a proper amount of inhibitor in the system. If this is the case, a more comprehensive analysis should be conducted. Sentinel is a resource for an analysis; please contact Andy Lapinsky at Andrew.Lapinsky@sentinel-solutions.net for details.

Using other products that are formulated specifically for boilers with stainless steel and aluminum heat exchangers will most likely have no detrimental effect but might not produce the optimal performance. It is recommended that customers use appropriate cleansers, inhibitors and propylene glycol in accordance with the installation manuals. Use of alternate chemicals is at the risk of the customer.

Last Note:

If you are replacing an old boiler with a new one – before removing the old boiler, it's always a good practice to circulate a cleaner in the system, and then flush the system to remove any sludge build up. This action will help restore circulation, eliminate cold spots, and improve system efficiency – which saves fuel.

If you are installing a new boiler on a new system (new construction) – circulating a system cleaner, then flushing, will help insure any corrosive flux residue and installation debris are removed.

Existing system cleaner (Sentinel X400), new system cleaner (Sentinel X300), flushing machines (Sentinel JetFlush 40 & 90) and other Sentinel products can be obtained through any Weil-McLain distributor.