



WAPOTEC LEGIOCID® SYSTEM

Why treat with the LegioCid® System?

LegioCid® is a **WAPOTEC** product that will eliminate biofilm that has developed in the Whirlpool system. Biofilm is a layer of microorganisms contained in a matrix (slime layer), which forms on surfaces in contact with water. This matrix protects pathogens from the concentration of chlorine that would normally kill or inhibit them. Should biofilm be left unchecked, the facility is likely to experience poor bacteriological test results, and may lead to a closure of the Whirlpool until the problem is eliminated.

How do I use the LegioCid® System?

The **LegioCid®** System is made up of three products; **LegioCid® 'A'** (TCDO Complex), **LegioCid® 'B'** (Lithium Hypochlorite) and **LegioCid® 'C'** (Sodium Thiosulfate). All three products should be used in the process.

1. Prior to adding **LegioCid®** to the Whirlpool:
 - a. Carefully calculate the volume of the Whirlpool. Ensure that the calculated volume includes the pipes and mechanical system. This volume is required to accurately calculate the proper dosage of **LegioCid®** products.
 - b. Adjust the pH to 7.3 to 7.5.
 - c. Ensure that the Chlorine and Base/Acid Feed Systems are shut off and the Water Chemistry Controller is unplugged.
 - d. The tubing leading to and from the Water Chemistry Controller Probe Holder may be contaminated with biofilm; therefore, it is ideal to circulate **LegioCid®** through the probe loop. Remove the ORP & pH Sensors from the Probe Holder, and replace with ½" threaded plugs. After the plugs are installed, the valves to and from the probe holder must be in the open position. Store the Sensors in water (distilled water is ideal).
 - e. Ensure that the entire system is operating, other than the Chlorine/pH Feed System and the Water Chemistry Controller. This includes the heat exchanger or boiler system.
2. Add the calculated dosage of **LegioCid® 'A'** to the Whirlpool. Wait 5 Minutes.
3. Pre-dissolve the required dosage of **LegioCid® 'B'** in a clean pail filled with Whirlpool water.
4. Add the **LegioCid® 'B'** solution to the Whirlpool.
5. Circulate the Whirlpool for a minimum of 12 hours.
6. It is very important to treat the Whirlpool Jet system with **LegioCid®**. Turn the Jet system on for 5 minutes of every hour during the treatment process.
7. After 12 hours, pre-dissolve the required dosage of **LegioCid® 'C'** in a clean pail filled with water. This will neutralize the chlorine prior to draining the Whirlpool.
8. Add the **LegioCid® 'C'** solution to the Whirlpool. Wait 30 minutes.
9. After treatment is complete, drain the Whirlpool.
10. Clean and start-up the Whirlpool system, as per your normal procedures.

This procedure should be completed every three months.