

OPERATIONS AND MAINTENANCE MANUAL

THE BLEACH-GUARD SYSTEM™

**IMPORTANT! READ & UNDERSTAND THIS ENTIRE
MANUAL BEFORE USING PRODUCT.**

THE **BLEACH-GUARD SYSTEM™** IS A PROPRIETARY PRODUCT OF THE PROTECTOPLAS COMPANY. THE **BLEACH-GUARD SYSTEM™** IS A REGISTERED TRADEMARK OF PROTECTOPLAS COMPANY, STREETSBORO, OH U.S.A.

CUSTOMER _____

JOB NO. _____

MODEL NUMBER _____

SERIAL NUMBER _____

DATE SHIPPED _____

FOR SERVICE OR TECHNICAL INFORMATION CALL 330-562-8265 BETWEEN THE HOURS OF 9:00 AND 5:00 EST, MONDAY THROUGH FRIDAY.

Vacuum Test Report

Return this completed page to fax number: 330-562-2560

Date of Test: _____
(MONTH/DAY/YEAR)

Tested By: _____
(PRINT YOUR NAME)

Length of Time to Vacuum _____
(MINUTES)

Verification of Primary Containment in Place: Yes _____ No _____

O & M MANUAL

BLEACH-GUARD SYSTEM™

- SCOPE** A) The **Bleach-Guard System™** is a double containment system designed expressly for the storage of sodium hypochlorite in concentrations up to 17% at room temperature. It is available in sizes from 55 gallons to 40,000 gallons. Sizes up to 12,000 gallons are shipped from Bedford, Ohio, ready for installation.
- B) This manual is intended to familiarize the user owner with the usage of the **Bleach-Guard System™**. If you encounter a situation where you are not sure what is the proper action call our service department at 330.562.8265, 9 AM to 5 PM, EST.

I. SHIPPING

The **Bleach-Guard System™** is shipped via common carrier and dedicated direct trucks.

Generally, tanks 2,000 gallons and smaller will be shipped via common carrier and larger tanks shipped via dedicated truck. For tanks that must be shipped on their sides, the most direct method will be employed.

II. RECEIVING

- A) Upon receipt look for shipping damage. While this is not common, any damage must be noted on the freight company receipt in order for any claims to be pursued.
- B) Each **Bleach-Guard System™** is shipped with a vacuum on the interstitial space. Immediately upon receipt, check the inside of the tank to insure the primary containment is not misaligned.
- Prior to installing the ¾" site glass monitor port, connect a shop vac to the monitor port fitting by removing the plug and placing the hose over the ¾" coupling.
 - Remove all air that is between the primary containment and the secondary containment. You can verify this is done by looking in the manway. The primary containment will appear to be glued to the walls and floor. There will be some wrinkles as the primary containment is slightly larger than the secondary containment.
 - If the primary containment shows areas where the lining is bridging (not in contact with the wall or floor) you must release the vacuum and enter the vessel and reposition the liner and repeat the process. If there is a breach in the primary containment you will hear air movement inside the tank indicating a possible leak.
 - Do not remove any fitting blank offs until the vacuum test has been successfully completed.***
 - Upon completion of the vacuum test, return the accompanying **Vacuum Test Report** sheet (the front page of this manual) to fax number 330.562.2560. ***Failure to do this will result in voiding the warranty.***

If there is any question, call our service department at 330.562.8265 between 9:00 AM and 5:00 PM EST.

C) Handling

1. Most **Bleach-Guard Systems™** are shipped with lifting lugs. You must use care when receiving and handling plastic tanks. Always use a spreader bar when lifting larger tanks (smaller tanks may only be equipped with one lifting lug).
2. Avoid any sharp point contact to the tank.
3. Always place on a solid, flat, clean surface with total bottom support.
4. For lifting, use nylon straps and slings. Do not use chains to handle tanks.
5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage in handling.

III. STORING

A) Short term: (up to 6 weeks)

1. Upon receipt the **Bleach-Guard System™** must be stored in a vertical position insuring that all fittings are protected and manways are in place. Do not remove any fitting blanks until you are ready to install piping to your tank.

B.) Long term: (over 6 weeks)

1. Follow same steps in short term storage.
2. If you must store your **Bleach-Guard System™** for over 6 weeks, we recommend that 3” of water be placed in the bottom of the tank to insure primary containment placement. If outside in winter climates, do not allow water to freeze, (tank should be placed in warm area.)

Note: It is possible and likely that condensation can form in the interstitial space on tanks that have been stored prior to putting into service. Since all fittings are shipped blanked off, outside weather conditions will dictate the formation of condensate. All tanks that have been stored should be vacuumed prior to the water test, this will remove any existing condensate. The outside temperature and the water test temperature will also dictate if condensate is created during the water test period. Condensate will not be an increasing or continuing liquid from the monitor port. It is possible depending on the size of tank for an appreciable amount of condensate to form in the interstitial space.

IV. INSTALLATION

A) Handling

1. Most **Bleach-Guard Systems™** must be installed on a solid flat pad or stand. The tank bottom requires 100% bottom support.
 2. Avoid any sharp point contact to the tank.
 3. Always place on a solid, flat, clean surface with total bottom support.
 4. Use nylon straps and slings, do not use chains to handle tanks.
 5. Be careful not to expose fittings to sharp blows as they are plastic and subject to damage.
- B) Your **Bleach-Guard System™** must be installed on a solid flat pad or stand. The tank bottom requires 100% bottom support.

- A) After the tank has been piped, close any bottom fittings and fill to the top of the straight shell with water for 8 hours. **DO NOT USE PRODUCT!**
- B) **MONITOR THE BOTTOM SIGHT PORT. UNDER SOME ATMOSPHERIC CONDITIONS IT IS POSSIBLE TO DEVELOP CONDENSATION IN THE INTERSTITIAL SPACE. CONDENSATION WILL NOT PRODUCE A CONSTANT FLOW. AFTER A PERIOD OF ONE OR TWO HOURS THE FLOW WILL STOP.**
- C) If no liquid is found at the monitor port, yet the tank level is dropping, check to see if there are leaks at the flange connections and that the valves are not leaking.

VII. OPERATIONS

- A) On a regular basis check the monitor port for a breach in the primary containment. **SHOULD A BREACH OF THE PRIMARY CONTAINMENT OCCUR, PROMPT ACTION MUST BE TAKEN TO REMOVE THE TANK CONTENTS. THE SECONDARY CONTAINMENT IS NOT INTENDED FOR LONG TERM STORAGE (over 30 days).** Report any problems to our service office at 330.562.8265.
- B) Insure that any changes to the installation do not effect the venting of the **Bleach-Guard System™**.
- C) The **Bleach-Guard System™** is designed for the **STORAGE** of commercial grade **SODIUM HYPOCHLORITE**, **NOT THE MANUFACTURE**.
- D) **DO NOT OVERFILL THE TANK.** The working capacity of the vessel is the straight side capacity. You must monitor the liquid level at all time to help prevent an overflow of the primary containment.
- E) Monitor the bottom of the tank to insure that sludge does not accumulate in the bottom. Remove sludge by vacuum or by flushing.

VIII. SPARE PARTS

- A) There are no parts on the normal **Bleach-Guard System™** that should require routine replacement.
- B) Should you require any fittings, they are generally in stock for sizes 2” through 8”. Fittings should not require replacement under normal operating conditions.
- C) The addition of extra nozzles will require a factory service call.

IX. REPAIRS

- A) There are no customer repairs that can be made. If you feel there is a condition that requires action, contact our service department to discuss the situation.
- B) When contacting our service department, please have the serial number and model number available.

- C) For warranty claims a warranty repair form must be completed. This will be supplied by the service department.