

# PRODUCT PROFILE

## SODIUM HYPOCHLORITE 5.25% (LIQUID BLEACH) SEWAGE & WASTEWATER EFFLUENT TREATMENT

### SEWAGE AND WASTEWATER EFFLUENT TREATMENT

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent and has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacteria kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, must be the final and primary standard, and the chlorine residual must be considered an operating standard valid only to the extent verified by the coliform quality of the effluent.

The following are critical factors affecting wastewater disinfection:

1. Mixing- It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. Contacting- Upon flash mixing, the flow through the system must be maintained.
3. Dosage/Residual Control- Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined desirable chlorine level. Secondary effluent must contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

### SEWAGE AND WASTEWATER TREATMENT

**EFFLUENT SLIME CONTROL-** Apply a 100 to 1,000 ppm available chlorine solution at a location which will allow for complete mixing. Prepare this solution by mixing 22 to 230 oz. of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 3.5 oz. of this product with 100 gallons of water.

**FILTER BEDS SLIME CONTROL-** Remove filter from service drain to a depth of 1 ft. above filter sand and add 230 oz. of the product per 20 sq. ft. evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

### DILUTION

To Achieve Available Chloride (By Weight)	Gallons of Water	Add Liquid Ounces of 5.25% Sodium Hypochlorite
5 ppm	100 gallons	1 oz
10 ppm	100 gallons	2 oz
15 ppm	100 gallons	3.5 oz
25 ppm	100 gallons	5.5 oz
35 ppm	100 gallons	8.0 oz
50 ppm	100 gallons	11.5 oz
100 ppm	10 gallons	2 oz
200 ppm	10 gallons	4.5 oz
500 ppm	10 gallons	11.5 oz
600 ppm	10 gallons	14 oz
1000 ppm	10 gallons	23 oz
5000 ppm	10 gallons	125 oz
10,000 ppm	10 gallons	280 oz

**NOTE:** This product degrades with age. Use a chlorine test kit and increase dosage as necessary to obtain the required level of chlorine.

### SAFETY AND HANDLING

Protective clothing, such as rubber gloves, safety goggles, and rubber safety boots should be worn to protect from eye and skin contact. Refer to the Safety Data Sheet.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage disposal or cleaning of equipment. Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used must be diluted with water before disposal in a sanitary sewer.

The information on this Product Profile is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose. For latest product specifications, contact our nearest sales office.

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**Refillable container** - Refill this container with sodium hypochlorite only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full of water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure 2 more times.



Sodium Hypochlorite 5.25%  
EPA Reg.No 266-40  
EPA Est.No. 266-AZ-1

Certified to  
NSF/ANSI 60

*\*The information contained in this profile pertains only to Sodium Hypochlorite manufactured at the Hill Brothers Phoenix, AZ facility.  
It is a violation of federal law to use this product in a manner inconsistent with its labeling.*



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