



PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

# BLEACH FILTER LIQUOR

Reg # 748-287

PM-32

EPA REG. NO. 748-287  
EPA EST. No. 748-WV-1

Hypochlorite Solution  
UN1791

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NOV 2 1990

## KEEP OUT OF REACH OF CHILDREN!!!

Active Ingredient: Calcium Hypochlorite . . . 8%  
Inert Ingredients: . . . . . 92%

### PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

## DANGER!!

- Corrosive, may cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.

**STATEMENT OF PRACTICAL TREATMENT (FIRST AID):** If contact with eyes occurs, flush with water for at least 15 minutes. Get prompt medical attention. If contact with skin occurs, wash with plenty of soap and water. If swallowed, drink large quantities of milk or gelatin solution, if these are not available, drink large quantities of water. Do not give vinegar or other acids. **DO NOT** induce vomiting. Get prompt medical attention.

**ENVIRONMENTAL HAZARDS:** This product is toxic to fish. Do not discharge into lakes, streams, ponds or public waterways unless in accordance with NPDES permit. For guidance, contact the regional office of the U.S. Environmental Protection Agency. **PHYSICAL OR CHEMICAL HAZARDS: STRONG OXIDIZING AGENT:** Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

**STORAGE AND DISPOSAL:** 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 should be diluted with water before disposal in a sanitary sewer. Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. **PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**DIRECTIONS FOR USE:** It is a violation of federal law to use this product in a manner inconsistent with its labeling. **NOTE:** This product degrades with age. Use a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

**SEWAGE & 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 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 bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered by 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 contact 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 should 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.

**PULP AND PAPER MILL PROCESS WATER SYSTEMS: Slug Feed Method - Initial Dose:** When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved. **Subsequent Dose:** When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun. **Intermittent Feed Method - Initial Dose:** When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. **Subsequent Dose:** When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost to blowdown. Badly fouled systems must be cleaned before treatment is begun. **Continuous Feed Method - Initial Dose:** when system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. **Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun. **Subsequent Dose:** When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

**COOLING TOWER/EVAPORATIVE CONDENSER WATER: Slug Feed Method - Initial Dose:** When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved. **Subsequent Dose:** When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun. **Intermittent Feed Method - Initial Dose:** When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. **Subsequent Dose:** When microbial control is evident, add 11 oz. of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun. **Continuous Feed Method - Initial Dose:** When system is noticeably fouled, apply 52 to 104 oz. of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. **Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 1 oz. of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.