



TOWERBROM® 60M GRANULES

ACTIVE INGREDIENTS:

Sodium Dichloro-s-triazinetriene 50%
Sodium Bromide 7%

INERT INGREDIENTS 3%
..... 100%

Provides 57% Available Chlorine
Provides up to 128% Available Bromine with continued
use in accordance with the Directions for Use

When used as directed, this product is a high performance bromine microbiocide which aids in the control of organic slimes of algae, bacteria and fungi in water systems.

KEEP OUT OF REACH OF CHILDREN

DANGER

STATEMENT OF PRACTICAL TREATMENT (FIRST AID)

IF SWALLOWED, drink large amounts of water. **DO NOT** induce vomiting. Avoid alcohol. Call a physician or poison control center immediately.

FOR EYES: OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes forcibly holding lids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within one (1) minute is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

FOR SKIN: Immediately brush off excess chemical and flush with plenty of water. Remove contaminated clothing. Wash clothing before reuse. GET MEDICAL ATTENTION if irritation persists.

IF INHALED: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

See side panel for DIRECTIONS FOR USE.

EPA Est. No. 58401-MO-1
EPA Reg. No. 935-71

Occidental Chemical Corporation
Basic Chemicals Group
Dallas, Texas 75380
214-404-3800
24 Hour Emergency Phone: 1-800-733-3665

NET WT. 50 LBS./22.7 KG.

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES EYE AND SKIN DAMAGE. IRRITATING TO NOSE AND THROAT. HARMFUL OR FATAL IF SWALLOWED. Prolonged ingestion of large amounts may cause adverse central nervous system effects.

Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing dust or fumes. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL OR CHEMICAL HAZARD

STRONG OXIDIZING AGENT. Contact with water slowly liberates irritating and hazardous chlorine and bromine containing gases. Decomposes at temperatures above 464°F with liberation of harmful gases. When ignited, will burn with the evolution of chlorine and equally toxic gases.

NEVER add water to product. Always add product to large quantities of water. Use clean, dry utensils. **DO NOT** add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic material, or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion. **DO NOT** add this product to a tablet feeder. Use a pot or shock feeder for granules only if high water flow rates can be assured. Mixtures of this product with 10-50% water in a confined space may result in destructive over pressurization.

IN CASE OF FIRE OR SMOKE:

Call the fire department. Do not attempt to extinguish the fire without a self contained breathing apparatus (SCBA). Do not let the fire burn. **Flood with copious amounts of water. DO NOT** use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

IN CASE OF CONTAMINATION OR DECOMPOSITION: DO NOT reseal container. Follow disposal instructions on label.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

FOR CONTROL OF BACTERIA, FUNGI AND ALGAE IN RECIRCULATING WATER SYSTEMS, SEWAGE WASTEWATER SYSTEMS, PULP AND PAPER MILL WATER SYSTEMS AND ONCE-THROUGH WATER SYSTEMS

FOR RECIRCULATING WATER SYSTEMS

This product is intended for use in the following aquatic sites: Air Washer Water Systems, Commercial/Industrial Water Cooling Systems, Evaporative Condenser Water Systems, Ornamental Ponds and Aquaria, Heat Exchange Water Systems, Lakes/Ponds/Reservoirs (Without Human or Wildlife Use), Industrial Scrubbing Systems, Industrial Auxiliary Water Systems, Industrial Process Water, Industrial Waste Disposal Systems, Pasteurizer/Warmer/Cannery Cooling Water Systems.

This product may be added to the system by direct placement into the water at a point where the product will be uniformly mixed with water. The frequency of feeding and duration of the treatment will depend on the severity of the contamination. Badly fouled systems must be cleaned before treatment begins.

Intermittent or slug method

Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.15 to 0.75 pounds per 1000 gallons (18 to 90 grams per 1000 liters) in the system to achieve 0.5-10 mg/L total available halogen as chlorine, as measured by a suitable test kit. Repeat dosage until residual is achieved.

Subsequent Dose: When microbial control is evident, add this product at the rate of 0.03 to 0.15 pounds per 1000 gallons (3.6 to 18 grams per 1000 liters) in the system to achieve 0.5-1 mg/L total available halogen as chlorine, as measured by a suitable test kit. Repeat periodically as needed to maintain control.

Continuous feed method

Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.15 to 0.75 pounds per 1000 gallons (18 to 90 grams per 1000 liters) in the system to achieve 0.5-10 mg/L total available halogen as chlorine, as measured by a suitable test kit. Repeat dosage until residual is achieved.

Subsequent Dose: When microbial control is evident, add this product at the rate of 0.03 to 0.15 pounds per day per 1000 gallons (3.6 to 18 grams per day per 1000 liters) in the system to maintain 0.5-1 mg/L total available halogen as chlorine, as measured by a suitable test kit.

FOR SEWAGE WASTEWATER SYSTEMS

This product is intended for use in sewage wastewater systems. This product provides rapid disinfection of primary, secondary and tertiary wastewater treatment systems.

Dose Rate: Add this product at the rate of 0.03 to 0.75 pounds per 1000 gallons (3.6 to 90 grams per 1000 liters) in the system to achieve 0.2-3 mg/L total available halogen as chlorine, as measured by a suitable test kit, at the injection point in the disinfection contact chamber. Adjust the dosage to achieve disinfection and minimize the halogen concentration at the exit of the contact chamber.

FOR PULP AND PAPER MILL WATER SYSTEMS

This product is intended for use in pulp and paper mill water systems.

Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.06 to 3.0 pounds per ton (0.03 to 1.5 kg. per metric ton) of dry pulp or paper produced to achieve 0.1-5 mg/L total available halogen as chlorine, as measured by a suitable test kit, in the water treated. Repeat dosage until residual is achieved.

Subsequent Dose: When microbial control is evident, add this product at the rate of 0.06 to 2.0 pounds per ton (0.03 to 1.0 kg. per metric ton) of dry pulp or paper produced to achieve 0.1-5 mg/L total available halogen as chlorine, as measured by a suitable test kit, in the water treated. Repeat periodically as needed to maintain control.

FOR ONCE-THROUGH WATER SYSTEMS

This product is intended for use in open or closed cycle, fresh or salt water, once-through cooling systems.

Initial Dose: When the system is noticeably fouled, add this product at the rate of 0.03 to 0.75 pounds per 1000 gallons (3.6 to 90 grams per 1000 liters) of water treated to achieve 0.2-10 mg/L total available halogen as chlorine, as measured by a suitable test kit, in the water treated. Repeat dosage until residual is achieved.

Subsequent Dose: When microbial control is evident, add this product at the rate of 0.03 to 0.15 pounds per 1000 gallons (3.6 to 18 grams per 1000 liters) of water treated to achieve 0.2-5 mg/L total available halogen as chlorine, as measured by a suitable test kit, in the water treated. Repeat periodically as needed to maintain control.



Towerbrom 60M Granules is a preservative which effectively inhibits the growth of microorganisms in aqueous systems, including paints, emulsions, adhesives, pigment dispersions and joint compounds.

Typical Use Levels - Laboratory testing shows the product to be effective in the range of 0.0125% - 0.4% (125ppm - 4,000ppm). These ranges are based on the total formulation weight. The exact amount of any given formulation will depend on components, storage time, etc.; and can be determined by actual testing.

Recommended Use Levels

Paints - The following concentrations must be used to inhibit in-can microbiological degradation of water based paint systems. The concentrations are based on the total paint formulation weight and should be incorporated into the make-up water during the grind.

<u>Interior Paint Type</u>	<u>Percent Concentration</u>
Vinyl Acrylic	0.05% - 0.2%
Acrylic	0.05% - 0.2%
PVA	0.05% - 0.2%

Emulsions - The following concentrations must be used to inhibit in-can microbiological degradation of water based emulsion systems. The concentrations are based on the total emulsion formulation weight and should be added using moderate agitation immediately following the cool-down of the emulsions and prior to pumping to storage tanks.

<u>Emulsion Type</u>	<u>Percent Concentration</u>
Vinyl Acetate	0.0125% - 0.4%
Vinyl Acrylic	0.0125% - 0.4%
100% Acrylic	0.0125% - 0.4%

Adhesives - The following concentrations must be used to inhibit in-can microbiological degradation of water based adhesive systems. The concentrations are based on the total adhesive formulation weight and should be incorporated with agitation to the make-up water; however, where the adhesive is heated, the product should be added during the cool-down cycle.

<u>Adhesive Type</u>	<u>Percent Concentration</u>
Clay based	0.0125% - 0.4%
Starch based	0.0125% - 0.4%
Dextrin	0.0125% - 0.4%
Casein	0.0125% - 0.4%
Polyvinyl	0.0125% - 0.4%
Acrylic	0.0125% - 0.4%

Pigment Dispersions - The following concentrations must be used to inhibit in-can microbiological degradation of water based dispersion pigment systems. The concentrations are based on the total dispersion pigment formulation weight and should be added using moderate agitation immediately following the cool-down of the dispersion pigment and prior to pumping to storage tanks.

<u>Pigment Type</u>	<u>Percent Concentration</u>
TiO2	0.025% - 0.4%
CaCO3	0.025% - 0.4%
Clay	0.025% - 0.4%

Joint Compounds - The following concentrations must be used to inhibit in-can microbiological degradation of water based joint compound systems. The concentrations are based on the total joint compound formulation weight and should be added with agitation to the make-up water blend at 0.025% - 0.4%.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Keep material dry and in a dry area. Store in original container where temperatures do not exceed 125°F (52 °C) for 24 hours. Keep container tightly closed.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. The preferred disposal methods are incineration or chemical treatment in accordance with Federal, State and Local regulations.

Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction and fire. DO NOT transport wet or damp material.

CONTAINER DISPOSAL:

BULK BIN: Return empty bulk bin for reuse. Do not vacuum, wash, or clean inside of bin.

PLASTIC BULK BAG: Completely empty bag into application equipment. Remove and triple rinse polyethylene liner. Dispose of empty bag and liner in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Do not reuse bag.

FIBER DRUM: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Remove and triple rinse polyethylene liner. Then dispose of liner in a sanitary landfill or by incineration as allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

PLASTIC DRUM: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

