HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through the skin. May cause irritation to the eyes and skin. Do not get in eyes, on skin, or on clothing. Use with adequate ventilation. Wearing protective eyewear (goggles, face shield or safety glasses), protective clothing and protective gloves (rubber, chemical resistant) while handling material. Contaminated clothing and wash clothes before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into 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 as soon as possible after discharge. Do not discharge effluent containing this product to sewers without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS

Direct mixing of this product with sodium hypochlorite solutions and other strong oxidizing and alkali chemicals will release hazardous gases. Only mix with other chemicals or materials solutions following the Directions for Use of this product.

STORAGE AND DISPOSAL

Do not contain water, food, or feed by storage and disposal. Open dumping is prohibited.

PESTICIDE STORAGE:

Keep container tightly closed. Store in a dry place. Leaking or damaged containers shall be placed in an enclosed, pesticide disposal container. Spills should be cleaned and cleaned using an absorbent material and disposed of in a sanitary landfill.

PESTICIDE DISPOSAL:

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinse 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 in your EPA Regional Office for guidance.

CONTAINER HANDLING

Non-refillable container. Do not reuse or refill this container. Triple tip (or equivalent) container promptly after emptying. Triple tip as follows: Empty remaining contents into application equipment. Then rinse triple tip and replace with water. Replace and tighten closures. Trip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinse into application equipment or a mix tank or store rinse for later use or disposal. Repeat this procedure two more times. Then offer for recycling, if available, or reconditioning, repurcating and dispose of in a sanitary landfill, or by other procedure approved by state and local authorities.

DIRECTIONS FOR USE

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

For the control of bacteria, algae and fungi. Nalco 60620 must be used in conjunction with 1) an EPA registered sodium hypochlorite product (12.5%) to produce chloramine; and 2) the OxiPRO delivery system at a pH of 2.5 to 5.5 as described in the above. The OxiPRO delivery system can be configured for a primary or secondary dilution strategy. Your Nalco technical representative will determine which OxiPRO delivery system configuration is appropriate for treatment of your system.

Nalco 60620 is used for the control of algae, fungi and sulphur bacteria. Nalco 60620 is used for the control of algal, bacterial and fungal deposits in industrial cooling towers, recirculating cooling water systems, evaporative condensers, influent water systems, industrial fresh water systems, airwashers, seawater desalination and reverse osmosis systems, paint spray booth sumps, ponds used for cooling purposes, sewage and wastewater systems. This product is also used for the control of algae, fungi and sulphotrichia in both seawater and freshwater influent systems.

When this product is used to treat sewage and wastewater systems, seawater, and freshwater influent systems it is used to neutralize industrial wastewaters, and seawater desalination and reverse osmosis systems, and the system water is not sent to a POTW, residual levels of chlorine in the effluent must be monitored and controlled using on-line monitoring and control equipment.

When this product is used to treat recirculating cooling water systems, evaporative condensers, influent water systems (not part of once-through industrial water systems), airwashers, spray paint booth sumps-ponds used for cooling purposes, sewage and wastewater systems. This product is also used for the control of algae, fungi and sulphotrichia in both seawater and freshwater influent systems.

Dosage Rates: When needed, apply sufficient product and sodium hypochlorite to achieve a total chlorine residual of at least 1 ppm in excess of the system oxidant demand. Once control is achieved, treatment rates can be reduced to sub-demand rates from 50% to 80% of system demand. The product may be added to the systems continuously or intermittently as needed to any area of the system where uniform mixing can be obtained.

For intermittent treatment: The chloramine dosage is typically achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 1 to 2 ppm of available chlorine in the system oxidant demand (maximum of 5 ppm measured) as total chlorine in the water being treated for 5 to 60 minutes every 1 to 6 hours. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

Careful handling in the application of Nalco 60620 will reduce, to a great extent, the possibility of dermatitis, particularly among workers with sensitive skin.

Inhalation of the product may be harmful to the lungs.

Nitrogen dioxide is a toxic gas produced by the reaction between hypochlorite and the product.

Ingestion of the product may cause severe irritation to the digestive system, particularly if large quantities are ingested.
**PRECAUTIONARY STATEMENTS:**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed or absorbed through the skin. May cause irritation to the eyes and skin.

Do not get in eyes, on skin, or on clothing. With adequate ventilation. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and protective gloves (rubber, chemical resistant) when handling.

Do not mix with sodium hypochlorite solutions and other strong oxidizing and alkali chemicals.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into 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 AND CHEMICAL HAZARDS**

Direct mixing of this product with sodium hypochlorite solutions and other strong oxidizing and alkali chemicals will release hazardous gases. Only mix with other chemicals or materials solutions following the Directions for Use of this product.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal. Open dumping is prohibited.

**PESTICIDE STORAGE:** Keep container tightly closed. Store in a dry place. Leaking or damaged container should be placed in an oven, overfired, and the disposal. Spills should be contained and cleaned up using an absorbent material and disposed of in a sanitary landfill.

**PESTICIDE DISPOSAL:** Pesticide waste is toxic. Improper disposal of excess pesticides, spray mixture, or residue 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 Responsible Party in your Regional Office for guidance.

**CONTAINER HANDLING:** Refillable container with this pesticide 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, container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinse into application equipment or rinseout collection system. Repeat this rinsing procedure two more times. Then offer for recycling, if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedure 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.

For the control of bacteria, algae and fungi. Nalco 60620 must be used in conjunction with: 1) an EPA registered sodium hypochlorite product (12.5%) to produce chloramine; and 2) the OxiPRO delivery system at a pH of 6.5 to 8.5 as described below. The OxiPRO delivery system can be configured for a primary or secondary disinfection strategy. Your Nalco technical representative will determine which OxiPRO delivery system configuration is appropriate for treatment of your system.

Nalco 60620 and the sodium hypochlorite are mixed in a specially designed OxiPRO system that produces the chloramine solution on site. The products are blended to achieve a minimum molar ratio of 0.5 to 1.0 Nalco 60620 to sodium hypochlorite (12.5%). The chloramine dosage is achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). The OxiPRO delivery system controller ensures the automatic production of the desired chloramine solution, controls the optimization of the production process, and ensures adequate dosing into the water system requiring treatment. Additional design, treatment, installation, calibration, and operation of the feeding system in all is to be conducted only by authorized and trained operators.

Use of this product for any other purpose or contrary to the instructions below, or without the supervision of authorized trained personnel is prohibited.

Note: Do not use other feeding modes to mix Nalco 60620 and the sodium hypochlorite. Non-authorized personnel are prohibited from operating or otherwise handling the feeding system or its chemical ingredients.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

FIRST AID

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told by a poison control center or doctor.

**IF ON SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF IN EYES:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or a doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or a doctor for treatment advice.

**NOTE:** Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**DIRECTIONS FOR USE (cont’d)**

**PULP AND PAPER MILL WATER SYSTEMS AND PRODUCTION OF FIBERGLASS**

Dosage Rates: When the system is noticeably fouled, apply sufficient product Nalco 60620 and sodium hypochlorite to achieve a chlorine residual in excess of the system oxidant demand. The chloramine solution produced by the delivery system controller must be used for the disinfection process. The dosage rate must be adjusted to ensure that the chlorination solution may be added at any point of uniform mixing. Addition may be continuous or intermittent depending on the severity of the contamination when treatment starts, and on other system operation parameters.

A. **SLUG FEED METHOD**

**Initial Dose:** When the system is noticeably fouled, add the appropriate amount of chloramine to the system to obtain 1 to 10 ppm total available chlorine. The chloramine dosage is achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Repeat until control is achieved. Badly fouled systems must be cleaned before treatment begins.

**Subsequent Dose:** When microbial control is evident, add the appropriate amount of chloramine to the system daily, or as needed to maintain control and keep the total chlorine residual at 1 to 10 ppm.

B. **INTERMITTENT FEED METHOD**

**Initial Dose:** When the system is noticeably fouled, add the appropriate amount of chloramine to the system to obtain 1 to 10 ppm total available chlorine. The chloramine dosage is achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Badly fouled systems must be cleaned before treatment begins.

**Subsequent Dose:** When microbial control is evident, add the appropriate amount of chloramine to the system to obtain a 1 to 10 ppm total chlorine residual.

C. **CONTINUOUS FEED METHOD**

**Initial Dose:** When the system is noticeably fouled, add the appropriate amount of chloramine to the system to obtain 1 to 10 ppm total available chlorine. The chloramine dosage is achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Badly fouled systems must be cleaned before treatment begins.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of chloramine to maintain a 1 to 10 ppm total chlorine residual.

**INDUSTRIAL WATER SYSTEMS**

Nalco 60620 is used for the control of algae, bacterial and fungal deposits in industrial cooling towers, recirculating cooling water systems, evaporative condensers, influent water systems, industrial fresh water systems, airwashers, seawater desalination and reverse osmosis systems, paint spray booth sumps, ponds used for cooling purposes, sewage and wastewater systems. This product is also used for the control of algae, bacteria, fungi and mollusks in both seawater and freshwater influent systems.

When this product is used to treat sewage and wastewater systems, seawater, and freshwater influent systems it is not recommended for use on once-through industrial wastewater systems, and seawater desalination and reverse treated seawater, and the system water is not sent to a POTW, residual levels of chloramine in the effluent must be monitored and neutralized using on-line monitoring and control equipment.

When this product is used to treat recirculating cooling water systems, evaporative condensers, influent water systems (not part of once-through industrial wastewater systems), airwashers, paint spray booth sumps used for cooling purposes, sewage and wastewater systems, the product should be conducted at least once per shift. If chloramine is detected in the effluent, it can be neutralized by the addition of sodium metabisulfite until the chloramine is no longer detected.

**Dosage Rates:** When noticeably fouled, supply sufficient product and sodium hypochlorite to achieve a total chlorine residual of at least 1 ppm in excess of the system oxidant demand. Once control is achieved, treatment rates can be reduced to sub-demand rates from 50% to 80% of system demand. The product may be added to the system continuously or intermittently as needed to any area of the system where uniform mixing can be obtained.

**For intermittent treatment:** The chloramine dosage is typically achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 0.5 to 1 ppm in excess of the system oxidant demand (maximum of 5 ppm measured) as total chlorine in the water being treated for 5 to 60 minutes every 1 to 6 hours. The frequency of feeding of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

**For continuous treatment:** The chloramine dosage is typically achieved by mixing 0.6 gallons of Nalco 60620 with 1.0 gallon of sodium hypochlorite (12.5%). Apply the solution at a rate to obtain 0.5 to 1 ppm in excess of the system oxidant demand (maximum of 5 ppm measured) as total chlorine in the water being treated on a continuous basis. The frequency of feeding and the duration of treatment will depend on the severity of the problem. Badly fouled systems must be cleaned before initial treatment.

**PRODUCT IS NOT REGULATED THROUGH TRANSPORTATION**