PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER. CORROSIVE: Do not enter an enclosed area without proper respiratory protection. Causes irreversible eye damage and skin burns. May be fatal if inhaled or absorbed through skin. Harmful if swallowed. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wear goggles and face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

PHYSICAL OR CHEMICAL HAZARDS
STRONG OXIDIZING AGENT. CORROSIVE. Mix only with potable water at 50-90°F. Product must be diluted in accordance with label directions prior to use. DicaSan PAA is corrosive; however, at temperatures exceeding 150°F, decomposition occurs releasing oxygen. The oxygen released could initiate combustion.

ENVIRONMENTAL HAZARDS:
This pesticide is toxic to birds, fish and aquatic invertebrates. Caution should be used when applying indoors because pets may be at risk. Do not discharge effluent containing this product into waterways, sewers, or septic tanks. Do not dispose of DicaSan PAA in any manner that violates any applicable law or regulation. Do not use near or in streams, lakes, ponds, or other bodies of water unless in accordance with the requirements of the National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage plant authority.

STORAGE AND DISPOSAL
Storage: Never return to the original container after it has been removed. Avoid all containers, especially dirt, castic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of decomposition, isolate container, dispose of container with cool water and dilute DicaSan PAA with large volumes of water. Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 80°F.
Procedure for Leak or Spill: Stop leak if this can be done without risk. Stop spill before it can enter waterways. Use absorbent materials to control spillage. Consult local authorities.

PESTICIDE DISPOSAL: Pesticide wastes are acute hazards. Improper disposal of excess pesticide, 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 Hazardous Waste representative at the nearest EPA Regional Office for guidance. If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all Local, State and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal. DicaSan PAA, which is to be discarded, should be disposed of as hazardous waste after contacting the appropriate Local, State or Federal agency to determine proper procedures.

CONTAINER DISPOSAL: Nonrefillable container. Do not refill or relabel this container. Use promptly after opening. Pour into toilet bowl, or add to trash. If empty, rinse container and refill with clean water. If container is not empty, return to nearest DuBois Chemicals, Inc. for proper disposal.

DIRECTIONS FOR USE
It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

SANITIZATION
DicaSan PAA peroxycetic acid sanitizer is recommended for use on pestilence surfaces such as equipment, pipelines, tanks, vats, filters, evaporators, pasteurizers, and aquatic equipment in dairies, breweries, wineries, breweries and food processing/packing plants, egg processing/packing equipment and surfaces, and eating establishments. This product is effective as a sanitizer when solution is prepared in water at up to 20 ppm hardness as CaCO3. This product has demonstrated greater than 99.999% reduction of organisms after 60 seconds exposure period in the ADAC Germicidal and Disinfecting Sanitizing of Disinfectants study.

NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitizing but may be reused for other purposes such as cooling. FOR MANUAL OPERATIONS fresh sanitizing solutions should be prepared daily or more often if the solution becomes discolored or soiled.

SANITIZING FOOD CONTACT SURFACES: This product can be used in Federally inspected Meat and Poultry facilities as a sanitizer. Prior to sanitizing, remove gross food particles, then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1.0-2.0 oz. DicaSan PAA diluted in 6 gallons of water (0.13-0.31% w/v concentration, or 60-167 ppm active peroxycetic acid). At this dilution, DicaSan PAA is effective against Staphylococcus aureus, Escherichia coli, Salmonella choleraesuis, and Listeria monocytogenes. Use immersion, coarse spray or high pressure spray applications. All surfaces should be exposed to sanitizing solution for a period of at least 60 seconds or more if specified by a governing code. Drain any excess solution. Do not reuse.
Sanitation of Conveyors and Equipment for Meat, Poultry, Seafood, Fruit, Nuts and Vegetables: DicloSlan PAA is effective against the gram negative and gram positive organisms Staphylococcus aureus, Salmonella choleraesuis, Enterobacteria coli and Listeria monocytogenes. For use in the static or continuous sanitizing, washing or rinsing of conveyors, slicers, saws, and equipment, apply a solution of this product using 1.0 to 2.4 or per 9 gallons of water (92 ppm to 127 ppm active peracetic acid). Apply sanitizer solution to the return portion of the conveyor or equipment using coarse spray or similar means of wetting surfaces, so as to affect cleaning and prevent puddling. Allow sanitizer to thoroughly wet surface for a minimum of 15 seconds. No rinsing is needed. Sanitizing of Casing, Shell or Hatching Eggs: To sanitize clean shell eggs intended for food or food products, spray with a solution of DicloSan PAA by diluting 1.0 to 2.4 or per 9 gallons of water (92 ppm to 127 ppm active peracetic acid). Sprays should be applied to the exterior of the eggs to be sanitized. Eggs should be sanitized thoroughly and allow to drain. Eggs that have been sanitized with this product may be broken for use in the manufacture of egg products without a prior potable water rinse. Eggs must be reasonably dry before eating or breaking. The sanitizing solution must not be reseeded for sanitizing eggs. For hatching eggs apply the sanitizing solution as eggs are gathered or prior to setting or using a coarse spray or fog so as to lightly wet egg shell surfaces. Allow to drain dry. Fogging In Filling, Packaging, and Dispensing Rooms or Areas: DicloSan PAA is used as an adjunct to acceptable manual cleaning and disinfection of room surfaces. Prior to fogging remove food products and packaging materials from the room or area or carefully protect them. Fog desired areas using one quart of a 0.5% to 1.5% solution of this product (2.0 to 5.0 or DicloSan PAA per 7.5 gallons of water) per 100 ft² of, or room area. Conventional disinfectant resistant fogging devices are recommended. Vacate the area of all personnel prior to, during and after fogging until the hydrogen peroxide concentration is below 0.5 ppm, or there is no strong odor present, characteristic of acetic acid. Allow surfaces to drain thoroughly before operations are resumed. For food contact surfaces, concentrations above 4.0 ppm this product per 7.5 gallons of water need a sterile or sanitizing rinse prior to resuming operations. Final Sanitizing Bottle Rinse: DicloSan PAA may be used as a final sanitizer rinse, followed by adequate draining for returnable and non-returnable bottles at a 0.1% - 0.3% dilution (1.0 oz to 4.0 oz. per 7.5 gallons of water) DicloSan PAA diluted in 6 gallons of water, which yields 96 to 192 ppm active peracetic acid. Bebible and Bottle Rinse of Precooked or NewReturnable or Non-Returnable Containers: To reduce the numbers of beverage spoilage organisms, including Aspergillus sydowii, Aspergillus niger, and Fusarium subsecta use a 2% to 5% v/v solution, which equals 1120-1700 ppm peracetic acid (2.5-5.0 times the 1.0 gallon of water of DicloSan PAA at a temperature range of 46 to 58°F for 15 seconds. Higher dilutions of 0.1% per gallon of water is effective against Aspergillus niger and Aspergillus sydowii at 60°C. After adequate draining, rinse interior container surfaces with sterile or potable water. Roof Contact Hard Surface Disinfection: DicloSan PAA is effective against Staphylococcus aureus, Staphylococcus epidermidis, Trichophyton mentagrophytes and Enterobacteria coli 0157:47 at 0.025% - 0.03% v/v (1.5 - 2.0 oz per gallon) in hard water. For use on hard surfaces load in 10 gallons of water, which yields 10 to 15 ppm active peracetic acid. To facely sanitized areas a pre-clearing step is required, followed by a potable water rinse. Apply solution with a mop, cloth, sponge, brush, etc., or by soaking or immersion so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove solution and entrapped soil with a clean wet mop, cloth, vacuum pickup, or by draining. Surfaces that may directly or indirectly contact food must be rinsed with potable water before operations resume. A rinse for non-food contact surfaces is optional. Prepare a fresh solution daily or when it becomes soiled or diluted. Control of Slime Forming Bacteria in Recirculating and Cooling Water Systems (Cooling Towers, Evaporative Condensers, Pasteurizers, and Air Washers): Severely fouled systems should be cleaned before adding the DicloSan PAA solution. DicloSan PAA should be added to the system directly and not mixed with any other chemicals or additives. Discontinue the use of detergent or biocide products prior to using this product. Contamination with other chemicals could result in product decomposition. Add DicloSan PAA to the system until the point of uniform mixing and a pH correction will occur. For slug treatment add 2.0 oz. per 1000 gallons of process water. Repeat as necessary until microbiological control is evident. Thereafter, to maintain control, use 0.3 to 1.0 lbs. of DicloSan PAA per 1000 gallons of process water (25 ppm active peracetic acid) as a continuous or intermittent slug treatment. Continuous dosing methods usually require a 20-50 ppm active peracetic acid (4.0-10.0 oz. per 1000 gallons of process water) to achieve adequate control. Air Washers: This product may be used to control bacteria and biofouling in industrial air washing systems. The air washer must have operational and effective dust elimination systems. Prior to use of this product, heavily fouled systems must be pre-cleaned using the appropriate cleaner. Continuous dosing methods require 2-7 ppm and intermittent dosing methods require 7-14 ppm (as peracetic acid), as described in the previous paragraph, depending on the type of system and the level of microbiological control desired.

**REVERSE OSMOSIS (RO) NANO AND ULTRA FILTRATION (UF) CLEANING SANITIZATION:** DicloSan PAA may be used in the sanitation of Nano Filtration (NF) and Ultra Filtration (UF) and Reverse Osmosis (RO) membranes and their associated piping systems. This product may be added continuously in food, beverage, and drinking water systems for RO (reverse osmosis) systems only and in accordance with the instructions below. This product is not for use in kidney dialysis equipment. This product may not totally eliminate all vegetative microorganisms in RO or UF or NF membranes and their associated piping systems due to their construction or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. Prior to using this product check with the manufacturer, reverse osmosis to determine compatibility of membranes with various types or concentrations of peracetic acid solutions.

**Batch Sanitization of NF, UF, and RO Systems:** Isolate incompressible equipment, such as carbon filters and ion exchangers. Clean system with an appropriate cleaner and follow with RO permeate water or potable water. Remove mineral deposits if necessary with an acetic cleaner, and rinse as before. Fill entire system with water and add up to 1% of this product by volume (600 ppm peracetic acid) for heavily fouled systems. The typical sanitization use solution dosing of this product is 1 to 2 per 5 gallons of water (168-336 ppm peracetic acid). Recirculate the sanitizing solution through the piping and membrane system at 20°C for 10 minutes minimum, or up to 4 hours, depending on the severity of cleaning to be done. Open and close process valves and solenoids to be sure all parts are in contact with the solution. For occasional intermittent feed, do not exceed 88 ppm active peracetic acid, which equals 1 oz. of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or direct food contact systems. Rinse the system with RO permeate or potable water until residual peracetic acid concentration is below 1 ppm. RO Continuous or Intermittent Addition: For continuous addition methods for RO systems, use 2-5 ppm active peracetic acid (38-90 ppm as product), which equals 1.6-4.5 oz. DicloSan PAA per 450 gallons of process water. For occasional intermittent feed, do not exceed 90 ppm active peracetic acid, which equals 1 oz. of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or direct food contact systems. Rinse the system with RO permeate or potable water until residual peracetic acid concentration is below 1 ppm. RO Continuous or Intermittent Addition: For continuous addition methods for RO systems, use 2-5 ppm active peracetic acid (38-90 ppm as product), which equals 1.6-4.5 oz. DicloSan PAA per 450 gallons of process water. For occasional intermittent feed, do not exceed 90 ppm active peracetic acid, which equals 1 oz. of this product per 5 gallons of feed water. Do not use the intermittent feed method for on-line use for potable water or direct food contact systems. Rinse the system with RO permeate or potable water until residual peracetic acid concentration is below 1 ppm.

**Agricultural or Horticultural Uses:** There is a Restricted-Entry-Interval of zero (0) hours after the use of this product. This product should never be mixed or combined with any other pesticide or fertilizer. This product may decompose rapidly to oxygen, carbon dioxide and water. This product may be harmful to fish if exposed on a continuous basis at concentrations of 0.5 ppm or more of active peracetic acid. Mter this product is exposed to sunlight on hard surfaces, it becomes a plastic or stainless steel injection/blockflow device installed far enough upstream from the target equipment to ensure thorough mixing with the incoming feedwater. As a result, the incoming feedwater, apply this product as far upstream as possible to allow adequate mixing prior to the flow entering any larger body of water. If open pouring of this product is required pour product as close to the surface of the water as possible to reduce color exposure. Treatment of Irrigation Water Systems (sand filters, humidification systems, storage tanks, ponds, reservoirs, canals): For the control of odor, sulfides, slime and algae in water systems, apply this product at 0.4 to 2 oz. per 100 gals of water (2-10 ppm peracetic acid). This feed rate equals 0.3-1.5 g per 10,000 gallons of water. Repeat doses as necessary to maintain control, which will vary with seasonal conditions. For prevention of algae some systems may require continuous low level dosing during warm sunny periods. NOTE: This product at its use solution is compatible with stainless steel and aluminum surfaces. If product is intended to be used on any other surface, it is recommended that you apply product to a smaller test area to determine compatibility before proceeding with its use. Fruit and Vegetable Water Treatment: This product may be used to help control spoilage or decay-causing bacteria and fungi in water or in soil that contacts raw, sized, or processed fruits and vegetables. The commodity should be continuously sprayed, using coarse spray, or submerged using a solution containing 1 oz. DicloSan PAA per 20 gallons of water. Adjust dose as necessary to maintain more than 25 ppm active peracetic acid. Remove excess water or allow to drain. If using the submersion method, replace with a fresh solution as necessary or when it becomes visibly soiled. A final potable water rinse is not necessary.