

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

SEP 27 2011

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Tom Magrecki VP Finance Vertex Chemical Corporation 11685 Manchester Road St. Louis, MO 63131

Subject:

Vertex Germicidal Ultra Bleach

EPA Reg. No. 9616-13

Application Dated: August 25, 2011 Receipt Date: September 1, 2011

Dear Mr. Magrecki:

The following notification submitted in connection with registration under the provisions of PR Notice 98-10, Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 3(c)9 is acceptable.

Proposed Notification:

· Additional container sizes

Comments:

Based on a review of the material submitted, the following comments apply:

This application for notification to add container sizes, as referenced above, is acceptable. A copy has been placed in our records for future reference.

Should you have any questions or comments concerning this letter, please contact me at harris.monisha@epa.gov or call (703) 308-0410.

Sincerely

Monisha Harris

Product Manager (32)

Regulatory Management Branch II

CONCURRENCES

SYMBOL SURNAME

DATE

EPA Form 1320-1A (1/90)

Printed on Recycled Paper

OFFICIAL FILE COPY

		_				Print Form
Please read instructions on reverse before con leting form	·	Form	Approveà	∠MB No. 20		Togo Mark Santan
United Sta				Registra		OPP Identifier Number
Environmental Prote		ncy		Amenda	nent	
			<u> </u>	Other		<u> </u>
Applic	ation for F	Pesticide - S	Section	1		
1. Company/Product Number 9616-13		2. EPA Product WANDA HEN	•		3. Pro	posed Classification
			13011		$\dashv \sqcap$	None Restricted
4. Company/Product (Name) VERTEX GERMICIDAL ULTRA BLEACH		PM# 32				
5. Name and Address of Applicant (Include ZIP Code)						FIFRA Section 3(c)(3)
Vertex Chemical Corporation		(b)(i), my prod to:	luct is sim	ilar or identi	cal in co	mposition and labeling
11685 Manchester Road St. Louis, MO 63131	6	EPA Reg. N	o	 -		
Check if this is a new address		Product Nar	ne			
	Sect	tion - II				
Amendment - Explain below.		Final p	rinted label	le in response	to	C C C
Banchesian in seconds to Agency letter detail		Agenc	y letter dat oo" Applica	be		C
Resubmission in response to Agency letter dated					000000	o c c e
X Notification - Explain below.		Other	- Explain be	elow. 	e c c e e	
Explanation: Use additional page(s) if necessary. (For s	ection I and Se	ction II.)			6 6 C C	c c
Add container size 182 FL. OZ. or 1.4 GAL (5.38L) to la	abel.				C C C G C C C C C C C C C C C C C C C C	66666
Child-Resistant Certification attached.					cccc	e c
Notification Certification attached.						6 6 6 6 6
						600000
	Sect	ion - III	=			
1. Material This Product Will Be Packaged In:				T		
Child-Resistant Peckaging Ves	Water	Soluble Packagin Yes	Ø	2. Type of	Container Metal	
	IH.	No		X	Plastic	
If "Yee" Ale pe	er If "Yes	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Der	┨	Glass Paper	
* Certification must Unit Packaging wgt. contain the submitted		e wgt con	tainer		Other (S	pecify)
3. Location of Net Contents Information 4. Size(s) Retail Contail	ner L	15. Lo	cation of Lab	el Directio	ns
	-•	r 1.4 GA		On Label		panying product
	ithograph	X	Other n	astic		
O. Walking III Which Eader & Allixed to 1100000	Paper glued Stenciled	لنشا	<u> </u>	Lastic	STEEN	
	Sect	ion - IV				
1. Contact Point (Complete items directly below for identity	fication of indivi	dual to be conta	cted, if nec	essery, to pro	cess this	application.)
Name Tom Magrecki	Title VP Fina	ance			Telephone 314-471	No. (Include Area Code)
	tification	····				6. Date Application
Cer I certify that the statements I have made on this forr	t ification n and all attach	ments thereto ar	e true, acci	urate and con	npiete.	Received
I acknowledge that any knowingly false or misleading both under applicable law.			-		•	(Stamped)
2. Signature	3. Title			·		
Im Male	VP Finar	nce .				
7 77 47						
4. Typed Name	5. Date					
Tom Magrecki	Aug 25	, 2011				

GERMICIDAL BLEACH VERTEX ULTRA

Active Ingredient:

Other Ingredients Sodium Hypochlorite

TOTAL:

Available Chlorine 6%

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID STATEMENT

- Hold eye 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 eye.
- Call a poison control center or doctor for further treatment advice

if on skin or clothing:

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

f swallowed:

- Call a poison control center or doctor immediately for further treatment advice.
 - Have person sip a glass of water if able to swallow
- Do not induce vomiting unless told to do so by poison control center or doctor Do not give anything by mouth to an unconscious person

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

HOT LINE NUMBER

Have the product container or label with you when calling a poison center or doctor, or going for treatment. (We will use one of these two numbers) Contact 1-800-222-1222 or 1-800-535-5035 for emergency medical treatment information.

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

- Respiratory illnesses attributable to Pandemic 2009 H1N1 are caused by influenza A virus.
- This product (Product Name) is a broad-spectrum hard surface disinfectant that has been shown to be effective against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 (formerly called swine flu).
 - This product has demonstrated effectiveness against influenza A virus and is expected to inactivate all influenza A viruses including Pandemic 2009 H1N1 This product has demonstrated effectiveness against (influenza A virus tested and listed on the label) and is expected to inactivate all influenza A viruses
 - Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu) including Pandemic 2009 H1N1 (formerly called swine flu),
 - Kills Pandemic 2009 H1N1 influenza A virus.

See Back Panel for Additional Precautionary Statements

NET 96 FL. OZ. (3 QT.) 2.84 L, 64 FL. OZ., 48 FL. OZ., 32 FL. OZ, 1 GALLON, 182 FL. OZ. OR 1.4 GAL (5.38L) (optional statement) Made in the U.S.A.

Double Quality Guarantee - Quality, performance and satisfied with this product, we will gladly replace the product. Chemical Corporation. If for any reason, you are not 100% AND refund your money. When corresponding, please satisfaction are always DOUBLE guaranteed at Vertex nclude code information from (the product).

> NOTIFICAL DOM HONORED Payered By.

optional statement) 100% Satisfaction Guaranteed

Manufactured by: Vertex Chemical Corporation St. Louis, MO 63131

EPA Est. No. 9616-IL-1; IA-1: TN-1 EPA Reg. No. 9616-13

DURING TRANSPORTATION ONLY Call INFOTRAC 1-800-535-5053 24 hours a day, 7 days a week FOR CHEMICAL EMERGENCY (optional statement)

(optional statement) Visit us at (web site address)



[Additional optional claims; note these can be listed in any order and location, parenthetical terms need not be included:][The phrase "this product" may be used interchangeably with the product name "VERTEX GERMICIDAL ULTRA BLEACH" throughout the label]

Kills 99.9% of common household germs

Kills 99.9% germs

Vertex Ultra Germicidal Bleach kills germs

This product, when used as directed on hard, non-porous surfaces, is effective against the following:

FUNGICIDAL

- Trichophyton mentagrophytes (Athlete's foot fungus)
 BACTERICIDAL
- Escherichia coli 0157:H7 (E. coli)
- Pseudomonas aeruginosa (pseudomonas)
- Salmonella enterica (Salmonella)
- · Shigella dysenteriae
- Staphylococcus aureus (staph)
- Streptococcus pyogenes (strep)

*VIRUCIDAL

- Adenovirus type 2
- *Canine Parvovirus
- *Cytomegalovirus
- *Feline Panleukopenia virus (Parvovirus)
- · *Hepatitis A virus
- *Herpes simplex virus 1 (herpes)
- *Herpes simplex virus 2 (herpes)
- *Influenza A virus
- *Poliovirus type 1
- *Respiratory syncytial virus
- *Rhinovirus type 37 (viruses that cause colds and flu)
- *Rotavirus

[Or, optional: can be listed in the following format:]

Vertex Germicidal Ultra Bleach kills germs:

Kills common household germs including Staphylococcus aureus (staph), Streptococcus pyogenes (strep), Salmonella enterica (salmonella), Pseudomonas aeruginosa (pseudomonas), *Influenza A virus, *Rhinovirus type 37 (viruses that cause colds and flu), Trichophyton mentagrophytes (Athlete's foot fungus), *Rotavirus and Escherichia coli 0157:H7 (E. coli). Also kills *Adenovirus type 2, *Hepatitis A, *Cytomegalovirus, *Respiratory Syncytial Virus, *Poliovirus type 1, *Herpes Virus 1 (herpes), *Herpes Virus 2 (herpes),

*Canine Parvovirus, *Feline Parvovirus, Shigella dysenteriae

[Additional optional claims:]

Commercial/Institutional Use

DISINFECTS • SANITIZES • DEODORIZES

*VIRUCIDE

BACTERICIDE • FUNGICIDE

HIGHER CONCENTRATION FORMULA

DISINFECTS AND DEODORIZES

WHITENS

BRIGHTENS LAUNDRY

KILLS GERMS

FORMULATED FOR FOODSERVICE APPLICATIONS

REMOVES STAINS

BACTERICIDAL

MILDEWCIDAL

FUNGICIDAL

CLEANS

ELIMINATES ODORS

SAFE ON BLEACHABLE FABRICS

JUST AS SAFE ON BLEACHABLE FABRICS AS BEFORE

FOR A CLEANER, FRESHER HOUSEHOLD & [AND] LAUNDRY

This product can be used on hard non-porous surfaces in commercial, institutional, hospital and household premises (including kitchens, bathrooms, nurseries, sick rooms, laundry rooms), eating establishments, pet kennels, veterinary premises, farms, dairies, and food processing plants.

Kitchen: Clean and disinfect kitchen sinks and countertops.

Bathroom: Deodorize and disinfect bathtubs, showers, floors, vinyl, and tile.

Toilet Bowls: Disinfect your toilet.

Exercise care in handling. Check to make sure bottle is always tightly capped. Product should be carried and stored in an upright position to avoid spillage.

Do not use this product full strength for cleaning surfaces. Always dilute strictly in accordance with label directions. Wear gloves when cleaning for prolonged periods.

Contains no phosphorous.

Keep upright.

Do not drop.

[The following headings maybe placed above or in front of appropriate directions (e.g., Household Use in front of directions for dishes or floors)]

FARM - DAIRY USE RESTAURANT USE FOODSERVICE APPLICATIONS HOUSEHOLD USE FOOD PROCESSING PLANT USE

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 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.

[In accordance with PR notice 95-I, the Environmental Hazards statement ດໍກິ່ງເຂົ້ອquired for containers 5 gallons and larger]

Environmental Hazards

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams ponds, estuaries, oceans or public 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

Strong oxidizer. Flush drains before and after use. Do not use or mix with other household chemicals, such as toilet bowl cleaners, rust removers, acid or ammonia containing products. To do so will release hazardous gasses. Prolonged contact with metal may cause pitting or discoloration.

STORAGE AND DISPOSAL

VERTEX GERMICIDAL ULTRA BLEACH STORAGE: Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. 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, in accordance with state & local regulations.

VERTEX GERMICIDAL ULTRA BLEACH DISPOSAL: Pesticide wastes may be hazardous. 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.

CONTAINER HANDLING: (HOUSEHOLD & RESIDENTIAL USE LABELS) (marketing label will include only applicable container handling instructions) **NONREFILLABLE CONTAINER-DO NOT reuse or refill this container.** Offer for recycling, if available or place in trash collection.

CONTAINER HANDLING: (ALL OTHER LABELS) (marketing label will include only applicable container handling instructions) (When check-off box format is used on label, filler will mark appropriate box.)

□ NONREFILLABLE CONTAINER-DO NOT reuse or refill this container. Offer for

recycling if available or place in trash collection.

	CONTAINER CLEANING: (NOT REQUIRED FOR HOUSEHOLD AND RESIDENTIAL
_	USE LABELS) Triple rinse promptly after emptying.
	Triple Rinse: If the container has a capacity greater than five (5) gallons, triple rinse as
	follows: Empty remaining contents into application equipment or a mix tank. Fill the
	container ¼ full with water. Replace and tighten closures. Tip 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 back and forth several times. Turn the container over the container of the
	onto its other end and tip it back and forth several times. Empty the rinsate into see a
	application equipment or a mix tank or store rinsate for later use or disposal. Repeat
	procedure two more times.
П	If the container has a capacity of five (5) gallons or less, triple rinse ລໍຣິເຖິງໂດws: Empty the
_	remaining contents into application equipment or a mix tank and drain for 10 seconds
	after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10
	seconds. Pour rinsate into application equipment or a mix tank or store the rinsate for
	later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the
	procedure two more times.
	REFILLABLE CONTAINER-Refill this container with VERTEX GERMICIDAL ULTRA
	BLEACH only. Do not reuse this container for any other purpose. Clean container
	promptly after emptying. Cleaning the container before refilling is the responsibility of the
	refiller. Cleaning the container before final disposal is the responsibility of the person
	disposing of the container. If disposing refillable container, offer for recycling if available or place in trash collection.
п	CONTAINER CLEANING: Triple rinse promptly after emptying.
	Triple Rinse: If the container has a capacity greater than five (5) gallons, triple rinse as
_	follows: Empty remaining contents into application equipment or a mix tank. Fill the
	container ¼ full with water. Replace and tighten closures. Tip 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 back and forth several times. Turn the container over
	onto its other end and tip it back and forth several times. Empty the rinsate into
	application equipment or a mix tank or store rinsate for later use or disposal. Repeat
	procedure two more times. I
	If the container has a capacity of five (5) gallons or less, triple rinse as follows: Empty the
	remaining contents into application equipment or a mix tank and drain for 10 seconds
	after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10
	seconds. Pour rinsate into application equipment or a mix tank or store the rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat the
	procedure two more times

IThe Directions for Use on the following pages are similar directions with different formats and quantities in order to provide flexibility to distributors to address their customers' and market needs on labeling for the marketplace.]

DIRECTIONS FOR USE

Its a violation of Federal law to use this product in a manner inconsistent with its labeling.

One Tbsp. (1/2 oz.) of this product in 1 gallon of water is equivalent to approximately 200 parts per million (ppm) available chlorine. Use a chlorine test kit to determine exact available chlorine concentration adjust as necessary to obtain specified ppm.

LAUNDRY

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Use to bleach white and colorfast Acrylics, Cotton, Nylon, Polyester, Rayon (test to be sure). Do not use on Acetate, Leather, Silk, Spandex or Wool, Mohair and non-fast colors. Sort laundry by color and fabric. Separate whites from colors, light colors from dark colors.

BLEACH TEST: Before using, mix one tablespoon of bleach with ½ cup of water in a glass, rubber, porcelain, or plastic container and test a small piece of fabric in a place that doesn't show. Test all colors, including trim. Let stand one minute, then blot dry. No color change means the article can be bleached safely.

LAUNDRY: Before adding clothes, mix \(^3\)4 cup of bleach with water in top-loading 16 gallon machines or mix \(^1\)2 cup. bleach with water in front-loading 8 gallon machines. For large top loading automatics or larger heavily soiled loads use 1 1/8 cup. Add clothes. If sanitization is desired, soak clothes for 5 minutes. Wash and rinse with usual cycles. If clothes are in machine the addition of bleach can cause damage.

TOP LOAD AUTOMATIC3/4 CUP LARGE TOP LOADING AUTOMATIC11/8 CUP FRONT LOAD AUTOMATIC 1/3 CUP LARGE/HEAVY SOILED LOADS11/8 CUP

REMOVE STAINS: Mix 1/4 cup of bleach with a gallon of water. Soak stained area for 5 minutes to remove grass, ink, coffee, tea, scorch, fruit, etc. Rinse thoroughly.

[OR: the following format maybe used:]

LAUNDRY USE:

- 1. Before adding clothes, mix 3/4 cup of bleach with water in top-loading 16 gallon machines or mix 1/3 cup bleach with water in front-loading 8 gallon machines. For large top loading automatics or larger heavily soiled loads, use 1 1/8 cup.
- 2. Add clothes.
- 3. Wash and rinse with usual cycles.

Do not use on Acetate, Leather, Silk, Spandex or Wool, Mohair and non-fast colors.

REMOVE STAINS:

- 1. Mix 1/4 cup of bleach with a gallon of water.
- 2. Soak stained area for 5 minutes to remove grass, ink, coffee, tea, scorch, fruit, etc.
- 3. Rinse thoroughly.

DISINFECTION OF HARD NON-POROUS SURFACES

Kitchen: Clean and disinfect countertops and sinks:

- 1. Use 3/4 cup of Vertex Germicidal Ultra Bleach [or this product] per gallon of water.
- 2. Wash, wipe, or rinse surfaces then apply disinfecting solution.
- 3. Let stand 5 minutes.
- 4. Rinse thoroughly and air dry.

Disinfecting and Deodorizing Bathrooms: Disinfect and deodorize bathtubs, showers, sinks, floors, vinyl, tile.

- 1. Spread a solution of 3/4 cup of Vertex Germicidal Ultra Bleach [or this product] persgâillôn of water [or Spread a solution of 1 1/2 cups of Vertex Germicidal Ultra Bleach [or this product] per 2 gallons of water.]
- 2. Let stand 5 minutes, then drain and air dry.

Toilet bowls: Disinfect and deodorize toilet

- I. Prewash toilet and flush.
- 2. Pour 1/2 cup of Vertex Germicidal Ultra Bleach [or this product] brush, making sure to get under the rim.
- 3. Let stand 10 minutes and flush. DO NOT use with bowl cleaners or any other household chemicals.

Disinfects, sanitizes, and deodorizes by killing most germs and their odors.

SANITIZING FOOD CONTACT SURFACES: Before using this product, remove or carefully protect food. Remove gross food particles from surface. Prewash surface with a good detergent and rinse thoroughly with potable water. Mix approximately 1 Tbsp. of Bleach per gallon of water to prepare a 200 ppm available chlorine solution. Cover surface with bleach solution for at least 2 minutes. Air dry.

DISINFECTING KITCHEN, DISHES, SINKS: Use 1/4 cup bleach mixed with a cup water to soak cleaned dishes, teapot, cups, sinks, etc. for 5 minutes. Rinse with a solution of cocces approximately 1 Tbsp. of bleach per gallon of water to prepare a 200 ppm solution. Do not use on silverware. Bleach solution can be used on porcelain, enamel, etc. surfaces after cleahing. Let air dry.

DISINFECTING WALLS, FLOORS, AND OTHER HARD INANIMATE SURFACES NOT IN DIRECT CONTACT WITH FOOD: Prewash surfaces and rinse. Mix 3/4 cup bleach per gallon of water. Spray, rinse, or wipe surface with bleach solution and let stand for 5 minutes. Drain and air dry.

DISINFECTING BATHROOM: Prewash toilet and flush. Pour 1/2 cup bleach into toilet bowl, scrub with a brush, making sure to get under rim, let stand 10 minutes, flush. Do not use with bowl cleaners or any other household chemicals,

DEODORIZING GARBAGE CANS: Wash and rinse, Use ¾ cup bleach for each gallon of water in can. Empty and let drain.

EGG SHELL SANITIZING: Thoroughly clean eggs. Mix approximately I Tbsp. (1/2 oz) of bleach per gallon of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130°F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable rinse, The solution should not be re-used to sanitize eggs.

One Tbsp. (1/2 ounce) of Vertex Germicidal Ultra bleach in 1 gallon of water is equivalent to approximately 200 parts per million (ppm) available chlorine. Use a chlorine test kit to determine exact available chlorine concentration.

כיווטוויום נפשר אונינס מכנפון ווווים כאמכני מאמוומטופי כיווטוווים כסווכפון ומנוטווי	ים בוווחוום בי	ווכבו ווו מווכווי		
	Amount	Amount	Instructions	
FOR SAMITIZING	DIESCII	water		
Work Surfaces	1 Tbsp.	1 Gallon	Pre-wash with detergent, rinse, cover surface with bleach solution for at least 2 minutes, drain, let air dry.	
Dishes, Glassware, Utensils	1 Tbsp.	1 Gallon	After washing, soak for at least two minutes in bleach solution. Drain and let air dry.	
Bathtubs, Showers	1 Tbsp.	1 Gallon	Wash, rinse, apply bleach solution for at least two minutes, drain, let air dry.	
Refrigerators, Freezers	1 Tbsp.	1 Gallon	Wash, rinse, apply bleach solution for at least two minutes, drain, let air dry.	(
FOR DISINFECTING				_
Floors & Walls	3/4 Cup	1 Gailon	Pre-wash surfaces and rinse. Spray, rinse or wipe surface with bleach solution, let stand for 5 minutes. Drain and air dry.	
Mops, Brushes, Brooms & Rugs	3/4 Cup	1 Gallon	Wash with detergent, apply bleach solution, soak at least 10 minutes. Rinse well.	
FOR DEODORIZING				
Garbage Cans	3/4Cup	1 Gallon	After washing and rinsing, brush inside with solution. Empty and let drain.	,
Drains	1 Cup		Pour into drain. Flush with hot water.	
FOR BLEACHINGIWHITENING				
Wooden Surfaces	1/2 Cup	1 Gallon	Apply for 5 minutes, rinse.	
FOR MOLD, MILDEW, & STAIN REMOVAL	۸L			(
All Surfaces	1/2 Cup	1 Gallon	Add bleach to detergent solution, apply, rinse.	(-
FOR AGRICULTURAL USES				
Food Egg	1 Tbsp.	1 Gallon	Wash, rinse, spray with maximum 130°F bleach solution until completely wet; let air dry before casing or breaking. Once solufield is นูร์ed เริ่ must not be reused for this purpose.	
Fruits and Vegetables	1 Tbsp.	20 Gallons	Wash, rinse, soak in circulating bleach solution (25 ppm) for 2 min. Spray veqetables with bleach solution befହୀକ packing ଧରe potable ਔate? to rinse fruit	
Rev. 1108			before packaging. Rinse is to occure only immediately prior 30 packaging.	
			C C C C C C C C C C C C C C C C C C C	

■ I aundering: To heach and sanitize white and colorfast cotton linen	Sanitizing Nonporous Food Contact Surfaces: Prenare a sanitizing
nylon, Dacron, Orlon, polyester, Dynel and rayon in washing machine: 34	solution by thoroughly mixing 2 Tbsp. (1 oz.) of this product with 2 1/2
cup of this product per load for conventional washing machine: 1/2 cup for	gallons of water to provide approximately 200 ppm available chlorine by
front load automatic. Add to pre-soak, wash water or first rinse. If clothes,	weight. Clean all surfaces in the normal manner. Prior to use, rinse all
are in machine, dilute product in 1 quart water before adding.	surfaces thoroughly with the sanitizing solution, maintaining contact with
■ To Whiten Nylon and Other Synthetics that have turned yellow or grey:	the sanitizer for at least 2 minutes. Do not rinse equipment with water after
1 tablespoon of this product per gallon water. Soak clean fabric in solution	treatment and do not soak equipment overnight.
for 15 to 20 minutes. Rinse well. Repeat if necessary.	■ To Sanitize Milking Equipment: Prepare sanitizing solution as above
■ To Remove Stains: Berry, wine, coffee, tea, ink, grass, dye, medicine	immediately prior to use. All surfaces to be sanitized should be properly
stains, scorch and mildew. Make solutions of 2 tablespoons of this product	cleaned before application of chlorine solution. Milking utensils should be
to each quart water. Immerse fabric for 5 to 10 minutes. Rinse well in	submerged in the solution for at least 2 minutes and allowed to drain. Do
clear water. Repeat if necessary.	not rinse equipment with water after treatment.
■ Today's permanent Press Fabrics are Bleachable and need this	If solution contains less than 50 ppm available chlorine, as determined by
product to get out stains and help prevent dirt build up. Wash with regular	a suitable test kit, either discard the solution or add sufficient product to
laundry as directed: Top-load automatics - 3/4 cup per load. Wringer-type	reestablish a 200 ppm residual. Sanitizers used in automated systems
washers - 34 cup per load. Front-load automatics - 12 cup per load.	may be used for general cleaning but may not be reused for sanitizing
Use this product with any good laundry soap or detergent. If your washer	purposes.
has an automatic bleach dispenser, follow washer directions. If not, add	■ Sanitizing Porous Food Contact Surfaces: Prepare a solution of
this product to wash water before laundry is put in. If laundry is put in	approximately 600 ppm by thoroughly mixing 6 Tbsp. (3 ozs.) of this
before wash water then dilute this product in quart of water and add after	product with 2 ½ gallons of water. Clean surfaces in the normal manner.
machine has started agitating and fabrics are thoroughly wet.	Rinse all surfaces thoroughly with the 600 ppm solution, maintaining
■ Disinfecting and Deodorizing Bathrooms:	contact with the sanitizer for at least 2 minutes. Prepare a 200 ppm
To disinfect and deodorize washable surfaces such as tubs, showers,	sanitizing solution by thoroughly mixing 2 Tbsp. (1 oz.) of this product with
countertops, sinks, ceramic tile and vinyl flooring, spread a solution of 1 1/2	2 1/2 gallon of water. Prior to using equipment, rinse all surfaces with 200
cups of this product per 2 gallons of water on clean surface. Let stand 5	ppm available chlorine solution. Do not rinse with water and do not soak
minutes then drain.	equipment overnight.
■ Toilet Bowls: To sanitize and deodorize pre-cleaned toilet bowls, use 1/2	
cup of this product. Flush, pour in bleach - brush, making sure	PROPORTIONS FOR DILUTION OF THIS PRODUCT
to get under the rim, and let stand for 10 minutes. Flush. DO NOT use	(200 ppm: 1 oz. (2 Tbsp) in 2 1/2 gallons of water
with bowl cleaners or any other household chemicals.	600 ppm: 3 oz. (6 Tbsp) in 2 1/2 gallons of water
■ Sickroom Equipment: Wash all surfaces thoroughly. Rinse, then	(Use a chlorine test kit to determine exact available chlorine concentration
spread a solution of 1 % cups of this product per 2 gallons of water over all	and adjust dosage as necessary.)
surfaces. Let stand 5 minutes, then drain.	
■ Garbage cans: Wash thoroughly with warm soapy solution. Rinse then	RESTAURANTS, TAVERNS, SOBA-FOUNTAINS, DAIRIES, ETC.
spread a solution of 1 % cups of this product per 2 gallons of water over all	DIRECTIONS FOR SANITIZING EATING AND CRINKING UTENSILS:
surfaces. Let stand 5 minutes, then drain.	Prepare sanitizing solution immediately proctouse.
	1. Scrape and pre-wash utensils and glass whenever possible.
Avoid prolonged contact with metal since corrosion or discoloration may	2. Wash with good detergent or compatible cleaner.
occur. Do not use this product in chipped enamel.	3. Rinse with clean water. and a second and a second a se
	5. Immerse utensils at least 2 minutes or for contact time specified by
	governing sanitary code.
Rev. 1108	6. Do not reuse sanitizing solution.
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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.

TABLE OF PROPORTIONS AVAILABLE CHLORINE 600 ppm - 12 oz. in 10 gal. water 200 ppm - 4 oz. in 10 gal. water

FECTION COLORS

SWIMMING POOL WATER DISINFECTION

For a new pool or spring start-up, superchlorinate with 107 to 213 oz. of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the เริ่มอะโอf available chlorine with a test kit. Adjust and maintain pool water pH to between 7.2 to 7.6 Adjust and maintain the alkalinity of the pool to between 50 to 100 ppm.

To maintain the pool, add manually or by a feeder device 21.3 oz. of this product for each 10,000 gallons of water to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual and alkalinity of the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers.

Every 7 days, or as necessary, superchlorinate the pool with 107 to 213 oz. of product for each 10,000 gallons of water to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not reenter pool until the chlorine residual is 4.0 ppm. Reentry into treated pools is prohibited above levels of 4 ppm due to risk of bodily harm.

At the end of the swimming pool season or when water is to be drained from the pool, chlorine must be allowed to dissipate from treated pool water before discharge. Do not chlorinate the pool within 24 hours prior to discharge.

WINTERIZING POOLS - While water is still clear & clean, apply 6.4 oz. of product per 1000 gallons, while filter is running, to obtain a 3 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter and heater components for winter by following manufacturers' instructions.

SPAS, HOT-TUBS, IMMERSION TANKS, ETC.

SPAS/HOT-TUBS - Apply 10.7 oz. of product per 1000 gallons of water to obtain a free available chlorine concentration of 5 ppm, as determined by a suitable chlorine test kit. Adjust and maintain pool water pH to between 7.2 and 7.8. Some oils, lotions, fragrances, cleaners, etc. may cause foaming or cloudy water as well as reduce the efficiency of the product.

To maintain the water, apply 10.7 oz. of product per 1000 gallons of water over the surface to maintain a chlorine concentration of 5 ppm. After each use, shock treat with 17 oz. of this product per 500 gallons of water to control odor and algae.

Re-entry into treated pools is prohibited above levels of 5 ppm due to risk of bodily harm.

During extended periods of disuse, add 6.4 oz. of product daily per 1000 gallons of water to maintain a 3 ppm chlorine concentration.

HUBBARD AND IMMERSION TANKS - Add 10.7 oz. of this product per 200 gallons of water before patient use to obtain a chlorine residual of 25 ppm, as determined by a suitable test kit. Adjust and maintain the water pH to between 7.2 and 7.6. After each use, drain the tank for 10.7 oz. to a bucket of water and circulate this solution through the agitator of the tank for 15 minutes and then rinse out the solution. Clean tank thoroughly and dry with clean cloths.

HYDROTHERAPY TANKS - Add 2.1 oz. of this product per 1000 gallons of Water to obtain a chlorine residual of 1 ppm, as determined by a suitable chlorine test kit. Pool should ພິວິເ ອີຣ໌ entered until the chlorine residual is below 3 ppm. Adjust and maintain the ໜ້ອ້າຍ pH to between 7.2 and 7.6. Operate pool filter continuously. Drain pool weekly, and clean before refilling.

SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

RINSE METHOD - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 2.1 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.

Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual, Do not rinse equipment with water after treatment and do not soak equipment overnight.

Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

IMMERSION METHOD - A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available. Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to ensure that the available chlorine does not drop below 50 ppm. Prepare a 100 ppm sanitizing solution by thoroughly mixing 2.1 oz. of this product with 10 gallons of water. If no test kit is available, prepare a sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight.

Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. If solution contains less than 50 ppm available chlorine, as determined by a suitable test kit, either discard the solution or add sufficient product to reestablish a 200 ppm residual. Do not rinse equipment with water

after treatment.

Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes.

FLOW/PRESSURE METHOD - Disassemble equipment and thoroughly clean after use. Assemble equipment in operating position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 4.25 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 2 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

CLEAN-IN-PLACE METHOD - Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment by mixing the product in a ratio of 4.25 oz. product with 10 gallons of water. Pump solution through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to ensure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine.

SPRAY/FOG METHOD - Preclean all surfaces after use. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi and a 600 ppm solution to control bacteriophage. Prepare a 200 ppm sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 4.25 oz. product with 10 gallons of water. Prepare a 600 ppm solution by thoroughly mixing the product in a ratio of 12.8 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with 600 ppm solution with a 200 ppm solution,

SANITIZING OF POROUS FOOD CONTACT SURFACES

RINSE METHOD - Prepare a sanitizing solution by thoroughly mixing 12.8 oz. of this product with 10 gallons of water to provide 600 ppm available chlorine by weight. Glean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes and allow the sanitizer to train. Prepare a 200 ppm sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water and rinse all surfaces with this 200 ppm solution. Do not rinse with water and do not soak equipment overnight.

IMMERSION METHOD - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 12,8 oz. of this product with 10 gallons of water to provide 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution, maintaining contact for at least 2 minutes and allow the sanitizer to drain. Following this, prepare a 200 ppm sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water and rinse all surfaces with this 200 ppm solution. Do not rinse with water and do not soak equipment overnight.

SPRAY/FOG METHOD - Preclean all surfaces after use. Prepare a 600 ppm available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 12.8 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Prepare a 200 ppm sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water.

SANITIZATION OF NONPOROUS NON-FOOD CONTACT SURFACES

RINSE METHOD - Prepare a sanitizing solution by thoroughly mixing 4.25 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight. Clean equipment surfaces in the normal manner, Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 4.25 oz. of this product with 10 gallons of water to provide approximately 200 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

SPRAY/FOG METHOD - Preclean all surfaces after use. Prepare a 200 ppm. available chlorine sanitizing solution of sufficient size by thoroughly mixing the product in a ratio of 4.25 oz. product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.

DISINFECTION OF NONPOROUS NON-FOOD CONTACT SURFACES

RINSE METHOD - Prepare a disinfecting solution by thoroughly mixing 12.8 oz. of this product with 10 gallons of water to provide approximately 600 ppm available chloring by weight. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the disinfecting solution, maintaining contact with the solution for at least 10 minutes. Do hot rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD - Prepare a disinfecting solution by thoroughly mixing, in an immersion tank, 12.8 oz. of this product with 10 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the disinfecting solution for at least 10 minutes and allow the disinfectant to drain. Do not rinse equipment with water after treatment.

SANITIZATION OF POROUS NON-FOOD CONTACT SURFACES

RINSE METHOD - Prepare a sanitizing solution by thoroughly mixing 12.8 oz. of this product with 10 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD - Prepare a sanitizing solution by thoroughly mixing, in an immersion tank, 12.8 oz. of this product with 10 gallons of water to provide approximately 600 ppm available chlorine by weight. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

SPRAY/FOG METHOD - After cleaning, sanitize non-food contact surfaces with 600 ppm available chlorine by thoroughly mixing the product in a ratio of 12.8 oz. of this product with 10 gallons of water. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Prior to using equipment, thoroughly spray or fog all surfaces until wet, allowing excess sanitizer to drain, Vacate area for at least 2 hours.

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 an operating standard valid only to the extent verified by the coliforth 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.

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3. Dosage/Residual Control: Successful disinfection is extremely dependant 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.

SEWAGE AND WASTE WATER TREATMENT

EFFLUENT SLIME CONTROL - Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 21.3 to 213 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 3.2 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 170 oz. of 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.

DISINFECTION OF DRINKING WATER (EMERGENCY/PUBLIC/INDIVIDUAL/ SYSTEMS)

PUBLIC SYSTEMS - Mix a ratio of 2 oz. of this product to 100 gallons of water, Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

INDIVIDUAL SYSTEMS: DUG WELLS - Upon completion of the casing (lining), wash the interior of the casing (lining) with a 100 ppm available chlorine solution using a stiff brush. This solution can be made by thoroughly mixing 2.1 oz. of this product into 10 gallons of water. After covering the well, pour the sanitizing solution into the well through both the pipesleeve opening and the pipeline. Wash the exterior of the pump cylinder also with the sanitizing solution. Start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Consult your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: DRILLED, DRIVEN & BORED WELLS - Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine sattitizing solution into the well. This solution can be made by thoroughly mixing 2.1 oz. of this product into 10 gallons of water. Add 5 to 10 gallons of clean, chlorinated water to the well in order to force the sanitizer into the rock formation. Wash the exterior of the pump cylinder with the sanitizer. Drop pipeline into the well, start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours, flush well until all traces of chlorine have been removed from the water, Deep wells with high water levels may

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necessitate the use of special methods for introduction of the sanitizer to the well. Consult your local Health Department for further details.

INDIVIDUAL WATER SYSTEMS: FLOWING ARTESIAN WELLS - Artesian Wells generally do not require disinfection. If analyses indicate persistent contamination, the well should be disinfected. Consult your local Health Department for further details.

EMERGENCY DISINFECTION - When boiling of water for 1 minute is not practical, water can be made potable by using this product. Prior to addition of the sanitizer, remove all suspended material by filtration or by allowing it to settle to the bottom. Decant the clarified, contaminated water to a clean container and add 3 drops at this product to 20 gallons of water. Allow the treated water to stand for 30 minutes. Properly treated water should have a slight chlorine odor, if not, repeat dosage and allow the water to stand an additional 15 minutes. The treated water can then be made palatable by pouring it between clean containers for several times. This process has not been demonstrated to inactivate Cryptosporidium cysts.

PUBLIC WATER SYSTEMS

RESERVOIRS: ALGAE CONTROL - Hypo chlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

MAINS - Thoroughly flush section to be sanitized by discharging from hydrants. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

NEW TANKS, BASINS, ETC. - Remove all physical soil from surfaces. Place 43 oz. of this product for each 5 cubic feet of working capacity (500 ppm available chlorine). Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and place in service.

NEW FILTER SAND - Apply 170 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

NEW WELLS - Flush the casing with a 50 ppm available chlorine solution of water containing 10.7 oz. of this product for each 100 gallons of water. The solution should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for several hours or overnight under chlorination. It may then be pumped until a representative faw water sample is obtained. Bacterial examination of the water will indicate whether further treatment is necessary.

EMERGENCY DISINFECTION AFTER FIRES

CROSS CONNECTIONS OF EMERGENCY CONNECTIONS - Hypochlorination or gravity feed equipment should be set up near the intake of the untreated water supply. Apply sufficient product to give a chlorine residual of at least 0.1 to 0.2 ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit.

EMERGENCY DISINFECTION AFTER DROUGHTS

SUPPLEMENTARY WATER SUPPLIES - Gravity or mechanical hypochlorite feeders should be set up on a supplementary line to dose the water to a minimum chlorine residual of 0.2 ppm after a 20 minute contact time. Use a chlorine test kit.

WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC. - Thoroughly clean all containers and equipment. Spray a 500 ppm available chlorine solution and rinse with potable water after 5 minutes, This solution is made by mixing 10.7 oz. of this product for each 10 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.2 ppm chlorine residual. Use a chlorine test kit.

EMERGENCY DISINFECTION AFTER MAIN BREAKS

MAINS - Before assembly of the repaired section, flush out mud and soil. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual of test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

COOLING TOWER/EVAPORATIVE CONDENSER WATER

SLUG FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 to 213 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 21.3 oz. of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chiorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD - Initial Dose: When system is noticeably found, apply 107 to 213 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 21.3 oz. of this product per 10000 gallons of water in the system to obtain a 1 ppm residual. Apply 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.

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CONTINUOUS FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 to 213 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 2.1 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.

LAUNDRY SANITIZERS

Household Laundry Sanitizers

IN SOAKING SUDS - Thoroughly mix 4.25 oz. of this product to 10 gallons of wash water to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle.

IN WASHING SUDS - Thoroughly mix 4.25 oz. of this product to 10 gallons of wash water containing clothes to provide 200 ppm available chlorine. Wait 5 minutes, then add soap or detergent and start the wash/rinse cycle.

Commercial Laundry Sanitizers

Wet fabrics or clothes should be spun dry prior to sanitization. Thoroughly mix 4.25 oz. of this product with 10 gallons of water to yield 200 ppm available chlorine. Promptly after mixing the sanitizer, add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent. Test the level of available chlorine, if solution has been allowed to stand. Add more of this product if the available chlorine level has dropped below 200 ppm.

FARM PREMISES

Remove all animals, poultry, and feed from premises, vehicles, and enclosures. Remove all litter and manure from floors, walls arid surfaces of barns, pens, stalls, chutes and other facilities occupied or transversed by animals or poultry. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. To disinfect, saturate all surfaces with a solution of at least 1000 ppm available chloring, for a period of 10 minutes. A 1000 ppm solution can be made by thoroughly mixing 21.3 oz. of this product with 10 gallons of water. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals or poultry, as well as the cleaned forks, shovels, and other closed spaces. Do not house livestock or poultry or employ equipment until chloring has been dissipated. All treated feed racks, mangers, troughs, automatic feeders, fountains, and waterers must be rinsed with potable water before reuse.

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PULP AND PAPER MILL PROCESS WATER SYSTEMS

SLUG FEED METHOD - Initial Dose: When system is noticeably fouled, apply 107 to 213 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 21.3 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 107 to 213 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 21.3 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 107 to 213 oz. of this product per 10000 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 2.1 oz. of this product per 1000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

AGRICULTURAL USES

POST-HARVEST PROTECTION - Potatoes can be sanitized after clearing and prior to storage by spraying with a sanitizing solution at a level of 1 gallon of sanitizing solution per ton of potatoes. Thoroughly mix 2.1 oz. of this product to 2 gallons of water to obtain 500 ppm available chlorine.

Disinfect leafcutting bee cells and bee boards by immersion in a solution containing 1 pໍກູກໍ້ ເ available chlorine for 3 minutes, Allow cells to drain for 2 minutes and dry for 4 to 5 hours or until no chlorine odor can be detected. This solution is made by thoroughly mixing 2 tsp. of this product to 100 gallons of water. The bee domicile is disinfected by spraying with a 0.1 ppm solution until all surfaces are thoroughly wet. Allow the domicile to dry until all chlorine odor has dissipated. [Not for use in California]

FOOD EGG SANITIZATION - Thoroughly clean all eggs. Thoroughly mix 4.25 oz. of this product with 10 gallons of warm water to produce a 200 ppm available chlorine solution. The sanitizer temperature should not exceed 130 degrees F. Spray the warm sanitizer so that the eggs are thoroughly wetted. Allow the eggs to thoroughly dry before casing or breaking. Do not apply a potable water rinse. The solution should not be re-used to sanitize eggs.

FRUIT & VEGETABLE WASHING - Thoroughly clean all fruits and vegetables in a wash tank. Thoroughly mix 10.7 oz. of this product in 200 gallons of water to make a sanitizing solution of 25 ppm available chlorine. After draining the tank submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution. Spray rinse vegetables with the sanitizing solution prior to packaging. Rinse fruit with potable water only prior to packaging.

AQUACULTURAL USES

FISH PONDS - Remove fish from ponds prior to treatment. Thoroughly mix 213 oz. of this product to 10000 gallons of water to obtain 10 ppm available chlorine. Add more product to the water if the available chlorine level is below I ppm after 5 minutes. Return fish to pond <u>after</u> the available chlorine level reaches zero.

FISH POND EQUIPMENT - Thoroughly clean all equipment prior to treatment. Thoroughly mix 4.25 oz. of this product to 10 gallons of water to obtain 200 ppm available chlorine. Porous equipment should soak for one hour.

MAINE LOBSTER PONDS - Remove lobsters, seaweed, etc. from ponds prior to treatment. Drain the pond. Thoroughly mix 12,800 oz. of this product to 10,000 gallons of water to obtain at least 600 ppm available chlorine. Apply so that all barrows, gates, rocks and dams are treated with product. Permit high tide to fill the pond and then close the gates. Allow water to stand for 2 to 3 days until the available chlorine level reaches zero. Open and allow 2 tidal cycles to flush the pond before returning lobsters to the pond. **[NOT FOR USE IN CALIFORNIA]**

CONDITIONING LIVE OYSTERS - Thoroughly mix 10.7 oz. of this product to 10000 gallons of water at 50 to 70 degrees F to obtain 0.5 ppm available chlorine. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 ppm. Repeat entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 50 degrees F. [Not for use in California]

CONTROL OF SCAVENGERS IN FISH HATCHERY PONDS - Prepare a solution containing 200 ppm of available chlorine by mixing 4.25 oz. of product with 10 gallons of water. Pour into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to 0 ppm, as determined by a test kit.

SANITIZATION OF DIALYSIS MACHINES

Flush equipment thoroughly with water prior to using this product. Thoroughly mix 12.8 oz. of this product to 10 gallons of water to obtain at least 600 ppm available chloring immediately use this product in the hemodialysate system allowing for a minimum contact time of 15 minutes at 20 degrees C. Drain system of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and thoroughly rinse with a solution of the sanitizing solution and sol

water. Discard and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to ensure that no available chlorine remains in the system.

This product is recommended for decontaminating single and multipatient hemodialysate systems. This product has been shown to be an effective disinfectant (*virucide, fungicide, bactericide, pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysate delivery systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. This product should be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT recommended for use in hemodialysate or reverse osmosis (RO) membranes.

Consult the guidelines for hemodialysate systems which are available from the Hepatitis Laboratories, CDC, Phoenix, AR 85021.

ASPHALT OR WOOD ROOFS AND SIDINGS

To control fungus and mildew, first remove all physical soil by brushing and hosing with clean water, and apply a 5000 ppm available chlorine solution, Mix 10.7 oz, of this product per gallon of water and brush or spray roof or siding. After 30 minutes, rinse by hosing with clean water. [Not for Use in California]

BOAT BOTTOMS

To control slime on boat bottoms sling a plastic tarp under boat, retaining enough *water* to cover the fouled bottom area, but not allowing water to enter enclosed area. This envelope should contain approximately 500 gallons of water for a 14 foot boat. Add 37.3 oz. of this product to this water to obtain a 35 ppm available chlorine concentration. Leave immersed for 8 to 12 hours. Repeat if necessary. Do not discharge the solution until the free chlorine level has dropped to 0 ppm, as determined by a swimming pool test kit. [Not for Use in California]

ARTIFICIAL SAND BEACHES

To sanitize the sand, spray a 500 ppm available chlorine solution containing 10.7 oz. ຄຳໃກ່ເຮ product per 10 gal. of water at frequent intervals. Small areas can be sprinkled with a ພໍ້ລູ້ເຂົ້າເຂົ້າ can. [Not for Use in California]

WARE WASHING

FOR SANITIZING TABLEWARE IN LOW TEMPERATURE DISHWASHING MACHINE Dispense this product into final rinse water at 100 ppm available chlorine. Do not allow concentration to fall below 50 ppm. Air dry. Dispenser should be set to deliver 6.5 cc of sanitizing solution per gallon of water to give 100 ppm of available chlorine. Only a qualified service representative should set or adjust dispenser on the machine.