

Precautionary Statements
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF SWALLOWED.

Do not get in eyes or on clothing. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ACIDIC PRODUCT — Do not mix with other cleaners or chemicals as hazardous gases or heat may be generated. Dilute only with water.

STORAGE AND DISPOSAL

STORAGE—COMBUSTIBLE— Keep away from open flames or sparks when diluting or when container is open. Store in a cool area. Do not contaminate water, soil or food by storage or disposal.

PESTICIDE DISPOSAL — Pesticide wastes are acutely hazardous. Improper disposal of empty pesticide spray mixture or residue is a violation of Federal Law. If these wastes cannot be disposed of properly according to label instructions, contact your State Pesticide or Environmental Control Agency, or the nearest waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL — Recycle (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, if allowed, by state and local authorities, by burning, if burned, stay out of smoke.

DIRECTIONS FOR USE

This is a violation of federal law to use this product in a manner inconsistent with labeling.

- A. Sanitizing dairy, beverage and food processing equipment.
 1. Rinse equipment immediately before use.
 2. Wash with recommended Diversey Wyandotte brand product.
 3. Rinse with potable water.
 4. Air dry. Protect from dust and dirt.
 5. Sanitize immediately before use with Diversey Wyandotte Low Foaming Iodine Sanitizer, using 1/2 oz. in each gallon of water (0.8 ml/liter), providing 125 ppm available iodine.
 6. Allow sanitizing solution to naturally drain from equipment prior to using it in contacting food.

DIRECTIONS FOR USE continued on right panel

DIVERSEY WYANDOTTE LOW FOAMING IODINE SANITIZER

For Industry Use Only

ACTIVE INGREDIENTS

Potassium Iodide (providing 1.75% titratable iodine)

INERT INGREDIENTS

497%
95.03%
100.00%

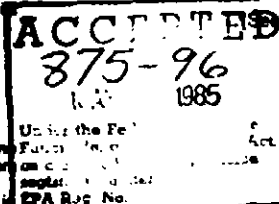
KEEP OUT OF REACH OF CHILDREN.

DANGER: CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF SWALLOWED.

STATEMENT OF PRACTICAL TREATMENT:

IF IN EYES. Flush with plenty of water. Get medical attention. **IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol. **NOTE TO PHYSICIAN:** Probable mucosal damage may complicate the use of gastric lavage.

See left panel for additional precautions)



NET CONTENTS 30 GALLONS (113.55 LITERS)

DIRECTIONS FOR USE

- B. Sanitizing dairy farm:
 1. Rinse equipment with water and drain system.
 2. Wash equipment with detergent. Rinse with cool water.
 3. Sanitize and acid rinse with Diversey Wyandotte Low Foam or soak at least 2 min before reuse.

- C. Terminal sanitizing:
 1. Scrape and pre-flush.
 2. Wash with recommended detergent.
 3. Rinse with potable water.
 4. Sanitize by immersion using 1/2 oz. in 5 gal. water. Immerse all utensils for a minimum of 30 seconds.
 5. Air dry on clean drain.

- D. Chemical sanitizing:
 1. Pre-scrape, pre-flush and wash with recommended detergent.
 2. Sanitize—rinse glasses per 5 gallons (0.8 ml/liter) 30 seconds. For sanitizing foaming iodine Sanitizer, use 1/2 oz. in 5 gal. water. Immerse all utensils for a minimum of 30 seconds.
 3. Rinse with potable water.
 4. Air dry on clean surface.

NOTE: Diversey Wyandotte water of over 120°F (50°C) is an iodine tester. When soil iodine and the color fades.

Diversey Wyandotte Low Foaming Iodine Sanitizer is a Pasteurized Milk Ordinance (PMO) approved sanitizer for use in 500 ppm hardness calcium and Detergent Sanitizer C.

Diversey Wyandotte Corporation



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US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDE REGISTRATION



Technical Service Bulletin

FI/ICP
4-310

Diversey Wyandotte Low Foaming Iodine Sanitizer

EPA Registration Number 875-96

PURPOSE AND USE

Diversey Wyandotte Low Foaming Iodine Sanitizer is a rapid acting, low-foaming, liquid sanitizer. It is designed for sanitizing food and beverage equipment in dairies, dairy farms, food plants, breweries, restaurants and taverns.

It is especially recommended in CIP sanitizing where foam may be a problem

FEATURES

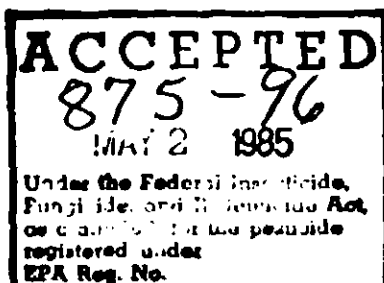
1. Rapid action
2. Colored solution
3. Hard water tolerance
4. Low corrosion
5. Low-Foaming

BENEFITS

- Sanitizes in 30 seconds reducing sanitation time.
- Yellow iodine color provides means of insuring active agent is present.
- Effective in water up to 30 grains hardness without increased usage.
- Will not damage 300 and 400 series stainless steel when used as directed.
- Satisfactory for use in spray or CIP sanitizing applications.

EFFECTIVENESS

Low Foaming Iodine Sanitizer fulfills the criteria of the Grade "A" Pasteurized Milk Ordinance, 1978, U. S. Public Health Service in 500 ppm (as CaCO₃) synthetic hard water when tested by the A.O.A.C. Germicidal and Detergent Sanitizer Test.



INSTITUTIONAL GROUP

Diversey Wyandotte Low Foaming Iodine Sanitizer is recommended for reduction of bacterial contamination to low levels on hard surfaces at recommended use concentrations of 25 or 12.5 ppm titratable iodine. Table I compares the antimicrobial effectiveness of Low Foaming Iodine Sanitizer against sodium hypochlorite when tested against typical bacteria and yeast encountered in food processing plants. Test results indicate that a sanitizing level of 12.5 ppm titratable iodine kills a greater number of microorganisms than 100 ppm available chlorine from sodium hypochlorite.

Table I

Comparison of Low Foaming Iodine Sanitizer with Sodium Hypochlorite by the A.O.A.C. AVAILABLE CHLORINE GERMICIDAL EQUIVALENT CONCENTRATION TEST - A.O.A.C. 12th Edition, 1975

<u>Test Organisms</u>	<u>Low Foaming Iodine Sanitizer</u>			<u>Sodium Hypochlorite</u>		
	<u>ppm Titratable Iodine</u>			<u>ppm Avail. Chlor</u>		
	<u>25</u>	<u>12.5</u>	<u>6.25</u>	<u>200</u>	<u>100</u>	<u>50</u>
Pseudomonas aeruginosa (ATCC 15442)	10 10	7 6	3 2	8	4	2
Rhodotorula rubra (BWC Y-7)	10 10	8 7	5 4	9	5	2
Sacchromyces cerevisiae (BWC Y-2)	10 8	8 7	5 4	8	5	1
Salmonella typhosa (ATCC 6539)	10 10	9 6	4 5	7	3	1
Staphylococcus aureus (ATCC 6538)	10 10	8 6	4 2	7	5	3
Streptococcus lactis (ATCC 11454)	10	8	3	6	3	1

Numbers indicate the increments of test culture killed by the corresponding concentration of active agent.

Low Foaming Iodine Sanitizer is effective in soft or hard water up to 30 grains per gallon. Table II records the time required to reduce a standard bacterial inoculum by 99.99% under hard and soft water conditions.

Table II

A.O.A.C. Germicidal and Detergent Sanitizers Test
 Time (in seconds) to Obtain 99.999% Kill
 of Test Organisms with Low Foaming Iodine Sanitizer

	<u>Distilled Water</u>			<u>Hard Water (500 ppm)</u>		
	<u>ppm Titratable Iodine</u>			<u>ppm Titratable Iodine</u>		
	<u>25</u>	<u>12.5</u>	<u>6.25</u>	<u>25</u>	<u>12.5</u>	<u>6.25</u>
Escherichia coli (ATCC 11229)	30	30	30	30	30	30
Staphylococcus aureus (ATCC 6538)	30	30	30	30	30	30

CORROSION

Concentrated Low Foaming Iodine Sanitizer is non-corrosive to 302, 304 and 430 series stainless steel when used as directed. Consult Diversey Wyandotte Technical Service Department for recommended feeding equipment.

Diluted Low Foaming Iodine Sanitizer, like other iodine products, is not recommended for 3003 or 7075 aluminum, dairy tin, brass, chrome plate, or copper unless exposure time is short. Diluted Low Foaming Iodine Sanitizer will attack mild and galvanized steel and is not recommended for routine use on these metals.

Diluted Low Foaming Iodine Sanitizer is acidic in use solution and may strip certain designs from glass surfaces. Check for stability of paint before use.

STAINING

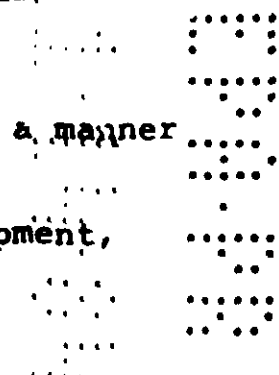
Concentrated and diluted solutions of Low Foaming Iodine Sanitizer may discolor certain types of floor tile, plastic tubing and containers.

Check use before recommendation of Low Foaming Iodine Sanitizer. Stained surfaces will decolorize slowly if exposed to air.

DIRECTIONS FOR USE

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

- A. Sanitizing of Dairy, Beverage, Food Processing Equipment, Farm Bulk Tanks, Pipeline Milkers:



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1. Rinse equipment immediately after use.
2. Wash with recommended Diversey Wyandotte product.
3. Rinse with potable water.
4. Air dry. Protect from dust and dirt.
5. Sanitize immediately before reuse with Diversey Wyandotte Low Foaming Iodine Sanitizer, using 1/2 oz of Low Foaming Iodine Sanitizer in each 5 gallons of water (0.8 ml/liter) providing 12.5 ppm titratable iodine. Test periodically with iodine tester. When solution depreciates to 6.25 ppm, discard.

B. Terminal Sanitizing of Glasses, Dishes and Food Preparation Surfaces

1. Scrape and pre-flush articles to be washed.
2. Wash with recommended Diversey Wyandotte brand product.
3. Rinse with potable water.
4. Sanitize by immersion in Diversey Wyandotte Low Foaming Iodine Sanitizer solutions using 1/2 oz to each 5 gallons of water (0.8 ml/liter) providing 12.5 ppm titratable iodine. Immerse all utensils for at least two minutes or for contact time specified by governing sanitary regulations. Test periodically with iodine tester. When solution depreciates to 6.25 ppm, discard.

C. Chemical Sanitizing - Cold Water Glasswashing Machines

1. Pre-scrape, pre-flush and load rack.
2. Wash with Low Temperature Glasswashing Detergent or other approved detergent at 120°-140°F.
3. Sanitize - rinse glasses or tableware with 12.5 ppm titratable iodine from 1/2 oz per 5 gallons (0.8 ml/liter) Low Foaming Iodine Sanitizer for 30 seconds. Certain types of glasswashing equipment have a rinse cycle of less than 30 seconds. For sanitizing rinse of glasses use 1 oz of Diversey Wyandotte Low Foaming Iodine Sanitizer in 5 gallons of water (1.6 ml/liter) providing 25 ppm titratable iodine. Consult equipment manufacturer's specifications for rinse duration or chemical feeding rate. Collect a sanitizer-rinse water sample and determine titratable iodine content with Iodine Test Kit daily.
4. Air dry on clean surface.

NOTE: Diversey Wyandotte Low Foaming Iodine Sanitizer should not be used in rinse water of over 120°F.

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<u>Use Dilution</u>	<u>Fluid Ounces per 5 gal of Water</u>	<u>ml per liter</u>	<u>ppm Titratable Iodine</u>
Sanitizing Cleaned Utensils	1/2	0.8	12.5
Sanitizing Cleaned Equipment	1/2	0.8	12.5
<u>Mechanical Glasswashing</u>			
30 second contact	1/2	0.8	12.5
less than 50 second contact	1	1.6	25

PHYSICAL PROPERTIES

Diversey Wyandotte Low Foaming Iodine Sanitizer is a dark brown, non-viscous liquid, having a slight characteristic odor. It is stable up to 120°F. When dissolved in water, solutions are yellow in color.

CHEMICAL PROPERTIES

pH	2.8 for 25 ppm tit. I ₂ (1 oz in 5 gal soft water)
Minimum titratable iodine	1.75%
Specific Gravity, 25°C	1.090
Viscosity	same as water
Freezing Point	-6°F
Flash Point TCC	83°F

ACTIVE INGREDIENTS

Potassium triiodide
(providing 1.75% titratable iodine) 4.97%

INERT INGREDIENTS 95.03%

TOTAL 100.00%

TITRATABLE IODINE DETERMINATION

The yellow color of the solution denotes the presence of titratable iodine. The minimum titratable iodine detectable visually is about 5 ppm. Presence of organic matter in solutions makes detection of the yellow color difficult and the visual technique is not recommended as a means of controlling the strength of such solutions.

The Diversey Wyandotte Iodine Test Kit should be used for determining the titratable iodine in use solutions.

TEST KIT PROCEDURE

1. Fill test bottle to 20 ml mark with solution to be tested.
2. Add 3 spoonfuls of FI-Reagent A, cap, and invert sample three times. Available iodine in solution gives a brown-blue color.
3. Add FI-0-00 84 N Sodium Thiosulfate, drop by drop, until color changes from a pale blue to colorless.
4. Number of drops of FI-0.0084 N Sodium Thiosulfate x 2.1 = ppm titratable iodine.

Example:

A solution of Diversey Wyandotte Low Foaming Iodine Sanitizer is tested.

Drops of FI-0.0084 N Sodium Thiosulfate required for the color change is 12.

Factor for ppm titratable iodine is 2.1

12 drops x 2.1 = 25.2 ppm titratable iodine.

PRECAUTIONARY TEXT

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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STATEMENT OF PRACTICAL TREATMENT:

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If swallowed: Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ACIDIC PRODUCT - Do not mix with other cleaners or chemicals as hazardous gases or heat may be generated. Dilute only with water.

STORAGE AND DISPOSAL - Combustible. Keep away from open flames when diluting or when container is open. Store in a cool area. Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide spray mixtures 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 Disposal - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incinerate, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

11-2 715-96 PW 32

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DIRECTIONS FOR USE continued on right panel

DIVERSEY LOW FOAMING IODINE

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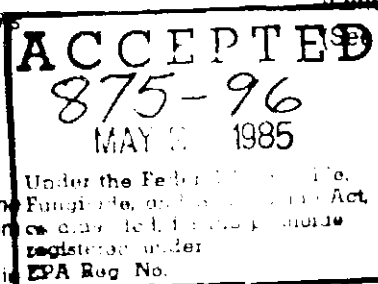
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NET CONTENTS 30 GALLONS

Diversey Wyandotte Corporation



FOOD INDUSTRIES GROUP
WYANDOTTE, MICHIGAN 48182