

1 32 PEG# 375-97

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAY 17 1990

Dr. Donald Garvin
 Diversey Wyandotte Corporation
 1532 Biddle Avenue
 Wyandotte, Michigan 48192

Subject: ACCORD II
 EPA Registration No. 875-97
 Amendment of March 30, 1990

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable subject to the comments listed below. Five copies of the finished labeling must be submitted.

1. Under the "Statement of Practical Treatment, If swallowed," delete "Drink promptly a large quantity of milk egg whites, gelatin solution, or if these are not available . . ."
2. The following instructions are applicable to the proposed label "Accord II" dated March 30, 1990.
 - A. For shell egg sanitizing use directions, revise "The sanitizer solution should be 100-120 F" to "The sanitizer solution must be equal to or warmer than the eggs (100-120 °F), but not to exceed 130 °F."
 - B. Revise the wording "Eggs should be reasonably dry before packaging or breaking" to read "Eggs must be reasonably dry before packaging or breaking."

51463:I:Pringle:C.Disk:KENCO:05/10/90:de:vo:sw:dd:dg

CONCURRENCES							
SYMBOL	H-25040						
SURNAME	Pringle						
DATE	5-17						

3. Technical Bulletin for "Accord II", dated March 30, 1990

The revised statements for shell egg sanitizing as noted above must be added to the technical bulletin.

Sincerely yours,



Walter C. Francis
Acting Product Manager (32)
Antimicrobial Program Branch
Registration Division (H7505C)

51463:I:Pringle:C.Disk:KENCO:05/10/90:de:vo:sw:dd:dg

EPA Est. 875-GA-1
EPA Reg. No. 875-97

ACCEPTED
with COMMENTS
by EPA Letter D

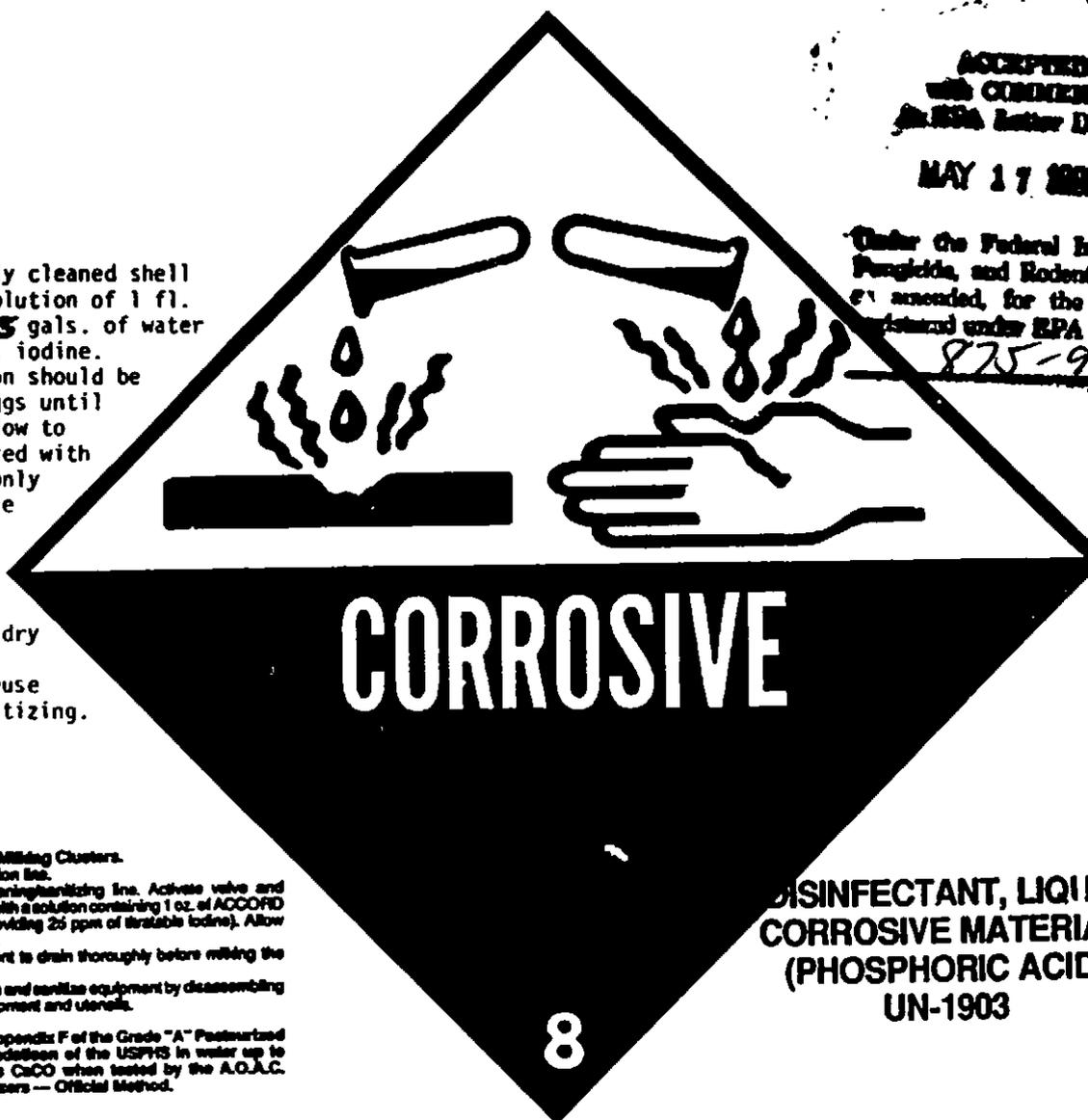
MAY 17 1988

Under the Federal Insecticide, Fungicide, and Rodenticide Act, amended, for the purposes of the Act, registered under EPA

875-9

ppm
Titratable
Fluid Ounces Per

SHELL EGG SANITIZING
To sanitize previously cleaned shell eggs, spray with a solution of 1 fl. oz. of ACCORD II per 5 gals. of water providing 25 ppm tit. iodine. The sanitizer solution should be 100-120 F. Spray eggs until thoroughly wet and allow to drain. Eggs sanitized with this product should only be rinsed with potable water if they are to be broken for immediate use in egg products. Eggs should be reasonably dry before packaging or breaking. Do not reuse solution for egg sanitizing.



- Flush Cleaning and Sanitizing of Milking Clusters.**
1. Disengage milk hose with collection line.
 2. Attach milk hose to control cleaning/sanitizing line. Activate valve and flush milk hose, cluster and claw with a solution containing 1 oz. of ACCORD II in 5 gallons of warm water (providing 25 ppm of titratable iodine). Allow flush to run until solution is clear.
 3. Allow milking hose and equipment to drain thoroughly before milking the next cow.
 4. At the completion of milking, clean and sanitize equipment by disassembling and processing as for other equipment and utensils.

ACCORD II fulfills the criteria of Appendix F of the Grade "A" Pasteurized Milk Ordinance, 1945 Recommendation of the USPHS in water up to 500 ppm hardness calculated as CaCO when tested by the A.O.A.C. Germicidal and Detergent Sanitizers -- Official Method.

DISINFECTANT, LIQUID
CORROSIVE MATERIAL
(PHOSPHORIC ACID)
UN-1903

ONS

NET CONTENTS

ACCORD® II

Iodine Detergent-Sanitizer and Germicide

For Industry and Dairy Farm Use Only

ACTIVE INGREDIENTS	
Iodine	1.75%
Phosphoric acid	18.75%
INERT INGREDIENTS	79.50%
	100.00%

* (From Alkyl (C₁₂-C₁₈) poly(oxypropylene) poly (oxyethylene) and Octylphenoxypolyoxyethoxy-ethanol-iodine complexes)

A.O.A.C. Use Dilution Tests	
Staphylococcus aureus	1:640
Salmonella choleraesuis	1:640
Pseudomonas aeruginosa	1:640
Escherichia coli	1:640

PRECAUTIONARY STATEMENTS.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS.
KEEP OUT OF REACH OF CHILDREN.

DANGER: CORROSIVE.
HARMFUL OR FATAL IF SWALLOWED.

Causes eye damage and skin irritation. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS — This pesticide is toxic to fish. Do not discharge into lakes, streams, ponds or public waters unless in accordance with NPDES permit. For guidance, contact the regional office of the Environmental Protection Agency.

CHEMICAL AND PHYSICAL HAZARDS
DANGER — MUST BE DILUTED BEFORE USE — 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
Store this product in a cool, dry area, away from sunlight and heat to avoid deterioration. In case of spill, flood area with large quantities of water. Product or residues that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not contaminate food or feed by storage disposal or cleaning of equipment.

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

STATEMENT OF PRACTICAL TREATMENT
FIRST AID: EXTERNAL — Eyes: Wash with water for about 15 minutes. Get prompt medical attention. Skin: Wash thoroughly with plenty of soap and water.
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.

121760 (111489)

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

Disinfecting Cleaned Equipment — Food Processing Equipment, Floors and Walls — Thoroughly wet or immerse previously cleaned and rinsed surfaces with 1 ounce of ACCORD II in 5 gallons of water (25 ppm titratable iodine) for 10 minutes. Drain and allow to dry.

Sanitizing of Manually Cleaned Equipment — Tanks, Vats, Utensils, Brushes, and Food Processing Equipment.

1. Rinse with warm water immediately after use.
2. Wash with recommended Diversey Wyandotte product. Rinse with clean water. Drain.
3. Sanitize and acid rinse by immersing in a solution of 1 ounce of ACCORD II in 10 gallons of water (12.5 ppm of titratable iodine). Expose for 2 minutes or as specified by local regulation.
4. Allow to drain and air dry on a clean rack or support. Protect from dust and dirt. (Where required by local or state regulations, sanitize immediately before reuse).

Cleaning of Equipment and Surfaces.

1. Rinse with warm water to remove heavy soil.
2. Flood or immerse equipment in 1 ounce of ACCORD II in 5 gallons of warm water (80-100F) and brush or wipe surfaces. Drain.
3. Rinse in potable water and drain.
4. Sanitize by use of an additional ACCORD II solution as directed by other instructions and conditions on this label.

Restaurant and Food Service — Sanitizing Glasses, Dishes, Utensils and Food Processing Equipment.

1. Scrape and pre-rinse articles to be washed.
2. Wash with a recommended Diversey Wyandotte Detergent.
3. Rinse with potable water.
4. Sanitize with a solution containing 1 oz. of ACCORD II in 10 gallons of water (providing 12.5 ppm titratable iodine). Immerse all articles for at least 1 minute or for times specified by local regulation. Test solution periodically with ACCORD II test kit. Discard solution when it depreciates below 12.5 ppm titratable iodine or become visually dirty.
5. Air dry on a clean drainboard.

Udder Washing.

1. About one minute before attaching milker, wash udder using 1 oz. of ACCORD II in 5 gallons of lukewarm water (25 ppm titratable iodine solution). Wash and massage entire udder thoroughly.
2. Dry udder with a single service towel. Do not reuse towel or wring it out in the solution. Yellow color indicates the presence of titratable iodine. Prepare a fresh solution when the yellow color fades or when the solution becomes visibly dirty.
3. After milking, dip each teat with an approved teat dip.

Spray Sanitizing of Food Service and Processing Equipment.

1. Wash equipment with a solution of recommended Diversey Wyandotte Detergent.
2. Rinse with warm water.
3. Spray with a solution containing 1 oz. ACCORD II in 5 gallons of water (providing 25 ppm titratable iodine). Test spray solution daily with an ACCORD II test kit to ensure adequate sanitizer is being supplied by dilution equipment.
4. Allow equipment to drain and air dry.

Wash with recommended Diversey Wyandotte product. Rinse with clean water. Drain. Sanitize and acid rinse by immersing in a solution of 1 ounce of ACCORD II in 10 gallons of water (12.5 ppm of titratable iodine). Expose for 2 minutes or as specified / local regulations.

ppm

121760 (111489)

IONS

ACCORD II sanitizer is recommended for cleaning, sanitizing, or disinfecting all types of food and beverage equipment in dairies, dairy farms, food plants and breweries. It may also be used as an udder wash when used at concentrations of 25 ppm titratable iodine (1 oz per 5 gallons or 1.6 ml per liter). ACCORD II may be used in restaurants for sanitizing glasses, dishes, utensils, and food processing equipment.

FEATURES

Iodine sanitizer

Yellow solutions

Complexed iodine

Hard water tolerance

BENEFITS

Broad spectrum disinfection

Visual indication of iodine

Low odor level

Effective in water up to 30 grains per gallon hardness (500 ppm CaCO_3).

DISCUSSION

ACCORD II is an iodophor sanitizer. Iodine, the active sanitizing agent, is chemically complexed to nonionic surfactant. In this form, the iodine is more stable, less corrosive, and less volatile than in simple iodine solutions; yet it retains germicidal activity in acidic media.

ACCORD II is an acid sanitizer. It can be used to combine the acid rinse and sanitize cycles of CIP systems. The surfactants in ACCORD II act as detergents and wetting agents to penetrate films and improve cleaning.

FOOD INDUSTRIES

HOW TO USE

ACCORD II can be used as a germicide as well as a sanitizer. Evaluations of germicides are more stringent than for sanitizers. In the standard laboratory test (A.O.A.C. Use Dilution Test) a germicide must destroy all of the standard test organisms, whereas in the A.O.A.C. Germicidal and Detergent Sanitizer method, a sanitizer reduces the bacterial population to a level recognized as relatively safe in terms of public health requirements.

Use Dilution Test results indicate that ACCORD II at the dilution of 1:640 disinfects the organisms shown in Table I. This product also passes the A.O.A.C. Germicidal and Detergent Test (See Table II).

TABLE I

A.O.A.C. Use Dilution Test (A.O.A.C. 12th ed., 1975)

ACCORD II at 1 oz/5 gallons (1.6 ml/L) in 500 ppm hard water (as CaCO₃)

<u>Organism</u>	<u>Phenol Resistance of Organisms</u>	<u>Number of Tests Showing Complete Destruction of Organisms</u>
Staphylococcus aureus (ATCC 6538)	1:65	59/60, 60/60
Salmonella choleraesius (ATCC 6539)	1:80	60/60, 60/60
Escherichia coli (ATCC 11229)	1:90	60/60, 60/60
Pseudomonas aeruginosa (ATCC 15442)	1:80	59/60, 60/60

TABLE II

A.O.A.C. Germicidal and Detergent Sanitizer Test
(A.O.A.C. 12th ed., 1975)

<u>Test Organism</u>	<u>Time In Seconds To Effect Sanitizing Action</u>	
	<u>Distilled Water</u>	<u>Hard Water (500 ppm)</u>
	<u>12.5 ppm</u>	<u>12.5 ppm</u>
	<u>Titratable I₂</u>	<u>Titratable I₂</u>
Staphylococcus aureus (ATCC 6538)	30	30
Escherichia coli (ATCC 11229)	30	30

Solutions of ACCORD II are normally recommended in concentrations of 12.5 to 25 ppm titratable iodine. A concentration of 12.5 ppm iodine is as effective as 100 ppm available chlorine as hypochlorite as determined by the Available Chlorine Germicidal Equivalent Concentration Method (See Table III).

TABLE III

Comparison of ACCORD II with sodium hypochlorite by the
Available Chlorine Germicidal Equivalent Concentration Method
(A.O.A.C. 12th ed., 1975)

<u>Test Organism</u>	<u>Increments of Culture Destroyed</u>					
	<u>ACCORD II</u>			<u>NaOCL</u>		
	<u>ppm</u>	<u>Titrable Iodine</u>		<u>ppm</u>	<u>Titrable Chlorine</u>	
	<u>25</u>	<u>12.5</u>	<u>6.25</u>	<u>200</u>	<u>100</u>	<u>50</u>
Salmonella typhosa (ATCC 6539)	10	9	6	7	4	2
Staphylococcus aureus (ATCC 6538)	9	5	2	8	4	3

CORROSION

ACCORD II is non-corrosive to stainless steel when used as directed. Like other iodine products, it is not recommended for aluminum, dairy tin, brass, chrome plate, copper unless exposure time is very short.

DIRECTIONS FOR USE

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

DILUTIONS

<u>Applications</u>	<u>Fluid Ounces Per</u>		<u>ppm Titratable Iodine</u>
	<u>5 gal water</u>	<u>100 gal water</u>	
Sanitizing of cleaned Equipment	1/2	10	12 1/2
Disinfecting cleaned equipment	1	20	25
Cleaning of equipment	1	20	25
Sanitizing by spraying	1	20	25
Udder washing	1	20	25

DISINFECTING CLEANED EQUIPMENT - Food Processing Equipment,
Floors and Walls

Thoroughly wet or immerse previously cleaned and rinsed surfaces with 1 ounce of ACCORD II in 5 gallons of water (25 ppm titratable iodine) for 10 minutes. Drain and allow to dry.

SANITIZING OF MANUALLY CLEANED EQUIPMENT - Tanks, Vats,
Utensils, Brushes, and Food Processing Equipment

1. Rinse with warm water immediately after use.
2. Wash with recommended Diversey Wyandotte product. Rinse with clean water. Drain.
3. Sanitize and acid rinse by immersing in a solution of 1 ounce of ACCORD II in 10 gallons of water (12.5 ppm of titratable iodine). Expose for 2 minutes or as specified by local regulation.
4. Allow to drain and air dry on a clean rack or support. Protect from dust and dirt. (Where required by local or state regulations, sanitize immediately before reuse.)

CLEANING OF EQUIPMENT AND SURFACES

1. Rinse with warm water to remove heavy soils.
2. Flood or immerse equipment in 1 ounce of ACCORD II in 5 gallons of warm water (80-100°F) and brush or wipe surface. Drain.
3. Rinse in potable water and drain.
4. Sanitize by use of an additional ACCORD II solution as directed by other instructions and conditions.

SANITIZING OF MANUALLY CLEANED EQUIPMENT - Tanks, Vats,
Utensils, Brushes and Food Processing Equipment

1. Rinse with warm water immediately after use.
2. Wash with recommended Diversey Wyandotte product. Rinse with clean water. Drain.
3. Sanitize and acid rinse by immersing in a solution of 1 ounce of ACCORD II in 10 gallons of water (12.5 ppm of titratable iodine). Expose for 2 minutes or as specified by local regulations.

4. Allow to drain and air dry on a clean rack or support. Protect from dust and dirt. (Where required by local or state regulations, sanitize immediately before reuse.)

RESTAURANT AND FOOD SERVICE - Sanitizing Glasses, Dishes, Utensils and Food Processing Equipment.

1. Scrape and pre-rinse articles to be washed.
2. Wash with a recommended Diversey Wyandotte Detergent.
3. Rinse with potable water.
4. Sanitize with a solution containing 1 oz of ACCORD II in 10 gallons of water (providing 12.5 ppm titratable iodine). Immerse all articles for at least 1 minute or for times specified by local regulation. Test solution periodically with an ACCORD II test kit. Discard solution when it depreciates to below 12.5 ppm titratable iodine or solution becomes visually dirty.
5. Air dry on a clean drainboard.

UDDER WASHING

1. About 1 minute before attaching milker, wash udder with 1 oz of ACCORD II in 5 gallons of lukewarm water (25 ppm titratable iodine solution). Wash and massage entire udder thoroughly.
2. Dry udder with a single service towel. Do not reuse towel or wring it out in the solution. Yellow color indicates the presence of titratable iodine. Prepare a fresh solution when the yellow color fades or when the solution becomes visibly dirty.
3. After milking, dip each teat with an approved teat dip.

SPRAY SANITIZING OF FOOD SERVICE AND PROCESSING EQUIPMENT

1. Wash equipment with a solution of recommended Diversey Wyandotte Detergent.
2. Rinse with warm water.
3. Spray with a solution containing 1 oz of ACCORD II in 5 gallons of water (providing 25 ppm titratable iodine). Test spray solution daily with an ACCORD II test kit to insure adequate sanitizer is being supplied by dilution equipment.
4. Allow equipment to drain and air dry.

FLUSH CLEANING AND SANITIZING OF MILKING CLUSTERS

1. Disengage milk hose from collection line.
2. Attach milk hose to control cleaning/sanitizing line. Activate valve and flush milk hose, cluster and claw with a solution containing 1 oz of ACCORD II in 5 gallons of warm water (providing 25 ppm of titratable iodine). Allow flush to run until solution is clear.
3. Allow milking hose and equipment to drain thoroughly before milking the next cow.
4. At the completion of milking, clean and sanitize equipment by disassembling and processing as for other equipment and utensils.

SHELL EGG SANITIZING

To sanitize previously cleaned shell eggs, spray with a solution of 1 fl. oz. of ACCORD II per 5 gals. of water providing 25 ppm tit. iodine. The sanitizer solution should be 100-120 F. Spray eggs until thoroughly wet and allow to drain. Eggs sanitized with this product should only be rinsed with potable water if they are to be broken for immediate use in egg products. Eggs should be reasonably dry before packaging or breaking. Do not reuse solution for egg sanitizing.

CHEMICAL PROPERTIES

Phosphoric Acid as H ₃ PO ₄	18.75%
pH 640:1 solution	3.3
Phosphorus as P	5.9%
ppm Phosphorus at 640:1	92

ACCORD II COMPOSITION

Active Ingredients

Iodine*	1.75
Phosphoric Acid	18.75
Inert Ingredients	<u>79.50</u>

100.0%

*From Alkyl (C₁₂-C₁₅) poly (oxy propylene) poly (oxy ethylene) iodine complex and Octyl phenoxy polyethoxy ethanol iodine complex.

PRECAUTIONARY STATEMENTS

HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

KEEP OUT OF THE REACH OF CHILDREN

DANGER: CORROSIVE

Causes eye damage and skin irritation. Do not get in eyes. Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID

EXTERNAL - Eyes: Wash with water for about 15 minutes. Get prompt medical attention. Skin: Wash thoroughly with plenty of soap and water.

IF SWALLOWED: Drink promptly large quantities of water. Avoid alcohol.

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

DANGER - MUST BE DILUTED BEFORE USE.

ENVIRONMENTAL HAZARDS - This pesticide is toxic to fish. Keep out of lakes, streams, and ponds. Permits may be required for discharges containing this pesticide into public waters. For guidance, contact the regional office of the Environmental Protection Agency.

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

Store in a cool, dry area away from sunlight and heat to avoid deterioration. In case of spill, floor area with large quantities of water. Product or rinsate that cannot be used should be diluted with water before disposal to a sanitary sewer. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

CONTAINER DISPOSAL (Plastic Containers)

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.

KEY WORDS

Disinfectant
Germicide
Iodine
Iodophor
Sanitizer
Spray sanitizer

Titratable iodine
Udder wash