



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

June 25, 2015

Patti Golick  
Sr. Regulatory Services Associate  
Lonza, Inc.  
90 Boroline Road  
Allendale, NJ 07401

Subject: PRIA Label Amendment –Add additional pathogen claims and soft surface sanitizing claims to the product label.  
Product Name: Lonza Formulation S-21F  
EPA Registration Number: 6836-140  
Application Date: December 29, 2014  
Decision Number: 499851

Dear Ms. Golick:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

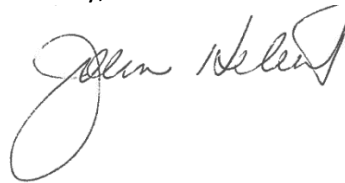
A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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EPA Reg. No. 6836-140  
Decision No. 499851

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions concerning this letter please contact Emilia Oiguenblik at (703) 347 0199 or Velma Noble at (703) 308-6233.

Sincerely,

A handwritten signature in black ink, appearing to read "John Hebert". The signature is fluid and cursive, with a large loop at the end of the last name.

John Hebert, Chief  
Regulatory Management Branch I  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

Enclosure: Stamped label

Note to reviewer:

[Items in brackets [AAA] are optional and may/may not be included on *final label*]

{Items in braces {AAA} are for information purposes and will not appear on final label}

## LONZA FORMULATION S-21F

One-Step Disinfectant

Cleaner – Sanitizer – Fungicide – Mildewstat – Virucide\* – Deodorizer  
For Homes, Restaurants, Hospitals, Institutional and Industrial Use

Effective in hard water up to 200 ppm hardness [calculated as CaCO<sub>3</sub>] in the presence of 5% serum contamination

For Farm, School, Dairy, Restaurant, Food Handling and Processing Areas, Bar and Institutional Kitchen Use

- Formulated for Effective Farm Premise Sanitation
  - Formulated for Effective Poultry Premise Sanitation
  - Formulated for Effective Swine Premise Sanitation
  - Formulated for Effective Mushroom Farm Sanitation
  - Formulated for Veterinary Practice / Animal Care / Animal Laboratory Disinfection
  - For use in federally inspected meat and poultry plants
- Staphylocidal • Pseudomonacidal • Bactericidal • Salmonellacidal • Fungicidal • Virucidal\*

Active Ingredients:

Octyl decyl dimethyl ammonium chloride.....	1.65%
Dioctyl dimethyl ammonium chloride.....	0.66%
Didecyl dimethyl ammonium chloride.....	0.99%
Alkyl (C <sub>14</sub> , 50%; C <sub>12</sub> , 40%; C <sub>16</sub> , 10%) dimethyl benzyl ammonium chloride .....	2.20%
Other Ingredients: .....	94.50%
Total:.....	100.00%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER [PELIGRO]**

See [left] [side] [right] [back] panel for Precautionary Statements and First Aid

EPA Reg. No. 6836-140

EPA Est. No. (*insert EPA Establishment No. here*)

Net Contents (*insert container size here*)

[DOT Symbols]

[Country of origin (*insert country*)]

[Manufactured in (*insert country*)]

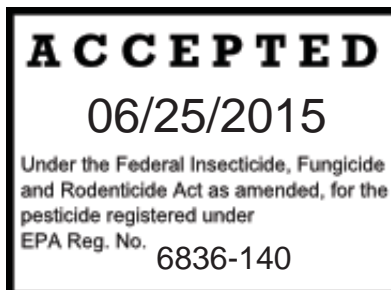
[Barcode]

Manufactured by:

Lonza Inc.

90 Boroline Road

Allendale, NJ 07401



## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER.** Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective (rubber or chemical resistant) gloves and protective clothing. Harmful if swallowed or absorbed through the skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

### **FIRST AID**

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

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

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

Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling poison control center or doctor or going for treatment.

*{If container size is 5 gallons or larger, the following Environmental Hazards statements will be used:}*

### **ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

{Note to reviewer: Pages 3-8 are considered optional marketing language.}

Cleans [Cleaner]  
Concentrate [Concentrated]  
Deodorizes [Deodorant]  
Disinfects [Disinfectant]  
This product contains no [phosphates or] phosphorous [compounds].

**Lonza Formulation S-21F:**

- delivers non-acid disinfectant and cleaning performance in an economical concentrate.
- [is a heavy duty disinfectant cleaner that] cleans, disinfects and deodorizes in one labor saving step.
- is an economical concentrate [that can be diluted for use] [with a mop and bucket, trigger sprayers, sponge or by soaking].
- is effective yet economical.
- deodorizes by killing microorganisms that cause offensive odors.
- [improves labor results by] effectively controls [controlling] malodors.
- will disinfect, clean and deodorize surfaces in rest rooms and toilet areas, behind and under sinks and counters, garbage cans and garbage storage areas, and other places where bacterial growth can cause malodors.
- is formulated for use in daily maintenance programs with a balance of detergents, biocides and malodor counteractants that deliver effective cleaning, disinfecting and malodor control.
- is a complete, chemically balanced disinfectant [and sanitizer] [that provides clear use solutions even in the presence of hard water].
- will not leave grit or soap scum.
- is a [versatile] disinfectant and sanitizer for hard, nonporous surfaces in Veterinarian, Animal care and Farm Premise applications.
- is a [versatile] cleaner and broad spectrum disinfectant formulated for use only on non-critical instruments in Ultrasonic Baths [Ultrasonic cleaning units].
- is a [concentrated] [one-step] [Hospital Use] disinfectant cleaner that is effective against a broad spectrum of bacteria, is virucidal\* [including HIV-1, the AIDS Virus and Hepatitis B Virus and Hepatitis C Virus], fungicidal, and inhibits the growth of mold and mildew, and their odors, when used as directed.
- is an effective one-step sanitizer-cleaner for use on non-food contact surfaces.
- meets AOAC efficacy standards for hospital disinfectants.
- meets Sanitizer Test standards for non-food contact sanitizers.
- is a proven one-step disinfectant - cleaner - fungicide - mildewstat - virucide\* which is effective in water up to 200 ppm hardness in the presence of 5% serum contamination.
- is a proven "one-step" cleaner - sanitizer which is effective in water up to 500 ppm hardness in the presence of 5% serum contamination.
- [Kills] [Eliminates] [Removes] [Destroys] avian influenza A Virus (H3N2) [and] (H5N1) on pre-cleaned environmental surfaces
- [Kills] [Eliminates] [Removes] [Destroys] *(Insert pathogen or pathogens from lists on pages 12 or 13)* on [pre-cleaned] environmental surfaces
- [Kills] [Eliminates] [Removes] [Destroys] [Germs] [Bacteria] [Viruses\*] [on pre-cleaned environmental surfaces]
- is effective at controlling mold and mildew odor on mattresses, pillows and shower curtains. **{Not for use in California}**
- leaves a clean fresh scent.
- provides long lasting freshness against tough [pet] odors such as odors from litter boxes and pet accidents.
- eliminates 99.9% of Staphylococcus aureus and Klebsiella pneumoniae in 60 seconds.
- is effective against Citrus Canker Disease [Xanthomonas axonopodis pv. citri] at 2000-ppm active quat.
- is a mildewstat and will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard nonporous surfaces.
- meets AOAC Germicidal & Detergent standards for previously cleaned food-contact surfaces.
- has been cleared by 40 CFR §180.940 (a) for use on Food-contact surfaces in public eating places, dairy-processing equipment, food processing equipment, utensils and other food-contact articles.

- Quaternary blend disinfectant effective in 200ppm hard water and 5% organic load.
- Formulated for effective farm, poultry, and swine premise and veterinary practice.
- Broad spectrum kill of molds, bacteria, viruses and fungi.
- Effective against *Aspergillus fumigatus* at a 2 oz. per gallon dilution
- (proven) (effective) soft surface sanitizer
- (proven) (effective) for use on soft surfaces
- (proven) (effective) on fabric surface(s)
- For use on (soft surfaces) such as [insert from soft surface use sites)
- Cost effective (concentrate) for use on soft surfaces
- One step sanitizer for soft surfaces
- One step sanitizer for fabric surfaces
- Sanitizes soft surfaces (in 5 minutes)
- Sanitizes fabric surfaces (in 5 minutes)
- Is a proven soft surface sanitizer against:
  - *Staphylococcus aureus*
  - *Enterobacter aerogenes*

### Use **Lonza Formulation S-21F**

- in federally inspected Meat & Poultry Plants as a food contact sanitizer and / or disinfectant. This product was authorized by USDA as category D2 under the prior authorization program and its formula has not been changed – a sanitizer for all surfaces not always requiring a rinse.
- as a disinfectant on hard, nonporous surfaces.
- in kitchens, bathrooms and other household areas.
- to clean and disinfect finished floors, sinks and tubs.
- with a mop and bucket, trigger sprayer, sponge or by soaking.
- for non-scratch cleaning of showers and tubs, shower doors and curtains, fixtures and toilet bowls.
- to clean and disinfect nonporous salon / barber tools and instruments: combs, brushes, scissors, blades and manicure instruments.
- for sanitizing and disinfecting of ultrasound transducers, probes, mammography compressor plates and other hard nonporous surfaces.
- to clean and disinfect finished floors. Must be applied with damp mop or autoscrubber. Cleans and disinfects without dulling gloss.
- on coils and drain pans of air conditioning and refrigeration equipment and heat pumps. Follow the directions for sanitization of non-food contact surfaces.
- To clean and disinfect nonporous fire fighting bunker / turnout gear; trousers; overcoats, gloves, boots, hoods, helmets, air masks.
- [on] [to clean and disinfect] [to clean and sanitize] nonporous personal protective safety equipment, wrestling headgear, boxing headgear, protective headgear, athletic helmets, hard hats, half mask respirators, full face breathing apparatus, gas masks, goggles, spectacles, face shields, hearing protectors, and ear muffs. Rinse all equipment that comes in prolonged contact with skin with clean warm water [about 120°F], and allow to air dry before reuse. [Precaution: Cleaning at 120°F temperature will avoid overheating and distortion of the personal safety equipment that would necessitate replacement.]
- [on] [to clean and disinfect] nonporous athletic mats, wrestling mats, gymnastic mats, exercise equipment and training tables.
- for Poultry Premise Sanitation [Hatcheries]: Egg Receiving Area, Egg Holding Area; Setter Room, Tray Dumping Area, Trays, Buggies, Racks, Egg Flats, Chick Holding Room, Hatchery Room, Chick Processing Area, Chick Loading Area, Poultry Buildings, Ceilings, Sidewalls and Floors, Drinkers and other Poultry House related equipment, and all other hard, nonporous surfaces in the Hatchery environment.
- for Swine Premise Sanitation: Waterers and Feeders, Hauling Equipment, Dressing Plants, Loading Equipment, Farrowing Barns and areas, Nursery blocks, Creep area, Chutes.
- for Farm Premise Sanitation of hard nonporous surfaces: floors, walls, feed racks, mangers, troughs, automatic feeders, fountains and waterers, forks, shovels, scrapers and other nonporous surfaces in barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals.
- in the laundry to control odors on musty bedding and linens. Test on a small inconspicuous area before using. **{Not for use in California}**
- in mildew stains in damp areas such as bathrooms, showers, kitchens, basements and laundry rooms.
- in work areas such as tool rooms and garages for odor control and light duty cleaning.
- to remove odors caused by flooding and smoke from fires.
- to clean and sanitize tables, chairs, and countertops
- as a [commercial] sanitizer on dishes, glassware, and utensils.
- as a sanitizer in bottling and beverage dispensing equipment.
- as a sanitizer in sanitary filling of bottles and cans.
- in sanitizing bottles or cans in the final rinse application, and for external spraying of filler and closing machines.
- as a sanitizer in beer fermentation and holding tanks.
- as a Food-Grade Shell Egg sanitizer, with best results achieved in water temperatures ranging from 78°-110°F. **Lonza Formulation S-21F** may be applied through, immersion tanks, foaming apparatus and low-pressure sprayers.

Cross-contamination is of major housekeeping concern. **Lonza Formulation S-21F** has been formulated to aid in the reduction of cross-contamination on treated surfaces not only in hospitals, but in schools, institutions and industry.

**Lonza Formulation S-21F** is a phosphate free, germicidal detergent effective in the presence of a moderate amount of organic soil on hard nonporous surfaces found at mushroom farms. **Lonza Formulation S-21F** has been designed for use between mushroom crops. Areas of intended use include breezeways and track alleys before spawning, inside and outside walls of mushroom houses, lofts, floors, storage sheds and casing rings. Use of **Lonza Formulation S-21F** must be limited to areas where compost and mushrooms are not present.

**Lonza Formulation S-21F** is effective at eliminating odors on porous surfaces such as upholstery, drapes, carpets, bedding, shower curtains, mattresses and non-porous surfaces such as walls and floors. Excellent for fire restoration.

Other suggested Uses: Homes, Veterinary Clinics, Fish Markets, Kennels, Trash Compactors, Offices, Beauty Salons, Locker Rooms, Health Spas, Conference rooms, Elevators, Smoking Areas, Lounges, Day Care Centers, Dry Cleaners, Theaters, Farms, Auditoriums and Churches.

**Lonza Formulation S-21F** is a sanitizer for hard nonporous non-food contact surfaces according to the method for Sanitizers - Non-Food Contact Surfaces, modified in the presence of 500 ppm hard water plus 5% organic serum in 60 seconds against:

*Klebsiella pneumoniae*      *Staphylococcus aureus*

Regular, effective cleaning and sanitizing of equipment, utensils, and work or dining surfaces which could harbor food poisoning microorganisms minimizes the probability of contaminating food during preparation, storage or service. Effective cleaning will remove soil and prevent the accumulation of food residues, which may decompose or support the rapid development of food poisoning organisms or toxins. Application of effective sanitizing procedures reduces the number of those organisms present on equipment and utensils after cleaning, and reduces the potential for the transfer, either directly through tableware such as glasses, cups and flatware or indirectly through food.

To prevent cross-contamination, kitchenware and food-contact surfaces of equipment must be washed, rinsed with potable water and sanitized after each use and following any interruption of operation during which time contamination may have occurred.

Where equipment and utensils are used for the preparation of foods on a continuous or production-line basis, utensils and the food-contact surfaces of equipment must be washed, rinsed with potable water and sanitized at intervals throughout the day on a schedule based on food temperature, type of food, and amount of food particle accumulation.

Articles that can be immersed in solution must remain in solution for 60 seconds. Articles or surfaces too large for immersing must be thoroughly wetted or flooded by rinsing, spraying or swabbing. Allow all sanitized surfaces to drain thoroughly [and air dry].

**Lonza Formulation S-21F** fulfills the criteria of Appendix F of the Grade "A" Pasteurized Milk Ordinance Recommendations of the U.S. Public Health Services in waters up to 500 ppm of hardness calculated as  $\text{CaCO}_3$  when evaluated by the AOAC Germicidal and Detergent Sanitizer Method.



*{Note to reviewer: The following is considered optional marketing language.}*

**[AREAS OF USE:]**

Use **Lonza Formulation S-21F** in:

*{Note to reviewer: Each entry below also represents a graphic depicting the corresponding area of use. The graphics will only represent individual objects or outsides or insides of buildings as described below. No people, animal or food will be depicted in graphics.}*

Bathrooms	Prisons
Homes [Households]	Public facilities
Kitchens	Public rest rooms,
	Schools
Clinics	Shower and bath areas
Dental offices	Salons [Beauty] [Tanning]
Health Care Facilities	Universities
Hospitals	
Medical Offices	Camp grounds
Medical Related facilities	Play ground equipment
Nursing homes	
Sick Rooms	Animal laboratories
Day care centers	Dairy farms
Nurseries	Farms
	Hog farms
Bars	Kennels
Cafeterias	Mushroom Farms
Convenience stores	Poultry farms
Food Preparation Areas	Pet animal quarters
Food processing plants	Pet shops
Food storage areas	Turkey farms
Institutional kitchens	Zoos
Restaurants [Front of House]	
USDA inspected food processing facilities	Airplanes
	Airports
Athletic facilities	Ambulances
Barber shops	Boats
Business and office buildings	Buses
Colleges	Campers
Correctional facilities	Cars
Dressing rooms	Emergency [Police] [EMS] [Fire] [Rescue] vehicles
Exercise facilities	
Factories	Mobile homes
Hotels	Ships
Institutional facilities	Taxis
Institutions	Trailers
Locker rooms	Trains
Motels	Transportation terminals

{Note to reviewer: The following is considered optional marketing language.}

**[TYPES OF SURFACES:]**

Use **Lonza Formulation S-21F** on washable hard, nonporous surfaces of:

{Note to reviewer: Each entry below also represents a graphic depicting the corresponding type of surface. No people, animal or food will be depicted in graphics. Only exteriors of microwaves and refrigerators will be depicted. Toy graphics will be submitted to Agency for review.}

- |   |   |
|---|---|
| Appliances, exteriors   | Coolers   |
| Bathroom fixtures   | Cutlery   |
| Bathtubs [fiberglass]   | Cutting Boards, plastic and other nonporous                 |
| Cabinets  | Dishes  |
| Cages   | Eating Utensils   |
| Chairs  | Food processors   |
| Coils and drain pans of air conditioning and refrigeration equipment and heat pumps | Food dispensing equipment                                   |
| Conductive flooring   | Frozen Drink Machines                                       |
| Counters [Countertops]  | Glassware   |
| Countertop laminates  | Ice Chests  |
| Desks   | Ice Machines  |
| Doorknobs   | Ice cream dispensing equipment [Soft Serve]                 |
| Floors  | Plastic Food Storage Containers                             |
| Foot Spas   | Kitchen equipment   |
| Garbage cans  | Refrigerator bins used for meat, fruit, vegetables and eggs |
| Highchairs  | Silverware  |
| Kennel runs   |   |
| Microwave ovens, exteriors  | Non-critical [hospital] [medical] equipment surfaces:       |
| Outdoor [patio] furniture except cushions and wood frames                           | Beds [Medical] [Hospital]                                   |
| Refrigerators, exteriors  | Bed frames  |
| Refrigerated storage and display equipment  | Bed rails   |
| Showers   | Crutches  |
| Shower stalls   | Defibrillators  |
| [Fiberglass] Shower stalls  | Gurneys   |
| [Fiberglass] Sinks [bathroom] [kitchen]   | [Medical] Examining tables                                  |
| Sinks [bathroom] [kitchen]  | [Medical] [Hospital] Lamps                                  |
| Stoves [stovetops]  | Rescue tools  |
| Tables, [Non-wooden picnic tables]  | Resuscitators   |
| Telephones  | [Medical] [Hospital] Scales                                 |
| Toilets   | Stands  |
| Toilet bowls  | Stretchers  |
| Toilet bowl surfaces  | Stethoscopes  |
| Tubs [Fiberglass]   | Walkers   |
| Tiles, glazed   | Wheel chairs  |
| Ultrasonic baths  |   |
| Urinals   | Other hard nonporous surfaces made of:                      |
| Walls   | Glazed ceramic  |
| Whirlpool [bathtubs] [tubs] [units]   | Glazed enameled surfaces                                    |
|   | Glazed porcelain  |
|   | Laminated surfaces  |
| Beer fermentation and holding tanks   | Metal   |
| Beverage dispensing equipment   | Plastic [such as polystyrene or polypropylene]              |
| Blenders  | Sealed stone  |
| Bottling or premix dispensing equipment   | Stainless steel   |
| Chopping blocks, plastic and other nonporous  | Upholstery, vinyl and plastic                               |
| Cooking utensils  | Woodwork, finished  |

Soft (household) surfaces

Upholstery

Fabric

(upholstered) Couches(es), Sofa(es) Chair(s), seat cushion(s)

(upholstered) cushions(s), pillow(s)

(upholstered) furniture

(fabric) Window treatment(s), Curtain(s), Draperies, Shower curtain(s)

(fabric) (Gym) (Laundry) (diaper) Bags, back pack(s)

(Fabric) Hamper(s)

(Fabric) (Dog) (Pet) Bedding, Blankets

(fabric) (upholstered) (car) seat(s)

(fabric) stuffed animal(s), toy(s)

*{Note to reviewer: one or more of the following must be used when making sanitizing claims depending on the use dilution selected. ATCC numbers are listed on the data matrix.}*

**Lonza Formulation S-21F** is an effective sanitizer for use on pre-cleaned food contact surfaces at 150 – 200 ppm in waters up to 500 ppm hardness in 60 seconds against:

Campylobacter jejuni  
Escherichia coli  
Staphylococcus aureus

**Lonza Formulation S-21F** is an effective sanitizer for use on pre-cleaned food contact surfaces at 200 - 300 ppm in waters up to 500 ppm hardness in 60 seconds against:

Campylobacter jejuni  
Escherichia coli  
ESBL Escherichia coli – [Extended spectrum beta-lactamase producing E. coli]  
Shigella sonneii  
Staphylococcus aureus  
Vibrio cholerae  
Yersinia enterocolitica

**Lonza Formulation S-21F** is an effective sanitizer for use on pre-cleaned food contact surfaces at 300 - 400 ppm in waters up to 500 ppm hardness in 60 seconds against:

Campylobacter jejuni  
Escherichia coli  
ESBL Escherichia coli – [Extended spectrum beta-lactamase producing E. coli]  
Salmonella enterica  
Shigella sonneii  
Staphylococcus aureus  
Vibrio cholerae  
Yersinia enterocolitica

{Note to reviewer: The following is considered optional marketing language. ATCC numbers are listed on the data matrix.}

**Lonza Formulation S-21F** is a [one-step] [Hospital use] disinfectant, Bactericidal according to the current AOAC Use-Dilution Test Method, Fungicidal according to the AOAC Fungicidal Test and Virucidal\* according to the virucidal qualification modified in the presence of 200 ppm hard water plus 5% organic serum against:

{or}  
As a disinfectant, **Lonza Formulation S-21F** [kills] [is effective against]:

[Bacteria:]

Pseudomonas aeruginosa [Pseudomonas]

Staphylococcus aureus [Staph]

Salmonella enterica [Salmonella]

Acinetobacter baumannii [Acinetobacter]

Burkholderia cepacia

Campylobacter jejuni [Campylobacter]

Corynebacterium ammoniagenes

Enterobacter aerogenes

Enterobacter cloacae NDM-1

Enterococcus faecalis [Enterococcus]

Enterococcus faecalis - Vancomycin resistant [VRE]

Escherichia coli [E. coli]

Escherichia coli, New Delhi Metallo-Beta Lactamase (NDM-1)

ESBL Escherichia coli – [Extended spectrum beta-lactamase producing E. coli]

Klebsiella pneumoniae [Klebsiella]

Klebsiella pneumoniae – NDM-1 positive

Legionella pneumophila

Listeria monocytogenes [Listeria]

Salmonella schottmuelleri [Salmonella]

Salmonella typhi [Salmonella]

Serratia marcescens

Shigella dysenteriae [Shigella]

Staphylococcus aureus - Community Associated Methicillin-Resistant [CA-MRSA] [NRS384] [USA300]

Staphylococcus aureus - Community Associated Methicillin-Resistant [CA-MRSA] [NRS123] [USA400]

Staphylococcus aureus - Methicillin-Resistant [MRSA]

Staphylococcus aureus - Multi-Drug Resistant [resistant to tetracycline [Tc], penicillin [Pc], streptomycin [Sm] and erythromycin [Em] and susceptible to chloramphenicol [Cm] *in vitro*]

Staphylococcus aureus - Vancomycin Intermediate Resistant – [VISA]

Streptococcus pyogenes [Strep] [a cause of scarlet fever]

Vibrio cholerae

[Viruses:]

\*Adenovirus Type 5 [Adenovirus]

\*Adenovirus Type 7 [Adenovirus]

\*Hepatitis B Virus [HBV]

\*Hepatitis C Virus [HCV]

\*Herpes Simplex Virus Type 1 [Herpes]

\*Herpes Simplex Virus Type 2 [Herpes]

\*HIV-1 [the AIDS Virus]

\*Human Coronavirus

\*Influenza Virus Type A / Brazil [Influenza]

\*Influenza Virus Type A / Hong Kong [Influenza]

\*2013 Influenza A Virus (H7N9)

\*Norwalk Virus [Norovirus]

\*Respiratory Syncytial Virus [RSV]

\*Rotavirus

\*SARS Associated Coronavirus [SARS] [cause of Severe Acute Respiratory Syndrome]

\*Vaccinia [Pox Virus]

{Note to reviewer: the following are non-enveloped viruses :}

\*Adenovirus Type 5

\*Adenovirus Type 7

\*Norwalk Virus [Feline Calicivirus] [Norovirus]

\*Rotavirus

- 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 influenza A virus.
- This product has demonstrated effectiveness 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).
- Kills Pandemic 2009 H1N1 influenza A virus (formerly called swine flu).
- Kills Pandemic 2009 H1N1 influenza A virus.

**Lonza Formulation S-21F** [kills] [is effective against] [the following animal viruses]:

Avian Infectious Bronchitis Virus

Avian Influenza virus (H3N2)

Avian Influenza virus (H5N1)

Canine distemper virus

Feline calicivirus

Feline Pankleukopenia Virus

Murine Norovirus<sup>1</sup>

Newcastle's Disease virus

Pseudorabies virus

[Fungi:]

*Aspergillus niger*

*Aspergillus fumigatus*

Trichophyton mentagrophytes [the Athlete's Foot Fungus] [A cause of Ringworm][A cause of Ringworm of the foot]

<sup>1</sup>Tested in deionized water

**Dilution:**

Disinfection [1:64]	2 oz. per gallon of water
Disinfection [1:32]	4 oz. per gallon of water
Disinfection [1:16]	8 oz. per gallon of water
Sanitizer [1:128]	4 oz. per 4 gallons of water
.....	[2 oz. per 2 gallons of water]
.....	[1 oz. per gallon of water]
.....	[400 ppm active]
Sanitizer [1:171]	3 oz. per 4 gallons of water
.....	[1 oz. per 1 1/3 gallons of water]
.....	[3/4 oz. per gallon of water]
.....	[300 ppm active]
Sanitizer [1:256]	2 oz. per 4 gallons of water
.....	[1 oz. per 2 gallons of water]
.....	[1/2 oz. per gallon of water]
.....	[200 ppm active]
Sanitizer [1:352]	2 oz. per 5 1/2 gallons of water
.....	[1 oz. per 2 3/4 gallons of water]
.....	[3/8 oz. per gallon of water]
.....	[150 ppm active]

*{If the following Spanish statement is used, it must appear directly above DIRECTIONS FOR USE.}  
 Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. [If you do not understand the label, find someone to explain it to you in detail.]*

**DIRECTIONS FOR USE**

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

Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected.

**Preparation of Disinfectant Use-Solution:**

Add [mix] 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon of water [1:64].  
 For heavy duty use, add [mix] 8 oz. per gallon of water [1:16].  
 Use 8 oz. per gallon of water to kill Adenovirus Type 5 and Type 7.

**DISINFECTION / VIRUCIDAL\* / FUNGICIDAL / MOLD AND MILDEW CONTROL DIRECTIONS:**

Apply use-solution to hard, nonporous surfaces, thoroughly wetting the surfaces, with a cloth, mop, sponge, sprayer or by immersion. Treated surfaces must remain wet for 10 minutes. *{Note to reviewer: if using reduced contact time for Influenza Virus Type A and/or Human Coronavirus, the following sentence will be required:}*  
**[For [Influenza Virus Type A] [and] [Human Coronavirus], treated surfaces must remain wet for 1 minute.]**  
 Wipe dry with a cloth, sponge or mop or allow to air dry. For heavily soiled areas, a preliminary cleaning is required.

For sprayer applications, use a coarse spray device. Spray 6 - 8 inches from surface; rub with brush, sponge or cloth. Avoid breathing spray.

**For fungicidal activity, Lonza Formulation S-21F** is an effective fungicide against *Trichophyton mentagrophytes* [the athlete's foot fungus] in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities. Dilute at 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon of water and allow surface to remain wet for 10 minutes.

**Lonza Formulation S-21F** is a one-step fungicide at 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon in 200 ppm hard water and 5% serum.

**For mold and mildew** At 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon, **Lonza Formulation S-21F** will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, nonporous surfaces. Follow disinfection instructions. Repeat treatment every seven days, or more often if new growth appears.

Rinse all surfaces that come in contact with food such as countertops, appliances, tables and stovetops with potable water before reuse. Do not use on utensils, glassware and dishes as a disinfectant.

*{Note to reviewer: **ONE OF** the following two statements will be used:}*

**BACTERICIDAL STABILITY OF USE-DILUTION:** Tests confirm that **Lonza Formulation S-21F**, when diluted in [water up to 200 ppm of hardness] [soft water] [via use of automatic dispensing devices], remains effective against *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Salmonella enterica* for [up to 7 days] [[up to one week] [for up to one month] [up to 2 months] [up to 3 months] [to 4 months] [to 5 months] [up to 6 months] [up to 7 months] [up to 8 months] [up to 9 months] [up to 10 months] [up to 11 months] [up to 12 months] [up to one year] [up to two years] when stored in a sealed container such as a spray bottle. If product becomes visibly dirty or contaminated, the use-dilution must be discarded and fresh product prepared. Always use clean, properly labeled containers when diluting this product. Bactericidal stability of the use-dilution does not apply to open containers such as buckets or pails.

*{or}*

Prepare a fresh solution daily or more often if the solution becomes visibly dirty or diluted.

*{Note for reviewer: For labels that list medical premises and metal and / or stainless steel surfaces, one of the following statements must be used:}*

This product is not to be used as a terminal sterilant / high level disinfectant on any surface or instrument that [1] is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or [2] contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. [This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.]

*{or}*

This product is not for use on medical device surfaces.

**\*KILLS HIV AND HBV AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES / OBJECTS**

**PREVIOUSLY SOILED WITH BLOOD / BODY FLUIDS** in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces / objects with blood or body fluids, and in which the surfaces / objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 [HIV-1] [associated with AIDS] or Hepatitis B Virus [HBV] or Hepatitis C Virus [HCV].

**Special Instructions for Cleaning and Decontamination against HIV-1 or HBV or HCV on Surfaces / Objects Soiled With Blood / Body Fluids.**

**Personal Protection:** Clean up must always be done wearing protective gloves, gowns, masks and eye protection.

**Cleaning Procedure:** Blood and other body fluids containing HIV-1 or HBV or HCV must be thoroughly cleaned from surfaces and objects before application of **Lonza Formulation S-21F**.

**Contact Time:** Leave surface wet for 1 minute [60 seconds] for HIV-1 and 10 minutes for HBV and HCV with a 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon use-solution. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and type 7. Use a 10-minute contact time for disinfection against all other viruses, bacteria and fungi claimed.

**Disposal of Infectious Material:** Blood, body fluids, cleaning materials and clothing must be autoclaved and disposed of according to local regulations for infectious waste disposal.

**NON-ACID TOILET BOWL [AND] [URINAL] DISINFECTANT / CLEANER DIRECTIONS:**

Remove gross filth prior to disinfection.

**From Concentrate:**

Add 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] to the bowl. Thoroughly brush or swab over exposed surfaces and under the rim with a cloth, mop or sponge. Allow to stand for 10 minutes and flush.

**From Use Solution:**

Empty toilet bowl [or] [urinal] and apply a 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon use-solution to exposed surfaces and under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly, allow to stand for 10 minutes and flush.



**For Heavy Duty Use:**

Empty toilet bowl [or] [urinal] and apply an 8 oz. per gallon use-solution to exposed surfaces including under the rim with a cloth, mop, sponge or sprayer. Brush or swab thoroughly, allow to stand for 10 minutes and flush.

**SALON / BARBER INSTRUMENTS AND TOOLS DISINFECTION [BACTERICIDE] / VIRUCIDE / FUNGICIDE DIRECTIONS:**

Mix 4 oz. [120 mL] or [4 - 8 oz. [120 -240 ml] of **Lonza Formulation S-21F** per gallon of water [1 oz. [30 mL] or [1 – 2 oz. [30 – 60 ml]] of **Lonza Formulation S-21F** per quart of water] to disinfect hard, nonporous instruments and tools. Completely immerse combs, brushes, razors, scissors, blades, plastic rollers, manicure and other salon instruments and tools for 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and type 7. For heavily soiled instruments and tools, a preliminary cleaning is required. Rinse thoroughly and dry before use. Fresh solution must be prepared daily or more often if solution becomes diluted or soiled.

**Note:** Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried and kept in a clean, non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

**ULTRASONIC BATH DISINFECTANT [/ VIRUCIDAL\*] DIRECTIONS:**

Use **Lonza Formulation S-21F** to disinfect hard nonporous non-critical objects compatible with Ultrasonic cleaning units. Pour fresh use-solution of 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water directly into bath chamber. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and type 7. Pre-clean heavily soiled objects. Place objects into unit and operate for a minimum of 10 minutes, according to the manufacturer's directions. Remove objects and wash with sterile water [sterile water for injection] or allow to air dry. Prepare fresh solution for each use.

**DISINFECTION OF [WHIRLPOOL [BATH[S] [UNITS]]]:**

After using the [whirlpool [bath] [unit]], drain and refill with fresh water to [just cover the intake valve] [cover the highest jet] [2 inches above the highest jet]. Add 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21** for each gallon of fresh water added. Start the pump to circulate the solution. Wash down [the [deck] [seat of chair lift] [any related equipment]] any uncovered surfaces on the [bath] [unit] with a clean swab, brush or sponge with the solution. Treated surfaces must remain wet for 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and type 7. After the [bath] [unit] has been thoroughly disinfected, drain and rinse surfaces with fresh water. Wipe dry with a clean sponge or cloth or allow to air dry. Repeat for heavily soiled units.

**DISINFECTION OF PEDICURE FOOT SPAS:**

For heavily soiled units, drain the water and thoroughly clean all hard nonporous surfaces with soap of detergent. After using pedicure foot spa, drain and refill with fresh water to cover the intake valve or highest jet by 2 inches. Add 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of product per gallon of fresh water. Start pump to circulate the solution. Turn the pump off to allow the solution to sit for 10 minutes. Wash down the unit sides and seat with a clean swab, brush, or sponge such that these surfaces remain wet for 10 minute contact time, drain the solution from the pedicure foot spa and rinse with fresh water.

**FOR USE ON FINISHED FLOORS:** To limit gloss reduction use **Lonza Formulation S-21F** at 2 oz. or [2 - 4 oz.] per gallon. Apply with a damp mop or autoscrubber. Allow surface to remain wet for 10 minutes. Wipe or allow to air dry. Do not use on floor finish at 8 oz. per gallon.

[Animal Viruses:]

Avian Infectious Bronchitis Virus  
Avian Influenza virus (H3N2)  
Avian Influenza virus (H5N1)  
Canine Distemper Virus  
Feline Calicivirus  
Feline Panleukopenia Virus  
Murine Norovirus  
Newcastle's Disease Virus  
Pseudorabies Virus

**["SPECIAL INSTRUCTIONS FOR INACTIVATING AVIAN INFLUENZA" AND OTHER ANIMAL VIRUSES LISTED ON THIS LABEL]**

**{or}**

**[VETERINARY [PRACTICE]] [FACILITIES] / [ANIMAL CARE] [FACILITIES] / [ANIMAL LABORATORY] [FACILITIES] / [ZOOS] / [PET SHOPS] / [KENNELS] DISINFECTION [/ VIRUCIDAL\*] DIRECTIONS:**

For cleaning and disinfecting hard nonporous surfaces: equipment used for feeding or watering animals, utensils, instruments, cages, kennels, stables, catteries, pens, stalls and etc. Remove all animals and feeds from premises, animal transportation vehicles, crates, pens, stalls and etc. Remove all litter, droppings and manure from floors, walls and surfaces of facilities occupied or traversed by animals. Empty all feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate surfaces with a use-solution of 2 oz. *or* [2 - 4 oz.] *or* [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water [or equivalent dilution] for a period of 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and Type 7. Use 32 oz. per gallon of water to kill Feline Panleukopenia Virus. For Murine norovirus, use dilution must be made with deionized water. Wipe or allow to air dry. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals as well as forks, shovels, and scrapers used to remove litter and manure. Thoroughly scrub all treated surfaces, then rinse all surfaces that come in contact with food, including equipment used for feeding or watering, with potable water before reuse. Ventilate buildings, animal enclosures, [vehicles] and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried.

**FARM PREMISE USE:**

Remove all animals and feed from premises, vehicles and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Saturate all surfaces with a use-solution of 2 oz. *or* [2 - 4 oz.] *or* [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water [or equivalent dilution] for a period of 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and Type 7. Immerse all halters, ropes and other types of equipment used in handling and restraining animals as well as forks, shovels and scrapers used for removing litter and manure. Ventilate buildings, cars, trucks, boats and other closed spaces. Do not house livestock or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub all treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

## **POULTRY AND SWINE PREMISE DISINFECTION [/ VIRUCIDAL\*] DIRECTIONS:**

Remove all animals and feeds from premises, vehicles, and enclosures such as coops and crates. Remove all litter, droppings and manure from floors, walls and surfaces of barns, pens, stalls, chutes and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water. Saturate surfaces with the disinfecting solution for 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and Type 7. Immerse all halters, ropes and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure. Ventilate buildings, cars, trucks, coops and other closed spaces. Do not house animals or employ equipment until treatment has been absorbed, set or dried. Thoroughly scrub treated feed racks, mangers, troughs, automatic feeders, fountains and waterers with soap or detergent, and rinse with potable water before reuse.

**Hatcheries:** Use 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water to treat the following hard nonporous surfaces: hatchers, setters, trays, racks, carts, sexing tables, delivery trucks and other hard surfaces. Leave all treated surfaces wet for 10 minutes or more. Wipe dry with a clean cloth or sponge or allow to air dry.

**Vehicles:** Treat all vehicles including mats, crates, cabs and wheels with water and **Lonza Formulation S-21F**. Use 2 oz. of **Lonza Formulation S-21F** per gallon of water to treat all vehicles. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and type 7. Leave all treated surfaces wet for 10 minutes or more. Wipe dry with a clean cloth or sponge or allow to air dry.

**Dressing Plant Disinfectant Directions:** Disinfect equipment, utensils, walls and floors in poultry and animal dressing plants. Disinfect offal rooms, exterior walls and loading platforms of dressing plants. Cover or remove all food and packaging materials. Remove all heavy soils prior to application. Saturate all surfaces with a 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water solution. Scrub to loosen all soils. Surfaces must remain wet for 10 minutes, then thoroughly rinsed with potable water before operations are resumed.

## **MUSHROOM FARM PREMISE USE:**

**Site Preparation:** The first step in any on-going sanitation program must be the removal of gross contamination and debris. This is accomplished by using a shovel, broom, or vacuum, depending on the area to be disinfected.

**Cleaning and Disinfection:** For general cleaning and disinfection, use 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] of **Lonza Formulation S-21F** per gallon of water [or equivalent dilution]. Apply use solution with a cloth, mop, sponge, sprayer or by immersion to thoroughly wet the surfaces. Treated surfaces must be allowed to remain wet for 10 minutes. Wipe or allow to air dry. For heavily soiled areas, preclean first. Prepare a fresh solution for each use or more often if solution becomes visibly diluted, clouded or soiled.

**For Heavy Duty Cleaning:** When greater cleaning is desired, use 8 oz. of **Lonza Formulation S-21F** per gallon of water. Heavily soiled areas may require repeated cleaning before treatment.

**DO NOT APPLY USE-SOLUTION TO THE MUSHROOM CROP, COMPOST OR CASING.** Rinse treated surfaces with potable water before they contact the crop, compost or casing.

## **CITRUS CANCKER DISEASE CONTROL:**

For prevention of Citrus Canker Disease through treatment of precleaned equipment. Effective against *Xanthomonas axonopodis* pv. *citri* [Citrus Canker Disease] at 2000 ppm active quat. Treatments must be applied to trucks, attached trailers, field harvesting equipment including cargo area, wheels, tires, undercarriage, hood, roof, fenders, and any other hard nonporous part of the equipment that can be taken into infested areas. Thoroughly clean all surfaces with soap or detergent and rinse with water. Then saturate surfaces with a 1:27.5 use-dilution [4 3/4 oz. of **Lonza Formulation S-21F** per gallon of water or 19 oz. of **Lonza Formulation S-21F** per 4 gallons of water] [or equivalent dilution] [2000 ppm active quat] for a period of 10 minutes. Allow to air dry. All surfaces that come in contact with food or crop must be rinsed with potable water before reuse. To prevent the spread of Citrus Canker Disease by this artificial means of transportation, treatments are made by trigger spraying, dipping or brushing. Clothing must be either rinsed or laundered before reuse. Footwear must be rinsed before reuse.

**TO SANITIZE NON-FOOD CONTACT SURFACES:**

Add [mix] 2 oz. of **Lonza Formulation S-21F** per 4 gallons of water [1/2 oz. of **Lonza Formulation S-21F** per gallon of water] to sanitize hard nonporous surfaces. Treated surfaces must remain wet for 60 seconds. Wipe dry with a sponge, mop or cloth or allow to air dry.

*{Note to reviewer: If this product is to be used as a sanitizer solely on non-food contact surfaces, the following statement must be included:}*

Do not use in food preparation, food handling and food storage areas. This product is not to be used on glassware, dishware, cookware or utensils.

**TO SANITIZE BARBER / SALON INSTRUMENTS AND TOOLS: {Not For Use in California}**

Immerse precleaned barber / salon instruments and tools (such as combs, brushes, razors, scissors, blades, plastic rollers and manicure instruments) in a use-solution of 2 oz. of **Lonza Formulation S-21F** per 4 gallons of water [or equivalent dilution] for at least 60 seconds [one minute]. Rinse thoroughly and dry before use.

Prepare a fresh solution daily or more often if solution becomes visibly diluted, cloudy or soiled.

**NOTE:** Plastics may remain immersed until ready to use. Stainless steel shears and instruments must be removed after 10 minutes, rinsed, dried, and kept in a clean non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

**SANITIZATION OF WHIRLPOOL [BATH[S] [UNITS]:**

After using the whirlpool [bath] [unit], drain and refill with fresh water to [just cover the intake valve] [cover the highest jet] [2 inches above the highest jet]. Add 2 ounces of **Lonza Formulation S-21F** for each 2 - 4 gallons of fresh water added. Start the pump to circulate the solution. Wash down the [[deck] [seat of chair lift] [any related equipment] and] any uncovered surfaces on the [bath] [unit] with a clean swab, brush or sponge with the solution. Treated surfaces must remain wet for at least 60 seconds. Drain bath and wipe dry with a clean sponge or cloth or allow to air dry.

*{Note to reviewer. On a final printed label, only one of the following dilution rates will be used in the sanitization sections below.}*

**For Food Contact Surfaces, Food Processing Equipment and Utensils in, Dairies, Public Eating Establishments and Food Processing Plants [40 CFR 180.940 (a)]**

1 oz. **Lonza Formulation S-21F** per 2  $\frac{3}{4}$  gallons of water [150 active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2 gallons of water [200 active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 1  $\frac{1}{3}$  gallons of water [300 active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 1 gallon of water [400 active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2  $\frac{3}{4}$  – 2 gallons of water [150 – 200 ppm active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2  $\frac{3}{4}$  – 1  $\frac{1}{3}$  gallons of water [150 – 300 ppm active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2  $\frac{3}{4}$  – 1 gallons of water [150 – 400 ppm active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2 – 1  $\frac{1}{3}$  gallons of water [200 – 300 ppm active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 2 – 1 gallons of water [200 – 400 ppm active quat] [or equivalent dilution]

*{or}*

1 oz. **Lonza Formulation S-21F** per 1  $\frac{1}{3}$  – 1 gallons of water [300 – 400 ppm active quat] [or equivalent dilution]

## **TO SANITIZE FOOD CONTACT SURFACES:**

{or}

## **TO SANITIZE FOOD PROCESSING EQUIPMENT AND OTHER HARD SURFACES IN FOOD PROCESSING LOCATIONS, DAIRIES, RESTAURANTS AND BARS:**

Use **Lonza Formulation S-21F** to sanitize hard nonporous surfaces of food processing equipment, dairy equipment, food utensils, dishes, silverware, glasses, sink tops, countertops, refrigerated storage and display equipment and other hard surfaces.

Prior to application, remove gross food particles and soil by a pre-flush, or pre-scrape and, when necessary, pre-soak. Then thoroughly wash or flush objects with a good detergent or compatible cleaner followed by a potable water rinse before application of the sanitizing solution.

Apply a use-solution of (*insert appropriate dilution here*) [or equivalent dilution] to pre-cleaned hard surfaces thoroughly wetting surfaces with a cloth, mop, sponge, coarse sprayer or by immersion. Surfaces must remain wet for at least 60 seconds [one minute] followed by adequate draining and air drying. Do not rinse. Prepare a fresh solution for each use. For mechanical application, use- solution may not be reused for sanitizing applications but may be reused for other purposes such as cleaning.

Apply to sink tops, countertops, refrigerated storage and display equipment and other stationary hard nonporous surfaces by cloth, sponge or brush or coarse spray.

Sanitize dishes, silverware, glasses, cooking utensils and other similar size food processing equipment by immersion.

**Lonza Formulation S-21F** can be used in accordance with the U.S. Public Health Service food service sanitization recommendations.

## **U.S. PUBLIC HEALTH SERVICE FOOD SERVICE SANITIZATION RECOMMENDATIONS**

**CLEANING AND SANITIZING:** Equipment and utensils shall be thoroughly pre-flushed or pre-scraped and when necessary, pre-soaked to remove gross food particles and soil.

1. Thoroughly wash equipment and utensils in hot detergent solution.
2. Rinse utensils and equipment thoroughly with clean water.
3. Sanitize equipment and utensils by immersion in a use solution of (*insert appropriate dilution here*) [or equivalent dilution] for at least 60 seconds at a temperature of 75°F.
4. For equipment and utensils too large to sanitize by immersion, apply a use-solution of (*insert appropriate dilution here*) by rinsing, spraying or swabbing until thoroughly wet.
5. Allow sanitized surface to drain and air dry. Do not rinse.

## **WISCONSIN STATE BOARD OF HEALTH DIRECTIONS FOR EATING ESTABLISHMENTS**

1. Scrape and pre-wash utensils and glasses whenever possible.
2. Wash with a good detergent or compatible cleaner.
3. Rinse with potable water.
4. Sanitize in a use-solution of (*insert dilution from dilution box*). Immerse all utensils for at least two minutes or for contact time specified by governing sanitary code.
5. Place sanitized utensils on a rack or drain board to air-dry.
6. Prepare a fresh sanitizing solution at least daily or when visibly soiled or diluted.

**NOTE:** A clean potable water rinse following sanitization is not permitted under Section HFS 196, Appendix 7-204.11 of the Wisconsin Administrative Code (reference CFR 180.940 (a)).

## **TO SANITIZE [BEVERAGE] [SOFT SERVE ICE CREAM] [OTHER FOOD] DISPENSING EQUIPMENT:**

1. Wash equipment with a compatible detergent and rinse with potable water prior to sanitizing.
2. Fill equipment with a solution of (*insert appropriate dilution here*).
3. Allow solution to remain in equipment for at least 60 seconds.
4. Drain thoroughly before reuse and allow to air dry.

**TO SANITIZE ICE MACHINES:**

1. Turn off refrigeration.
2. Wash equipment with a compatible detergent and rinse with potable water prior to sanitizing.
3. Apply a solution of (*insert appropriate dilution here*) by mechanical spray, directly pouring, or by recirculating through the system.
4. Allow surfaces to remain wet or solution to remain in equipment for at least 60 seconds.
5. Drain thoroughly before reuse and allow to air dry.

**TO SANITIZE SANITARY FILLING EQUIPMENT:**

Wash surfaces with a compatible detergent and rinse with potable water prior to sanitizing. Prepare a use-solution of (*insert appropriate dilution here*) for final washer and rinser applications. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly before reuse and allow to air dry.

**TO SANITIZE BEER FERMENTATION AND STORAGE TANKS:**

Wash surfaces with a compatible detergent and rinse with potable water prior to sanitizing. Prepare a use-solution of (*insert appropriate dilution here*) [or equivalent dilution] for mechanical or automated systems. Allow surfaces to remain wet for at least 60 seconds. Drain thoroughly and allow to air dry before reuse.

**TO SANITIZE EGG SHELLS INTENDED FOR FOOD:**

To sanitize previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a use-solution of (*insert appropriate dilution here*) [or equivalent dilution]. The solution must be equal to or warmer than the eggs, but not to exceed 130°F. Wet eggs thoroughly and allow to drain. Eggs sanitized with this product shall be subjected to a thorough potable water rinse only if they are to be broken immediately for use in the manufacture of egg products. Eggs must be reasonably dry before casing or breaking. The solution must not be re-used for sanitizing eggs.

**Note:** Only clean, whole eggs can be used for sanitizing. Dirty, cracked or punctured eggs cannot be sanitized.

*{For food processing or other facilities that have installed entryway sanitizing systems}*

**SHOE BATH SANITIZER DIRECTIONS:** To prevent cross contamination into animal areas, shoe baths containing one inch of freshly made solution must be placed at all entrances to buildings and hatcheries. Scrape waterproof work boots and place in a 2 oz. per 4 gallons of water solution for 60 seconds prior to entering area. Change the solution in the bath daily or more often if solution appears diluted or soiled.

**SHOE FOAM SANITIZER DIRECTIONS:**

To prevent cross contamination into animal areas and the packaging and storage areas of food plants. Apply a foam layer approximately 1/2 to 2 inches thick made from a solution of 2 oz. of **Lonza Formulation S-21F** per 2 – 5 ½ gallons of water [150 – 400 ppm active quat] [or equivalent dilution], at all entrances to buildings, hatcheries, production and packaging rooms by using a foam generating machine or aerator to apply the foam layer. Follow the foaming directions as specified by the manufacturer of the foam generator or aerator. Scrape waterproof work boots [shoes]. Stand or walk through foamed area for 60 seconds prior to entering area. Wash and replace Foam Area at least daily or more often if the Foam Area appears diluted or soiled.

**TO SANITIZE SOFT SURFACES:**

Add [mix] 2 oz. or [2 - 4 oz.] or [2 – 8 oz.] per gallon of water [1:64]. Apply use solution with a sprayer. Hold bottle 6" – 8" from surface and spray until fabric is wet. Fabric must remain wet for 5 minutes. Allow fabric to Air dry. (Reapply as necessary.) (Gross) (Highly)(Heavily) soiled areas must be cleaned prior to sanitizing.

**TO CLEAN AND DEODORIZE:** Mix 2 oz. per gallon of water to clean and deodorize surfaces. Apply using a cloth, mop, sponge or sprayer. Wipe or allow to air dry.

**Cleaning Solution:** Dilute 2 - 4 oz. per gallon of water for cleaning of kitchen counters, tables, walls, bathrooms, toilet seats, mopping floors and large routine applications.

**Deodorizing directions:**

**Nursing Homes, Hospitals, Hotels, Schools, Restaurants:** 2 - 4 oz. in chemical toilets, waste receptacles, bed pans, drainage bottles, diaper pails, hampers, disposals, commodes and air conditioner pans will eliminate odors.

**Mopping Solutions, Automatic Scrubbers:** 2 - 4 oz. per gallon of cleaning solution eliminates undesirable odors.

**Laundry:** 2 oz. per load added during the final rinse cycle deodorizes all offensive odors.

**Air Freshener/Automotive Uses:** 8 ounces per gallon of water or desired concentration will effectively neutralize damp musty odors caused by mildew in storage areas, basements, closets and bathrooms. Effective on smoking and cooking odors [garlic, fish, onions, etc.]. Automobile odors from tobacco, musty carpet smell and beverage smells will be eliminated.

**RV Holding Tanks:** Toilet waste: cover bottom of holding tank with water and add 2 - 4 oz. If odors return before time to empty, simply add 2 - 4 oz. to the tank. Kitchen waste: 2 - 4 oz. of **Lonza Formulation S-21F** to gray water tank as needed to control malodors created by dirty dish water.

**Pet Odors:** Use 8 - 12 oz. per gallon of water or desired concentration, for urine, feces, and vomit, in carpet and upholstery. Clean prior to application then spray onto affected areas. Test hidden area for colorfastness. Allow 10 minutes contact time. Then blot with clean cloth. Allow to dry. Also effective on pet bedding and litter boxes.



**WATER DAMAGE RESTORATION AGAINST ODOR-CAUSING BACTERIA AND FUNGI FOR HOME, INSTITUTIONAL, INDUSTRIAL AND HOSPITAL USE: {Not for use in California}**

This product is particularly suitable for use in water damage restoration situations against odor causing bacteria on the following porous and semi-porous materials: carpets, carpet cushions, subfloors, drywall, concrete, brick, trim and frame lumber, tackless strip and paneling. Using appropriate dilution, saturate the affected materials with enough product to remain wet for at least 10 minutes.

**Sewer Backup and River Flooding:** During mitigation procedures, dilute 2 – 4 oz. of the concentrate per gallon of water, allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil along with non-salvageable materials. Saturate all affected areas with a coarse spray device before and after cleaning and extraction.

**Carpets, Carpet Cushions and Other Porous Materials such as Subfloors, Drywall, Concrete, Brick, Trim and Frame Lumber, Tackless Strip and Paneling:** For water damage from a clean source, extract excess water. Test hidden area for colorfastness. Dilute 2 – 4 oz. of the concentrate per gallon of water, allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil. Saturate all affected areas with a coarse spray device. Roll, brush or agitate into the materials and allow materials to remain wet for 10 minutes. Follow with a thorough extraction. Dry rapidly and thoroughly.

**Special instructions For Cleaning Carpet against Odor Causing Bacteria:** Use this product in industrial and institutional areas such as homes, motels, hotels, nursing homes, schools, and hospitals. Use on wet-cleanable synthetic fibers. Do not use on wool. Vacuum carpet thoroughly prior to cleaning. Test fabric for colorfastness.

**For portable extraction units:** Mix 2 oz. of concentrate per gallon of water. **For truck mounted extraction machines:** Mix 2 – 4 oz. of concentrate per gallon of water and meter at 4 gallons per hour. **For rotary floor machines:** Mix 2 oz. of concentrate per gallon of water and apply at the rate of 300 – 500 sq. ft. per gallon. Do not mix this product with other cleaning products. Follow the cleaning procedures specified by the manufacturer of the cleaning equipment. After using the product, set the carpet pile and protect the carpet from furniture legs and bases while drying. Do not over-wet. If applied to stain resistant nylon carpet, apply a fabric protector according to the manufacturer's directions.

*{Note to reviewer: For Nonrefillable Containers, Label has Household and Residential Uses}*

## **STORAGE AND DISPOSAL**

Store in original container in areas inaccessible to children. Nonrefillable container. Do not reuse or refill this container. Wrap [container] and put in trash or offer for recycling if available.

*{or}*

Store in original container in areas inaccessible to children. Nonrefillable container. Do not reuse or refill this container. Wrap [container] and put in trash or offer for reconditioning if appropriate.

*{Note to reviewer: For Nonrefillable Containers for commercial, industrial, and institutional uses – all sizes – No Reuse Rinsate Statement for Public Health Use products. Chapter 13, Table 6 of the Label Review Manual states that for “All products in containers that could be burned,” the registrant has the option to “Remain silent on burning;” therefore, no incineration language is provided for plastic containers.}*

## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Open dumping is prohibited. Store in original container in areas inaccessible to children.

**Pesticide Disposal:** Pesticide wastes are acutely 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 Disposal:**

**[Plastic and Metal Containers:]** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water and reclose the container. Agitate vigorously, and dispose of rinsate consistent with pesticide disposal instructions. Repeat two more times. Then offer for recycling if available or puncture and dispose in sanitary landfill or by other procedures approved by state and local authorities. Follow pesticide disposal instructions for rinsate. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations.

**[Metal containers only:]** DO NOT cut or weld metal containers.

**[Bag in Box Containers:]** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Completely empty bag into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

*{Note to reviewer: For Nonrefillable Sealed Containers: Packaging options can be in sealed containers or bottles designed for use dilution systems to reduce worker exposure to the concentrate. None of these can be triple rinsed because they are closed sealed containers. The following text will be used on these sealed container types:}*

## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Open dumping is prohibited. Store in original container in areas inaccessible to children.

**Pesticide Disposal:** Pesticide wastes are acutely 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 Disposal:** Nonrefillable container. Do not reuse or refill this container. Wrap empty container and put in trash.

*{Note to reviewer: For Refillable Containers – all sizes – No Reuse Rinsate Statement for Public Health Use products. Chapter 13, Table 6 of the Label Review Manual states that for “All products in containers that could be burned,” the registrant has the option to “Remain silent on burning;” therefore, no incineration language is provided for plastic containers.}*

## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

### **Pesticide Storage:**

Open dumping is prohibited. Store in original container in areas inaccessible to children.

### **Pesticide Disposal:**

Pesticide wastes are acutely 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 Disposal:**

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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.

*[Plastic or Metal Containers:]* To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously, and dispose of rinsate consistent with pesticide disposal instructions. Repeat this rinsing procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in sanitary landfill. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state, and federal regulations.

*[Metal containers only:]* DO NOT cut or weld metal containers.

**PACKET LABEL TO BE USED WITH MASTER CONTAINER LABEL**

FOR DISINFECTION

*Note to reviewer: the following will be used for 1/2 oz. of concentrate:  
MIX EACH PACKET WITH [1 QUART] OF WATER*

*Note to reviewer: the following will be used for 4 oz. of concentrate:  
MIX EACH PACKET WITH [2 GALLONS] OF WATER*

*Note to reviewer: the following will be used for 8 oz. of concentrate:  
MIX EACH PACKET WITH [4 GALLONS] OF WATER*

*Note to reviewer: the following will be used for 16 oz. of concentrate:  
MIX EACH PACKET WITH [8 GALLONS] OF WATER*

*{If other packet sizes are desired, new packet label will be identical and the only things that will vary are the net contents, amount of water to dilute with and ppm active quat. Those 3 items will have to match or be equivalent to the dilution chart that is shown on page 11.}*

**LONZA FORMULATION S-21F**

Active Ingredients:

Octyl decyl dimethyl ammonium chloride.....	1.65%
Diocetyl dimethyl ammonium chloride.....	0.66%
Didecyl dimethyl ammonium chloride.....	0.99%
Alkyl (C <sub>14</sub> , 50%; C <sub>12</sub> , 40%; C <sub>16</sub> , 10%) dimethyl benzyl ammonium chloride .....	2.20%
Other Ingredients: .....	94.50%
Total:.....	100.00%

**KEEP OUT OF REACH OF CHILDREN**

**DANGER [PELIGRO]**

See outer container for Precautionary Statements and Use directions

Disposal: Nonrefillable container. Do not reuse packet. Wrap and put in trash.

[Not for retail sale]

EPA Reg. No. 6836-140  
EPA Est. No. (*insert EPA Establishment No. here*)  
Net Contents (*insert container size here*)

Lonza Inc.  
90 Boroline Road  
Allendale, NJ 07401

**SECONDARY CONTAINER LABEL**

*{Note to reviewer: This secondary container label will be used only when the product is diluted at the 8 oz. or less per gallon of water}*

**LONZA FORMULATION S-21F**

**Active Ingredients:**

Octyl decyl dimethyl ammonium chloride.....	1.65%
Diocetyl dimethyl ammonium chloride.....	0.66%
Didecyl dimethyl ammonium chloride.....	0.99%
Alkyl (C <sub>14</sub> , 50%; C <sub>12</sub> , 40%; C <sub>16</sub> , 10%) dimethyl benzyl ammonium chloride .....	2.20%
Other Ingredients: .....	<u>94.50%</u>
Total:.....	100.00%

The product in this container must be diluted at the use rate of 2 oz. or less per gallon of water as directed on the pesticide product label.

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION [PRECAUCIÓN]**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**Caution.** Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Follow the directions for use on the pesticide label when applying this product

EPA Reg. No. 6836-140

{Note to reviewer: The following are optional text and graphics.}

{Note to reviewer. The following may be used only if the supplemental registrant has obtained an NSF listing. Allowed on back or side panel only.}



[NSF Listed]  
(Insert 6-Digit NSF Listing Number here)

{Note to reviewer. The following may be used only if the supplemental registrant has obtained a Kosher Certification.}



{Any Kosher Symbol such as:}

[Kosher]

{Note to reviewer. The following may be used only if the supplemental registrant has obtained an IFANCA Halal (Islamic Dietary) certification.}



[IFANCA Halal certified] or [Halal certified]



{Note to reviewer: The following may be used for products used for animal/veterinary practice disinfection}

