

NEUTRON



SURFACE DEFENSE PLUS

Concentrated • Disinfectant • Cleaner • Sanitizer • Fungicidal • Mildewstat • Virucidal* • Deodorizer • Bactericidal

For Restaurants, Hospitals, Institutional and Industrial Use

Active Ingredients:

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

**KEEP OUT OF REACH OF CHILDREN
DANGER**

See right panel for Precautionary Statements

EPA Reg. No. 6836-140-42666

EPA Est. No. 70799-OH-2

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. Call a poison control center or doctor for treatment advice.
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.

Have the product container or label with you when calling poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. You may also contact the poison control center at 1-800-222-1222 for emergency medical treatment information.

Net Contents: 1 U.S. Gallon

DISINFECTION / VIRUCIDAL* / FUNGICIDAL / MOLD AND MILDEW CONTROL DIRECTIONS: Apply use-solution to hard, non-porous surfaces, thoroughly wetting the surfaces, with a cloth, mop, sponge, sprayer or by immersion. Treated surfaces must remain visibly wet for 10 minutes. For **Influenza Virus Type A, Human Coronavirus and SARS-CoV-2**, treated surfaces must remain visibly wet for 1 minute. Wipe dry with a cloth, sponge or mop or allow to air dry. For visibly soiled areas, a preliminary cleaning is required.

For sprayer applications, use a coarse spray device. Spray 6 - 8 inches from surface. Avoid breathing spray.

For fungicidal activity, Surface Defense Plus is an effective fungicide against Trichophyton interdigitale (the athlete's foot fungus) in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities. Dilute at 2 oz. per gallon of water and allow surface to remain visibly wet for 10 minutes.

For mold and mildew At 2 oz. per gallon, **Surface Defense Plus** will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous 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.

BACTERICIDAL STABILITY OF USE-DILUTION: Tests confirm that **Surface Defense Plus**, when diluted in water up to 200 ppm of hardness, remains effective against Pseudomonas aeruginosa, Staphylococcus aureus and Salmonella enterica for up to 7 days 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.

This product is not to be used as a terminal sterilant / high level disinfectant on any surface or instrument that is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body.

***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 or Hepatitis B Virus or Hepatitis C Virus.

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 **Surface Defense Plus**.

Contact Time: Leave surface visibly wet for 1 minute for HIV-1 and 10 minutes for HBV and HCV with a 2 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.

For use as a One-Step Cleaner and Disinfectant by Electrostatic Spraying:

Electrostatic spray application is for efficacy claims with a 10 minute contact and 1:64 dilution. The application method is not to be used to treat surfaces for sanitization or fungicidal claims.

- Ensure bystanders and pets are not present in the room during application.
- Clean visibly dirty surfaces prior to spraying.
- Wear a N95 filtering facepiece respirator or half face respirator with a N95 filter and eye protection (goggles, face shield, or safety glasses) when spraying.
- Select a spray nozzle that produces a spray droplet particles with a volume median diameter ≥ 80 µm
- Place the electrostatic spray function in the ON position for electrostatic spray models that have the functionality to toggle ON/OFF.
- Hold the sprayer nozzle 12 inches away from the target surface. Starting at the highest point and working down to the lowest point, spray target surfaces using a smooth methodical "S" pattern. To avoid leaving gaps in sprayed surfaces, overlap previously treated surfaces when moving onto subsequent sections.
- The target surface must remain visibly wet for 10 minutes. Re-apply product as necessary to keep surface visibly wet for the duration of the contact time. Wipe surfaces dry or allow to air dry.
- Allow the treated room to remain unoccupied for 15 minutes before reentering.



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MANUFACTURED IN THE USA

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Surface Defense Plus: • Cleans², disinfects and deodorizes in one labor saving step • Effective against SARS-Related Coronavirus 2² (SARS-CoV-2) in 1 minute • Deodorizes by killing microorganisms that cause offensive odors. • Is effective at controlling mold and mildew odor on mattresses, pillows and shower curtains. **Not for use in California** • Consistent with 40 CFR §180.940 (a), when used per the food-contact sanitization instructions, for use on Food-contact surfaces in public eating places, dairy-processing equipment, food processing equipment, utensils and other food-contact articles. • For use as a spot treatment on soft surfaces such as carpet and upholstery • Is a proven soft surface spot sanitizer treatment against: Staphylococcus aureus and Enterobacter aerogenes • Sanitizes fabric surfaces as a spot treatment in 5 minutes

Use **Surface Defense Plus** as a disinfectant on hard, non-porous surfaces.

Surface Defense Plus is effective at eliminating odors on porous surfaces such as upholstery, drapes, bedding, shower curtains, mattresses and non-porous surfaces such as walls and floors. Excellent for fire restoration.

Use **Surface Defense Plus** in: Bathrooms, Kitchens, Health Care Facilities, Medical Offices, Medical Related facilities, Nursing homes, Day care centers, Food Preparation Areas, Food processing plants, Bars, Cafeterias, Restaurants, Business and office buildings, Factories, Exercise facilities, Hotels, Prisons, Camp grounds, Play ground equipment, Schools, Universities, Farms, Kennels, Zoos, Airports, Cars, Mobile homes and Emergency vehicles.

Use **Surface Defense Plus** on washable hard non-porous surfaces of: Bathroom fixtures, cabinets, cages, chairs, counters, desks, doorknobs, floors, garbage cans, showers, telephones, toilet bowls exteriors, urinals, kitchen equipment, food dispensing equipment, bed frames, crutches, walkers and wheel chairs.

Surface Defense Plus 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, Shigella sonnei, Salmonella enterica, Staphylococcus aureus, Vibrio cholerae, Yersinia enterocolitica

As a disinfectant, **Surface Defense Plus** is effective against: **Bacteria:** Pseudomonas aeruginosa, Staphylococcus aureus, Salmonella enterica, Acinetobacter baumannii, Burkholderia cepacia, Campylobacter jejuni, Corynebacterium ammoniagenes, Enterobacter aerogenes, Enterobacter cloacae NDM-1 positive, Enterococcus faecalis, Enterococcus faecalis - Vancomycin resistant, Escherichia coli, Escherichia coli, New Delhi Metallo-Beta Lactamase (NDM-1), ESBL Escherichia coli, Klebsiella pneumoniae, Klebsiella pneumoniae – NDM-1 positive, Legionella pneumophila, Listeria monocytogenes, Salmonella schottmuelleri, Salmonella typhi, Serratia marcescens, Shigella dysenteriae, Staphylococcus aureus - Community Associated Methicillin-Resistant USA300, Staphylococcus aureus - Community Associated Methicillin-Resistant USA400, Staphylococcus aureus - Methicillin-Resistant, Staphylococcus aureus - Multi-Drug Resistant, Staphylococcus aureus - Vancomycin Intermediate Resistant, Streptococcus pyogenes, Vibrio cholerae.

Viruses: *Hepatitis B Virus, *Hepatitis C Virus, *Herpes Simplex Virus Type 1, *Herpes Simplex Virus Type 2, *HIV-1, *Human Coronavirus, *Influenza Virus Type A / H1N1, *Influenza Virus Type A / H3N2, *2013 Influenza A Virus (H7N9), *Respiratory Syncytial Virus, *SARS Associated Coronavirus (SARS), *SARS-Related Coronavirus 2 (SARS-CoV-2), *Vaccinia Virus, *Adenovirus Type 5 (8 oz. per gallon of water), *Adenovirus Type 7 (8 oz. per gallon of water), *Norwalk Virus (Feline Calicivirus), *Rotavirus.

Surface Defense Plus 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 Panleukopenia Virus (32 oz. per gallon of water), Murine Norovirus³, Newcastle's Disease virus, Pseudorabies virus

Fungi: Aspergillus niger⁴, Aspergillus fumigatus, Trichophyton interdigitale (the Athlete's Foot Fungus)

Dilution:

Disinfection/Soft Surface Sanitization 1:64.....	2 oz. per gallon of water
Sanitizer 1:171	3 oz. per 4 gallons of water 300 ppm active
Sanitizer 1:128	1 oz. per gallon of water 400 ppm active

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 2 oz. per gallon of water.
 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.

NON-ACID TOILET BOWL AND URINAL DISINFECTANT / CLEANER DIRECTIONS: Remove visible filth prior to disinfection. **From Concentrate:** Add 2 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. 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.

VETERINARY PRACTICE FACILITIES / ANIMAL CARE FACILITIES / ANIMAL LABORATORY FACILITIES / ZOOS / PET SHOPS / KENNELS DISINFECTION / VIRUCIDAL* DIRECTIONS: For cleaning and disinfecting hard, non-porous 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. of **Surface Defense Plus** per gallon of water 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.

TO SANITIZE NON-FOOD CONTACT SURFACES:

Add 2 oz. of **Surface Defense Plus** per 4 gallons of water to sanitize hard, non-porous surfaces. Treated surfaces must remain visibly wet for 60 seconds. Wipe dry with a sponge, mop or cloth or allow to air dry.

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 FOOD PROCESSING EQUIPMENT AND OTHER HARD SURFACES IN FOOD PROCESSING LOCATIONS, DAIRIES, RESTAURANTS AND BARS:

Use **Surface Defense Plus** to sanitize hard, non-porous surfaces of food processing equipment, dairy equipment, food utensils, dishes, silverware, glasses, sink tops, countertops, refrigerated storage¹⁰ and display equipment and other hard surfaces.

Prior to application, remove visible 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 1 oz. per 2 – 1-1/3 gallons of water to pre-cleaned hard surfaces thoroughly wetting surfaces with a cloth, mop, sponge, coarse sprayer or by immersion. Surfaces must remain visibly 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 storage¹⁰ and display equipment and other stationary hard, non-porous surfaces by cloth, sponge or brush or coarse spray.

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

Surface Defense Plus 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 visible 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 1 oz. per 2 – 1-1/3 gallons of water 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 1 oz. per 2 – 1-1/3 gallons of water 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 1 oz. per 2 – 1-1/3 gallons of water dilution. 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 SOFT SURFACES: For spot treatment only. Add 2 oz. per gallon of water. Apply use solution with a sprayer. Hold bottle 6” – 8” from surface and spray until fabric is wet. Fabric must remain visibly wet for 5 minutes. Allow fabric to air dry. Visibly soiled areas must be cleaned prior to sanitizing.

2 On hard, non-porous, non-food surfaces

3 Tested in deionized water

5 When used according to the disinfection directions.

10 Allow the surface to adjust to room temperature before disinfection.

TO CLEAN AND DEODORIZE: Mix 2 oz. per gallon of water to clean and deodorize hard, non-porous, non-food surfaces. Apply using a cloth, mop, sponge or sprayer. Wipe or allow to air dry. Rinse all surfaces that come in contact with food such as countertops, exteriors of appliances, tables and stovetops with potable water before reuse. Do not use on utensils, glassware and dishes.

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. 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 **Surface Defense Plus** 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 INSTITUTIONAL AND INDUSTRIAL 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 visibly wet for at least 10 minutes.

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 visible 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 visibly 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 motels, hotels and schools. 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.

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. 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.

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.