First Defense™ Disinfectant Concentrate (40-90)
Product Data Sheet

PROPERTIES

TYPE:
Quaternary Ammonium Chloride

VOLATILE:
Water

AVERAGE WEIGHT/U.S. GALLON (ASTM D1475):
8.4 lbs. (1.01 kg/l)

APPLICATION CONSISTENCY:
Follow directions for use on the product label.
Dilute per instructions then wipe, cloth, mop, sponge or coarse spray

ODOR:
Fresh Mild Scent

AVERAGE COVERAGE RANGE:
Dependent upon the method of application and the surface. Per instructions, apply in sufficient quantity to ensure that the surface remains wet continuously for at least ten (10) minutes.

ALKALINITY (ASTM E70):
12 – 13.5 pH

SAFETY:
Wet flammability (ASTM D3278)
No flash to boiling, 212°F (100°C)

DILUTION
See label directions for use.
Typical: 2 oz. of solution per one gallon of water

Foster® 40-90 First Defense™ Disinfectant Concentrate is an EPA Registered concentrate formulation that kills odor-causing bacteria and inhibits the growth of mold and mildew when used as directed. It yields up to 64 gallons of use solution per gallon of concentrate. This product is particularly suitable for use in water damage restoration situations against odor causing bacteria on porous and semi-porous materials including carpets, drywall, trim and frame lumber. It helps clean and remove residue and odors resulting from flood and water damage and smoke from fires.

Foster® 40-90 First Defense™ Disinfectant Concentrate is a phosphate-free, one-step disinfectant, cleaner, sanitizer, fungicide, mildewstat, virucide and deodorizer. It may be used to disinfect washable hard, non-porous surfaces such as tables, countertops, cabinets, chairs, floors, walls, desks, doorknobs, showers, toilets, sinks and other non-porous surfaces such as metal and finished woodwork. Additionally, it can be used on coils and drain pans of air conditioning and refrigeration equipment, and heat pumps found in homes, restaurants, hospitals, institutional and industrial facilities.

Foster® 40-90 First Defense™ Disinfectant Concentrate may be used to clean, sanitize and disinfect nonporous personal protective safety equipment: protective headgear, 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 before reuse with clean warm water (about 120°F), and allow to air dry.

Foster® 40-90 First Defense™ Disinfectant Concentrate is effective against a wide variety of environmental organisms including gram positive and gram negative bacteria, fungi and viruses, including Influenza viruses. See product label for more information.

LIMITATIONS:
Do not store or apply to surfaces below 32°F (0°C) or above 100°F (38°C).

Consult the Safety Data Sheet and product label for additional information.

Do not use inside HVAC ducts, vents or on duct liner insulations.

KEEP OUT OF REACH OF CHILDREN.

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**Foster® 40-90 First Defense™ Disinfectant Concentrate**

**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 dairyeries, food products and packaging materials must be removed from the room or carefully protected. Refer to product label for more information.

**Preparation of Disinfectant Use-Solution:** Mix 2 oz. of this product per gallon of water [1:64]. For heavy duty use, 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. 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. For fungicidal activity, Foster® First Defense® Disinfectant Concentrate, 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 exercised facilities. Dilute 2 oz. per gallon of water and allow surface to remain wet for 10 minutes. For mold and mildew: At 2 oz. per gallon, Foster® First Defense® Disinfectant Concentrate 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.

**This product is not for use on medical device surfaces.**

Prepare a fresh solution daily or more often if the use solution becomes visibly dilute or soiled.

**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 should always be done wearing protective gloves, gowns, masks and eye protection. Treatment: Blood and other body fluids containing HIV-1 or HBV or HCV must be thoroughly cleaned from surfaces and objects before application of Foster® First Defense® Disinfectant Concentrate, 1 oz. per gallon of water. Dilute 2 oz. to 4 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 should be autoclaved and disposed of according to local regulations for infectious waste disposal.

**TO SANITIZE NON-FOOD CONTACT SURFACES:** Mix 2 oz. of this product per 4 gallons 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. **Poultry and Swine Premise Disinfection 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, racers, brushes, and other feeding and watering appliances. Thoroughly clean all surfaces with soap or detergent and rinse with water. Use 2 - 4 oz. of Foster® First Defense® Disinfectant Concentrate per gallon of water. Saturate surfaces with the recommended disinfecting solution for 10 minutes. Use 8 oz. per gallon of water to kill Adenovirus Type 5 and Type 7. Immperse all halers, 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.

**WATER DAMAGE RESTORATION AGAINST ODOR-CASING 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, trim and frame lumber, tackless strip and paneling. Use 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, trim and frame lumber, tackless strip and paneling: For water damage from a clean source, extract excess water. Test for clean source by pouring 4 oz. of the concentrate onto carpet. If the water is clean and there is no bleeding, you may use 4 oz. of the concentrate per gallon of diluting water. For rooms or areas that have been affected by sewage or flood waters or water saturated with odor-causing bacteria, use 2 oz. of the concentrate per gallon of water for 10 minutes. For water damage from a dirty source, extract excess water and then 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 / sanitizing 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 / sanitizing. 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 40-90 First Defense® Disinfectant Concentrate. Mix 2 oz. of concentrate per gallon of water and apply at the rate of 300 to 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.

**TO CLEAN AND DEODORIZ:** 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. **DEODORIZING DIRECTIONS:** Mopping Solutions, Automatic Scrubbers: 2 - 4 oz. per gallon of water eliminates undesirable odors. Allow surfaces to air dry. Laundry: 2 oz. per load added during the final rinse cycle deodorizes all offensive odors. Carpets: 2 - 4 oz. per gallon of water eliminates odors associated with urine, vomit, smoke, and mildew. Reapply after cleaning for freshening effects. Allow to dry. **Sewage Backup, Water Damage:** 4 - 8 oz. per gallon of water or desired concentration. Spray over affected areas before and after cleaning and extraction. Allow ten minutes contact time. Use proper ventilation; open windows. 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. Apply to surfaces using cloth, mop or sponge. Remove excess liquid or allow surfaces to air dry. **Foster® First Defense® Disinfectant Concentrate** 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. **Foster® First Defense® Disinfectant Concentrate** kills avian influenza A H5N2 and H5N1 on pre-cleaned environmental surfaces.

**PRECAUTIONS and First Aid:** Refer to product label and SDS sheet for information.

**CUSTOMER SERVICE:** 800-832-9002

ADEQUATE TESTS: The information contained herein we believe is correct to the best of our knowledge and tests. The recommendations and suggestions herein are made without guarantee or representation as to results. We recommend that adequate tests be performed by you to determine if this product meets all of your requirements. Refer to product label before use. For professional use only. Keep out of reach of children.

Foster PDS 40-90 R0117