

## FAQs for

# VITAL DEFENSE<sup>®</sup>-D

Concentrated Surface Disinfectant, Cleaning and Holding Solution



### What is Vital Defense-D?

Vital Defense-D is a concentrated intermediate-level tuberculocidal surface disinfectant and cleaner approved for use in healthcare settings. The light lemon scent makes frequent disinfection tasks more pleasant. It is formulated to be diluted at 1:32 prior to use.

### What is the contact time for Vital Defense-D?

Vital Defense-D is tested and approved for a one minute contact time to inactivate HIV-1, Herpes simplex virus type 1 & 2, Staphylococcus aureus and methicillin-resistant Staphylococcus aureus (MRSA), Salmonella enterica, Pseudomonas aeruginosa and fungi such as Trichophyton mentagrophytes. Vital Defense-D inactivates benchmark M. tuberculosis var. bovis (TB) in five minutes.

### What are the chemical actives in Vital Defense-D?

This product is a water-based dual synthetic phenolic compound with o-phenylphenol and o-benzyl-p-chlorophenol. Synthetic phenolics combine reliable disinfectant qualities with tested safety for low toxicity. Recent independent lab testing reaffirms the safe use of Vital Defense-D with bare hands in the absence of biohazards after dilution. Always use gloves when diluting concentrated solutions.

### What is CDC guidance for disinfectant activity against Hepatitis B and Hepatitis C?

Ability of a disinfectant to inactivate M. tuberculosis var. bovis (TB) is considered a benchmark by the CDC to designate intermediate-level disinfectant activity. It makes Vital Defense-D suitable for use in healthcare and other settings where blood and other human soils are likely to be present. The CDC also states that any germicide with a tuberculocidal claim on the label is considered capable of inactivating less resistant blood borne pathogens such as HIV, Hepatitis B and Hepatitis C.

### Does Vital Defense-D have EPA registration?

Yes, it is regulated as a General Purpose, hard surface cleaner/disinfectant by the EPA and as such has undergone required AOAC testing with subsequent registration # 46851-1-74975.

### What is the benefit of non-alcohol actives in the Vital Defense-D formula?

- Disinfectants with alcohol tend to evaporate quickly making full contact time more difficult.
- Alcohol interferes with cleaning by causing blood and proteins to adhere more tightly.
- Long term use of disinfectants containing alcohol and/or solvents may cause tubing, vinyls and plastic housing to crack and discolor.

### Why should clinicians avoid disinfectant products with solvents?

Solvents such as glycol ethers are added to some disinfectants to reduce contact time. This ingredient is not found on the main label but will be listed in product Safety Data Sheets. Testing of products with glycol ethers demonstrates visible damage to acrylic plastic and similar surfaces after long term application. Vital Defense-D has no glycol ether solvents in the formula.

### How should Vital Defense-D be used?

First, prepare Vital Defense-D by diluting according to package directions. Next, for surface disinfection as a "one-step" cleaner/disinfectant for surfaces that are not visibly soiled: Spray or squirt prepared Vital Defense-D onto surfaces or apply using paper towels or 4 X 4 gauze. Allow surfaces to stay wet for five minutes.

For surface disinfection on surfaces with visible blood and soils: Use the 2 step method: Clean surfaces by spraying or squirting prepared Vital Defense-D onto surfaces or paper towels or 4 X 4 gauze. Wipe to remove soils. Discard used wipe material. Reapply Vital Defense-D to surfaces and keep wet for a total of five minutes.

For instrument holding and cleaning solution: Check instrument manufacturer's instructions. Fill pan or ultrasonic tank with sufficient Vital Defense-D to cover instruments. Soak for 5 minutes. Avoid prolonged soaking over one hour.



**Is Vital Defense-D recommended for use to disinfect dental impressions and appliances?**

Yes. It is water based and meets most recommendations for disinfection of dental impression materials. It is bleach-free and will not corrode the metal portions of appliances. Rinse and remove gross debris from item. Place impression or appliance inside baggie, thoroughly wet all surfaces with prepared Vital Defense-D and allow 5 minute contact time. Remove and rinse item gently.

**How should Vital Defense-D be used for disinfection of tubing on equipment used to clean devices with channels and cannulas?**

Prepare Vital Defense-D according to package directions. Use prepared solution and follow the cleaning equipment manufacturer's directions and a five minute contact time. Rinse disinfectant residue out of tubing after disinfection is completed.

**Why is cleaning such an important step in environmental disinfection?**

Vital Defense-D contains surfactants and detergents to quickly remove body soils, blood and dust. Soils act as a barrier between disinfectants and germs on surfaces. Blood and body soils also act as carriers to keep some germs viable (able to infect) for days or even weeks. Patients perceive safety and infection prevention through a clean and sanitary environment.

**What color range should I expect to see in Vital Defense-D concentrated solution?**

This product contains synthetic phenolics which are naturally tan to brown. Concentrated Vital Defense-D will appear light golden brown to medium brown. Heat, light and air exposure will accelerate color change. Also check expiration date (stamped on every container). This product has a two year use life after date of manufacture.

**How can we cut down on aerosols created during environmental cleaning and disinfection?**

Saturate paper towel or gauze applicator with prepared Vital Defense-D, then apply to surface. Do not "fog" treatment areas. Use ProSpray™ wipes pre-saturated disinfectant wipes with similar water-based dual synthetic phenolic actives and a three minute contact time.

**Is it appropriate to use a stack of gauze pads pre-saturated with prepared Vital Defense-D solution?**

This is not best practice. Gauze fibers may interact with disinfectant agents and reduce efficacy. Reaching into an open container may introduce contamination. Gauze at the bottom may not be used in a timely fashion and become degraded.

**Does Vital Defense-D have residual antimicrobial properties on surfaces?**

Yes, phenolic disinfectants have demonstrated persistence of antimicrobial action on surfaces well after the initial application.

**Will Vital Defense-D stain surfaces?**

No, it is non-staining but after repeated use may leave residue from surfactants in the formula. This is easily avoided by simply wiping surfaces with water and paper towels at least weekly. Vital Defense-D actives may interact with bleach creating a permanent stain on porous surfaces and textiles. Rinse surfaces and clothing prior to any application of bleach products.

**Can I use Vital Defense-D as a "cold sterile soak" for plastic items that cannot tolerate heat sterilization?**

Items that are used inside the mouth or other mucosal surfaces such as film holders, bite blocks and laryngeal airway devices are considered semi-critical. According to CDC guidelines such items preferably should be heat sterilized or at a minimum disinfected using high-level disinfectant processes (gluteraldehyde, peracetic acid, ethylene oxide gas, etc.). Vital Defense-D is an intermediate-level disinfectant.

Reference: CDC Guidelines for Disinfection and Sterilization in Healthcare Facilities, 2008.