

OPTIM® BLUE FAQ

What is a disinfectant?

A chemical agent used on inanimate objects (e.g., countertops, floors, walls, sinks, non-critical medical devices) to destroy virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial endospores). Manufacturers that label products with disinfectant claims are responsible for having data to demonstrate that the product is efficacious when used as labelled.

OPT/M Blue has been proven to be effective against **Mycobacteria** causing Tuberculosis, **Viruses** (ex. Poliovirus, Rotavirus, HIV, HBV, HCV, and Influenza A), **Bacteria** (ex. MRSA, VRE, *E.Coli*, and *PSA*), and **Fungi** (ex. *Trichophyton Mentagrophytes*).

What is Accelerated Hydrogen Peroxide?

OPT*IM* Blue's is powered by accelerated hydrogen peroxide. It is a synergistic blend of commonly used ingredients that are listed on the Environmental Protection Agency (EPA) *Inerts List*, the FDA *GRAS* list and Code of Federal Regulations (CFR) 21 *Food Additives List*, that when combined with low levels of hydrogen peroxide, dramatically increase its germicidal potency and cleaning performance.

Which surfaces can be cleaned and disinfected by OPTIM Blue?

OPT*IM* Blue has been tested to be compatible with hard surfaces, including but not limited to dental chairs, stools, lights and counter tops if used according to our instructions for use listed on the label.

Surfaces that are composed of brass, copper, or other ferrous metals and soft plastic may show signs of discolouration or damage if not used as directed. Anodized aluminium (often used on handpieces) and carbon tipped instruments should be avoided. Please refer to the *Instructions* for Use on the product label.

What is OPTIM Blue's contact time, and what does that mean?

OPT/M Blue's has a three-minute tuberculocidal, bactericidal, virucidal contact time and fungicidal contact time. That means that the surface must remain wet for 3 minutes in order to inactivate tuberculosis causing mycobacteria, other bacteria, viruses and fungi.



What is OPTIM Blue's shelf life?

OPT*IM* Blue has a two-year shelf life from date of manufacture. The expiration date is listed on each container.

Does it matter which pathogens (viruses, bacteria, etc.) an intermediate level disinfectant can kill?

Yes. Disinfectant product labels often include a long list of pathogens that it can kill, but which ones are the most important? Pathogens are divided into classes, and each class has a surrogate organism that is the gold standard or most difficult-to-kill pathogen in that class. For example:

Class	Surrogate Organism
Vegetative Bacteria	Pseudomonas aeruginosa and Staphylococcus aureus
Viruses	Poliovirus
Mycobacteria	Mycobacterium terrae (Tuberculosis)
Fungi	Trichophyton mentagrophytes

When choosing a disinfectant, it is important to make sure that it can inactivate the most difficult pathogens (surrogate organisms) so that you can feel confident that you are killing virtually everything.

Can OPTIM Blue be used to disinfect my dental chairs?

Yes, OPT*IM* Blue can be used to disinfect your dental chairs. Remember, it is important to remember that it is best practice to rinse all surfaces weekly with water to prevent surfactant (i.e. soaps) build.

How do I properly dispose of OPTIM Blue?

OPT/M Blue liquid can be poured directly down the drain. There is no need to dilute it with water since hydrogen peroxide breaks down into water and oxygen. Wipes should be disposed of in the trash after use; do not flush them down the toilet. The empty container should be recycled and if recycling is not available it can be discarded in the trash.

If the wipes have been used on surfaces where blood or body fluids were present, they should be disposed of according to federal, state and local regulations for infectious waste disposal.



Does OPTIM Blue have any special storage requirements?

OPT*IM* Blue should be stored in a cool dry area, away from direct sunlight and heat, and inaccessible to small children.

Are any of the ingredients in OPTIM Blue carcinogenic?

No, all of the ingredients in OPT*IM* Blue are on the Environmental Protection Agency (EPA) *Inerts List*, the FDA *GRAS* list and Code of Federal Regulations (CFR) 21 *Food Additives List*.

Do I need to wear personal protective equipment when disinfecting clinical contact surfaces?

Yes, you should always wear appropriate personal protective equipment such as utility gloves when cleaning and disinfecting contaminated surfaces to protect against pricks and pokes. However, as stated in OPT*IM* Blue's *Safety Data Sheet*, PPE is not required to handle the product, particularly in non-clinical settings, because it is not irritating to the skin.

Can OPTIM Blue be used to clean surfaces?

Yes, OPT*IM* Blue has been tested as a one-step cleaner disinfectant, meaning it cleans your surfaces as it disinfects. Please refer to the product label or our *Instructions for Use* to learn how to use our product as a one-step cleaner disinfectant.

Is OPTIM Blue an intermediate level disinfectant?

Yes, OPTIM Blue has a three-minute efficacy claim against Mycobacteria causing Tuberculosis, bacteria, viruses and fungi. Any disinfectant that is capable of destroying or irreversibly inactivating all microbial pathogens, including mycobacteria may be recommended for the disinfection of non-critical medical devices, environmental surface and inanimate objects.

Why doesn't OPTIM Blue have any of the new GHS hazard pictograms?

You may have noticed many disinfectants having new labels that include hazard pictograms they didn't have before. This is because the revised hazard communication requirements of the new globally harmonized system of classification and labelling of chemicals (GHS) has specific criteria for each health and physical hazard, and establishes both hazard classes and hazard categories. The previous hazard communication requirements did not include categories for most of the health hazards covered by the new GHS system. This new approach provides the consumer with more information for awareness and that can be used to address the hazard.



As with the old criteria, OPT*IM* Blue has been classified as non-hazardous in accordance with GHS criteria and therefore does not require any hazard pictograms, signal words or statements.

Is it OK to place disinfectant in a container with 4X4 gauze for use on dental equipment?

It is not recommended because the bleach in the gauze may inactivate the disinfectants.¹ However, it is acceptable to spray OPT*IM* Blue onto 2x2 or 4x4 gauze or c-fold towels for <u>immediate use</u>. Please note that it is not recommended to spray any disinfectant directly onto any surface.

What is the difference between accelerated hydrogen peroxide and the hydrogen peroxide that can be purchased at a drug store?

Hydrogen Peroxide purchased at a drug store contains 3% hydrogen peroxide mixed with water. Accelerated Hydrogen Peroxide is a blend of 0.5% Hydrogen Peroxide, other inert ingredients/surfactants, and water. This blend results in a better cleaning capability and a faster contact time than the hydrogen peroxide you can buy at the drugstore.

Is the efficacy or stability of OPT*IM* Blue affected if the product is frozen?

Freeze—Thaw studies have been conducted on OPT*IM* Blue to ensure that freezing will not have a negative effect on the stability & efficacy of AHP. If product is frozen, simply allow the product to thaw at room temperature. Once the product is completely thawed, shake to ensure the product has not separated into different phases prior to first use of the bottle.

Can OPTIM Blue be mixed with other chemicals?

It is never advisable to mix different chemical products. OPT*IM* Blue should never be mixed with any other chemicals.

I recently switched to OPT*IM* Blue after using a QUAT based product. What is causing the musty odour & film left on the surfaces?

Quaternary Ammonium Compound based products (QUATs) leave residual chemistry on surfaces. OPT*IM* Blue will remove the residual chemistry that has been left on the surface; however, there may be several layers of residual chemistry to remove. The odour and film you

¹ OSAP, "Frequently Asked Questions (FAQs) on Dental Infection Control | Instruments & Equipment Disinfection," OSAP. http://www.osap.org/?FAQ_Instrum_Disinf1 (accessed December 2016).



are experiencing is caused by the QUATs reacting to OPT*IM* Blue removing it. It may take between 5 and 10 days of OPT*IM* Blue use before the odour and film disappear.

To prevent this from happening we recommend cleaning your surfaces with soap and water before switching to a new disinfectant.

Can all disinfectants clean and disinfect in one-step?

No. Organic matter (food, blood or body fluid) on the surface forms a barrier that can either increase the contact time required to reach and kill the germs, or prevent their contact entirely.

OPT/M Blue is effective in the presence of organic matter, meaning it is a one-step cleaner-disinfectant. OPT/M Blue has been tested in the presence of organic matter called serum. The serum test measures the product efficacy when organic soils are present. To check whether a disinfectant has been tested with serum, check the label to see if it says "tested in the presence of serum load."

Is the use of disinfectants contributing to antimicrobial resistance?

Yes, studies show that disinfectants that leave an active residue behind on surfaces contribute to the development of antimicrobial resistance, a major global health crisis we are facing.

It is best practice to look for disinfectants with active ingredients that readily degrade into the environment such as hydrogen peroxide. OPTIM Blue contains accelerated hydrogen peroxide which breaks down into water and oxygen leaving no active residues behind, ensuring that it won't contribute to antimicrobial resistance.²

What colour and scent does OPTIM Blue have?

For environmental and health reasons there are no dyes or fragrances added to OPTIM Blue.

I understand that the pH of accelerated hydrogen peroxide is acidic. Will this cause irritation or serious damage to unprotected skin?

No. Accelerated hydrogen peroxide is acidic because it contains small amounts of food acids. Food acids are not toxic and found naturally in food, such as vinegar (acetic acid), citrus fruits

² Ulas Tezel, Spyros G. Pavlostathis, "Role of Quaternary Ammonium Compounds on Antimicrobial Resistance in the Environment," in *Antimicrobial Resistance in the Environment, First Edition* ed. Patricia L. Keen et al. (Toronto: John Wiley & Sons, Inc, 2011), 349-387.



(citric acid), Vitamin C (ascorbic acid), and Coca-Cola™ (phosphoric acid). If food acids are carefully formulated, as they are in OPT*IM* Blue, they do not cause irritation.³

Is OPTIM Blue safe for disinfecting VPS impressions?

Yes. A study was done to test the effects of OPTIM on VPS impression materials' surface detail and dimensional stability. The study found that when used in accordance with our instructions for use there was no damage done to the impression.⁴

Is OPTIM Blue (or any intermediate level disinfectant) effective against C. difficile?

No, intermediate level disinfectants cannot kill *C. difficile*. However, accelerated hydrogen peroxide based products like OPT*IM* Blue can be used as a preventative method against *C. difficile* outbreaks and related Hospital Acquired Infections (HAI). A study published in the *American Journal of Infection Control (AJIC)* concluded that daily use of accelerated hydrogen peroxide disinfectant was superior to using a cleaner alone because it resulted in significantly reduced rates of HAIs caused by *C. difficile*.⁵

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³ VIROX, "Disinfection Digest: pH: Is it an appropriate indicator of product safety?," VIROX. https://cdn2.hubspot.net/hubfs/241248/ph is it an appropriate indicator of product safety HH.pdf (accessed December 2016).

⁴ Dr. Raghunath Puttaiah, "Compatibility of Hydrogen Peroxide-Based Surface and Immersion Disinfectants with Elastomeric Impression Materials." Toronto: Spectrum Dialogue Volume 12, Issue 2 (2013), 66.

⁵ M.J. Alfa et al., "Use of a daily disinfectant cleaner instead of a daily cleaner reduced hospital-acquired infection rates," AJIC Volume 43 (2015), 141-6.