

NANO PROTECT (PHS DO BRASIL)



Final grade: 10,0



PRODUCT DESCRIPTION

The NANO PROTECT line offers virucidal and bactericidal disinfectants that follow biosafety protocols for both work and home environments.

PRODUCT CHARACTERISTICS

This line has five products. All are based on the broad-spectrum biocidal activity of hydrogen peroxide, which is stable and has an increased oxidative activity, as well as high inactivation rates against viruses and bacteria. All its products have been tested by the Applied Virology Laboratory of the Federal University of Santa Catarina (LVA-UFSC), and norms have been followed to assess their inactivation potential using bacterial and viral models. Results were greater than 99.9% inactivation in most cases, which ensures that these products are highly reliable.

Another important characteristic of NANO PROTECT is its long-acting effect, also tested in a laboratory (LVA-UFSC). Its action may last up to four hours against bacteria and three hours against viruses. This improves safety for longer patient visits, during which the surfaces are constantly contaminated.

INDICATIONS

NANO PROTECT provides a comprehensive response to the need of protection against biological risks. When combined, the five products in this line cover the daily disinfection routine from beginning to end. For that, a kit with all the products is available. Their presentation follows certification that ensures product efficacy according to scientific trials, and suggests daily protocols for room disinfection. This document may be displayed to patients and people visiting the clinic, so that everybody takes notice of the care being taken in the premises.

- ➔ **Nano Protect Hands** – recommended for routine hand antisepsis;
- ➔ **Nano Protect Multiuse 360** – to be applied to different surfaces for an efficient and long-lasting disinfection;
- ➔ **Nano Protect Air Conditioner** – recommended for application to air conditioning air filters to improve circulating air quality in a closed environment;
- ➔ **Nano Protect Body and Clothing** – applied to clothes, shoes and skin (except face), particularly for use when entering or leaving rooms; and
- ➔ **Nano Protect Mouthwash** – used for patient mouthwashing in the office, immediately before dental or medical procedures.

MAIN COMPETITION IN THE BRAZILIAN MARKET

There are several antiseptic and disinfectant products in the Brazilian market, but none with the same active ingredients for specific uses.

EVALUATORS' COMMENTS

If we think of the pathogen transmission chain, from one person to another, it is easy to understand that our hands are a preponderant factor, as we use them for almost everything we do. Therefore, I keep NANO PROTECT HANDS at hand for my patients in the waiting rooms and toilets. Every time patients come into our clinical environment, NANO PROTECT BODY AND CLOTHING and NANO PROTECT HANDS are sprayed on them and their hands to reduce chances that their clothes or hands bring pathogens into our environment. (Score: 10)."

Iduilton Jorge Grabowski Junior.

Some disinfecting agents generate a strong odor or irritate the skin, which requires that we take a longer interval before the patient enters the clinical environment. Nano Protect shortens this waiting time because it is much gentler on the skin. (Score: 10)." **Valter Scalco.**

Its percentage of virus and bacterial inactivation is very high, and its long-lasting effect (up to 4 hours) is decisive to ensure greater safety to the disinfection protocol in our clinic. (Score: 10). **Ricardo Annibeli**.

I still see colleagues that use 70% ethanol as the basis of their disinfection protocol. NANO PROTECT, which contains stabilized hydrogen peroxide, has several advantages, such as a long-lasting effect, easier application, less irritation to living tissues, efficacy persistence when in contact with organic matter, etc. In addition, it is not flammable and may be stored in the clinic safely. (Score: 10). **Thiago Ottoboni**.

Offering them the opportunity of disinfecting (NANO PROTECT Body and Clothing) their clothes as patients enter a closed environment is a very smart way to add safety to the disinfection protocol that we already use in our clinic. Moreover, patients always take notice of this additional care measure, and this increases their appreciation for our staff. (Score: 10). **Rogério Marcondes**.

A dental practice with a high level of excellence should be based on evidence. This basis is a guaranty that dentists with do their best for their patients. As a professor of the

Araraquara School of Dentistry, at UNESP, one of the most respected universities in Brazil, I have been carefully studying some details that may make a difference. In biosafety, we see a few gaps that have to be addressed. The NANO PROTECT line, produced by PHS, has been devised very assertively. The technology tested and validated using scientific methods has become a great ally in our profession. It has a unique solution for each gap in disinfection, such as for air conditioning filters and clothing, and provides a fantastic long-lasting effect of up to four hours thanks to its unmatched chemical composition. (Score: 10). **Weber Adad Ricci**.

TIP:

It was very easy to include the NANO PROTECT products in my biosafety protocol. A tip to streamline environment disinfection: as soon as a patient leaves the dental room, the first thing to do is to disinfect it using Multiuse 360. The staff, then, gets involved with other tasks and prepares the room for the next patient; meanwhile, the product continues acting. When the next patient comes into the office, the product has already had enough time to be effective even against the most resistant microorganisms. (Score: 10). **Pedro Alexandre**.

Opalustre® (Ultradent)



Final grade: 9,3



PRODUCT DESCRIPTION

Opalustre® is a semifluid chemical and mechanical abrasion slurry that contains 6.6% hydrochloric acid and silicon carbide microparticles in a water-soluble paste.

PRODUCT CHARACTERISTICS

Opalustre® is a 6.6% hydrochloric acid slurry that contains silicon carbide microparticles in a water-soluble base. This compound removes stains chemically using gentle mechanical abrasion. This product is used for the rapid removal of aesthetic enamel demineralization defects. Ideal for white and brown surface demineralization defects resulting in enamel stains due to fluorosis, as well as for white stains.

INDICATIONS

Opalustre® is used to correct superficial white, brown or multi-colored stains (<0.2 mm deep) in enamel defects, including discolorations due to fluorosis that do not respond to at-home bleaching.

MAIN COMPETITION IN THE BRAZILIAN MARKET

Whiteness RM (FGM); Potenza Abrasione (PHS).

EVALUATORS' COMMENTS

Opalustre is an excellent option to remove light stains due to enamel imperfections. It is easy to apply and has already shown to produce very satisfactory results even in the first session. It is used with the polishing cup that is part of the kit, or any polishing cup for composite resins. (Score: 8)." **Gustavo Tonolli.**

“The balance between the acid and the abrasive components of Opalustre make it a high-quality product that is easy to use and has excellent clinical results in the removal of stains using microabrasion. (Score: 9).”

Roberto Amaral.

Opalustre is an excellent product to remove superficial stains using the enamel microabrasion technique. As with any other competing product, it is fundamental that the dentist should make an accurate diagnosis of the stain before using the product. Our experience using this product made us to define it as our first choice when using a microabrasion agent. (Score: 10).” **Jorge Eustáquio.**

Opalustre is a 6.6% hydrochloric acid slurry that contains silicon carbide microparticles, known to be one of the hardest materials in nature. Hydrochloric acid is a weak acid, which facilitates the control of removal of only a thin layer of teeth with intrinsic stains, the most frequent of which are those due to fluorosis. Obviously, treatment results depend on an accurate diagnosis of the depth of these stains. As it is a material based on a weak acid and dependent on silicon carbide for its action, multiple applications may be necessary. The best results are usually obtained for superficial stains with a depth of about 0.2 mm. Its characteristic violet color provides good contrast with oral tissues, such as teeth and gingiva, which facilitates the control of

the procedure. As its application may result in considerable splatter, meticulous rubber dam isolation should be used, as well as eye protection for the dentist, the assistant and, above all, the patient. Excellent workability facilitates intraoral application and use. (Score: 10).” **Rafael Beolchi.**

I use and recommend Opalustre because of its chemical composition, ideal for the removal of superficial stains, and because it belongs to the group of materials that requires minimal intervention. (Score: 10).” **Paulo Vinicius Soares.**

This material is an interesting alternative to the treatment of superficial white and brown stains. Often associated with whitening, satisfactory to good results may be achieved. Microabrasion is in fact a conservative treatment. If the cost of this material is also considered, there is an advantageous cost-benefit ratio for the patient and the dentist. Biologically, it is less invasive, as substantially less enamel is removed than when other treatments are used. The product is provided in a kit that is enough for the treatment of one patient, and it is easy to apply; it is limited, though, as it should not be used in case of deep stains. (Score: 8,5).” **Shizuma Shibata.**

An ideal product to remove areas of enamel that are discolored and opaque, in cases that require careful removal of superficial enamel stains. It provides a perfect balance of chemical stain removal and mechanical abrasion. A special feature of microabrasion with Opalustre should be highlighted: its bristle polishing cups, which promote a more aggressive action and minimize splatter. (Score: 10)." **Renato Miotto.**

In times of minimal thickness veneers and indirect molar-to-molar treatments, we often forget what minimally invasive means: something really minimal, as little as possible. I like to use Opalustre in the treatment of stains that are not deep, and I get quite good results with patients that do not want any anatomic changes to their teeth and who often were not even aware that they could be treated this way. Another positive point is the fast result and the simple application, a useful alternative for specific cases. (Score: 8)." **Camila S. Sampaio.**

CLINICAL TIP

For over 30 years, I have been investigating and clinically working with superficial intrinsic enamel stains of any color found on hard buccal surfaces and, more recently, with the treatment of enamel surfaces after the removal of residual composite of orthodontic bracket debonding. My interest in this topic goes back to 1986, first triggered by

the studies and suggestions made by Professor Theodore P. Croll, one of the great developers of this technique. Since then, I have searched for acidic/abrasive materials that would provide greater safety for the oral tissues and would have an easier application to tooth enamel with superficial stains or irregularities. One of these products is the Opalustre (Ultradent Products, Inc., South Jordan, UT), composed of 6.6% hydrochloric acid and silicon carbide microparticles, which ensure, among other benefits, a good margin of safety during its application, for both the operator and the patient. After rubber dam isolation, this excellent microabrasive product should be applied using a polishing cup with bristles in the center, specially developed for this purpose (OpalCups, Ultradent Products Inc., South Jordan, UT). The rubber cup is used with a low-speed handpiece to avoid product splatter during application. The microabrasive product should be firmly applied to the superficial stains or irregularities at one-minute intervals for each three teeth, and regularly rinsed with water between applications. A longer working time may be required for the total removal of the dental enamel defect when treating more pronounced and generalized intrinsic stains. Because of that, I suggest that the procedures to remove the imperfect superficial enamel should begin with a fine diamond bur (3195 FF K.G. Sorensen) in the area of interest. After that, the microabrasive product, Opalustre (Ultradent Products,

Inc., South Jordan, UT), should be used to complete stain removal, as well as to smoothen the dental enamel surface that was previously treated using a diamond bur. Because of the initial macroabrasion with a diamond bur, a mean 2 to 3 applications of the microabrasive product may be necessary to achieve the desired aesthetic effect. However, the use of a diamond bur is optional and, if it is not used

before the application of the microabrasive product, a maximum of about 10 applications of the microabrasive product are necessary. We should always make sure that the teeth are wet for stain removal. Long-term clinical studies have confirmed excellent gloss and smoothness of enamel surfaces treated with this microabrasive product. (Score: 10)." **Renato Herman Sundfeld.**

Structur 3 - VOCO



Final grade: 9,8



PRODUCT DESCRIPTION

Structur 3 is a self-curing nano-filled composite for the fabrication of long-term provisional crowns and bridges. Perfect provisionals are easily fabricated using this material. The improvement of the Structur 3 parameters of “fabrication”, “aesthetics” and “stability” resulted in a product that allows for the rapid fabrication of provisionals that are not only aesthetically adequate, but also extremely stable.

PRODUCT CHARACTERISTICS

Fabrication:

- Rapid, easy and safe fabrication, thanks to the 1:1 cartridges;
- Short curing time;
- Short total working time (4 min). Intraoral setting time of only 45 sec;
- Perfect provisionals, fabrication that is rapid and comfortable for patients;
- Easy removal from prepared tooth during elastic phase; and
- High gloss without polishing – just remove the inhibition layer with alcohol.

Aesthetics:

- Natural gloss and human tooth-like fluorescence; and
- Available in eight shades.

Stability:

- High resistance to fractures and compressive strength (>500 MPa); and
- Smooth surface, which facilitates plaque removal and minimizes color changes..

INDICATIONS

- ➔ Fabrication of crowns, bridges, inlays, onlays, partial crowns, veneers and temporary posts;

- Fabrication of long-term provisionals;
- Relining of prefabricated provisional composite, metal or polycarbonate crowns.

MAIN COMPETITION IN THE BRAZILIAN MARKET

- Protemp 4 (3M);
- Luxatemp Star (DMG);
- Systemp C&B II (Ivoclar);
- Yprovy Bisacryl (Yllor);
- Primma Art (FGM).

EVALUATORS' COMMENTS

First line product, better than its main competitor, 3M. (Score: 10)." **Rudá Moreira**.

I use the Structur 3 (VOCO) bis-acrylic resin composite for the fabrication of provisional crowns in the daily routine of the office. In addition to being an easy-to-apply material, it has excellent aesthetic results. Its differential is the natural gloss and the eight shades available, which adapt the provisional to natural tooth colors perfectly. (Score: 9)." **Cristian Sbardelotto**.

Bis-acrylic resin composite with good mechanical and aesthetic properties and easy to use. (Score: 10)." **Marcelo Giannini**.

Excellent material for the fabrication of provisionals, specially those supported by teeth prepared for porcelain laminate veneers, because it has good mechanical resistance, aesthetics, gloss and color preservation, even in long-term provisionals. (Score: 9)." **Rodrigo Ehlers Ilkiu**.

My specialty is Restorative Dentistry, but, in addition to treatments with composite resins, I also work with indirect procedures, such as crowns, onlays and veneers, and I have been working with bis-acrylic composite resins to fabricate provisionals for a long time. Structur 3 provides great agility in everyday practice: a short curing time, good aesthetics due to its fluorescence, good polishing and resistance. (Score: 9,5)." **Antonio S. Sakamoto Junior**.

The Structur 3 composite resin, by VOCO, has excellent resistance, finishing quality and gloss. (Score: 10)." **Paulo Vinicius Soares**.

Structur, by VOCO, was the material I used in my first clinical case with self-curing resins; I used it for the fabrication of provisionals. For me, Structur 3 has good resistance and a very good working time, in addition to excellent gloss, the outstanding characteristic of this material. Its various options of shades favor its use in the anterior area. (Score: 10)." **Lucas Silveira Machado**.

A top, fast bis-acrylic composite resin and easy to use, it provides great polishing, excellent flowability to fill all spaces of the mock-ups, preventing air bubble formation; resistant to stress and, consequently, fracture, it has a very particular characteristic of this brand: color stability after the material is fully polymerized. (Score: 10)." **José Rodolfo Verbicário.**

I use and suggest the use of Structur because of its technical friendliness, good working time, exothermic reaction temperature, which is lower than that of acrylic resins, its mechanical resistance, fluorescence, shade stability and easy polishing. Its presentation in universal cartridges or QuickMix with several shade options facilitates the technique and ensures good aesthetic results. (Score: 10)." **Paulo Quagliatto.**

Bis-acrylic resin composites are our favorite material for provisionals. Structur 3, by VOCO, is one of the best options in the market. It has high resistance, fidelity of its various shades and, above all, good and easy polishing, both to acquire and to maintain. It is a very reliable material. (Score: 10)." **Marcelo Alves.**

I use Structur 3 for mock-ups to evaluate aesthetics and for fabrication of provisionals and --guides for scanning in the case of full-arch implant-supported prostheses. Its use with a universal self-mixing gun facilitates clinical procedures,

and its natural shades have an excellent aesthetic appearance and superficial polishing, as well as a high mechanical resistance. (Score: 10)." **Eduardo Miyashita.**

Structur 3, a bis-acrylic resin composite, is a great advancement, not only from Structur 2, but also from other bis-acrylic resin composites. Its clinical performance is excellent, and it seems to be more resistant to fracture, less brittle and more aesthetically pleasing than its competitors in the market. Today, Structur 3 is my bis-acrylic resin composite of choice, and I recommend it. (Score: 10)." **Jorge Eustáquio.**

I have been working with Structur 3 for some years. Some of the characteristics that I like best are the fact that it is easy to handle and bubble-free, leaves little excess material and has an excellent polishing. In addition, its great variety of shades and 1:1 mixing facilitate its application in clinical routine. (Score: 10)." **Raphael Monte Alto.**

Excellent material. Today, bis-acrylic resin composites are part of our collection of essential products for the dental practice; it is simple, and its aesthetic results are excellent. This material is useful for several phases of a treatment, from planning to rehabilitation. I recommend it! (Score: 9,5)." **Rafael Andreiuolo.**

CLINICAL TIP

With the development of bis-acrylic resin composites, I am sure that the simple fabrication of provisionals and, especially, the aesthetic predictability of treatment has changed substantially – for the better. In the past, we would take hours to fabricate an acrylic resin provisional and, even so, results were somewhat dissatisfactory. Today, we take 10 minutes at most when using bis-acrylic resin composites, and this is the same even when the provisional has to include a larger number of teeth. These materials have given us a practical way to show patients precisely how predictable their aesthetic and functional restorations are. Also, they give us the chance to insert into the patient's mouth what was planned, easily and in a short time. We can refer to the completed treatment

*accurately, so that patients can safely evaluate whether it meets their expectations (what some dentists call a “test-drive”). Of the several bis-acrylic resin composites in the market, I call attention to one, called Structur 3, by VOCO. In addition to having very good resistance among others of this type of material (500 MPa), it is nano-filled and does not require polishing; all it takes is wiping it off with a piece of gauze soaked in alcohol. Structur 3 comes in several vita lumin shades, which facilitates its use and, above all, does not irritate periodontal tissues. I actually had a patient that kept an aesthetic provisional fabricated with Structur 3 for 8 months and had no gingival irritations, preserving aesthetic results for all that time. Let alone the possibility of combining it with implant impression transfers, as its curing contraction is low. (Score: 10).” **Hamilton Renato.***