

## BACOBAN FAQ

### 1. Which ingredients in Bacoban kill pathogens?

Bacoban contains benzalkonium chloride and sodium pyrithione. These are well-known and highly effective active substances against pathogens.

### 2. Why is Bacoban effective for up to 10 days?

The active ingredients are embedded in a specially developed SiO<sub>2</sub> ("liquid glass") layer that acts like a "sponge" and ensures that the pathogens are neutralized over a long period of time.

Without this "sponge", the effectiveness of benzalkonium chloride and sodium pyrithione on the surface would only last a few minutes before new contamination occurs again (as is also the case with usual standard disinfectants).

### 3. Is it correct that Bacoban is also effective against Covid-19 for 10 days?

In 2020, Bacoban was tested again specifically for Covid-19 within ASTM E 2180 and EN 14476 guidelines and confirmed to be effective, including long-term efficacy.

### 4. Are there also tests that prove the effectiveness of Bacoban over a period longer than 10 days?

Yes, we have independent tests that show efficacy of up to 30 days for Ecoli, Staphylococcus Aureus, Pseudomonas Aeruginosa, Aspergillus Niger Candida Albicans.

### 5. How long does the disinfectant layer actually last in daily use?

There is a direct correlation between the degree of abrasion and the length of time the coating remains active. Independent studies show that Bacoban is effective for up to 10 days in an "active environment", e.g. on surfaces within a hospital that are frequently touched and wiped.

If Bacoban is applied to an area subject to massive abrasion (e.g. a grab handle in an underground that may be subject to over 100,000 abrasions per day), the shelf life is shortened.

However, if, for example, the ceiling of the same train carriage has been disinfected and coated with Bacoban, the effectiveness can last far longer than 10 days; tests have achieved results of up to 90 days.

### 6. How long does Bacoban protect against corona when used on the hands?

Bacoban is a surface disinfectant and is therefore not recommended for use as a hand disinfectant.

### 7. Ist Bacoban dangerous for the skin?

Bacoban has been tested for consumer safety by "Dermatest" and rated as "very good" for skin tolerance.

**8. I have read that Bacoban is a class 2a medical device. Is that correct?**

Bacoban was a "Class 2a medical device" for almost 10 years. However, we have decided to withdraw from this certification process and focus only on the ECHA listing.

Of course, the (expired) 2a tests and certifications can still be viewed. The concentrate "WB" also has the German VAH medical listing.

**9. How long does it take for Bacoban to kill pathogens?**

There are two possibilities:

- 1) Bacoban is applied to a surface and then kills the pathogens in a few seconds or minutes, depending on the species.
- 2) The pathogens meet the Bacoban layer that has already been applied for a longer time, then the effect time can be longer, but according to the ASTM 2180 test 99% of the viruses are killed within 5 minutes.

**10. Which pathogens Bacoban is effective against?**

Bacoban is effective against a very broad spectrum of viruses, bacteria and fungi. Here is the [link](#) to the complete list. Bacoban is not suitable for use as a sporicidal agent.

**11. Can I inhale Bacoban?**

Bacoban should not be inhaled or sprayed on the face as it can irritate the mucous membranes around the eyes, nose, mouth and lungs.

**12. Can Bacoban be used by private end users?**

Bacoban is supplied in household/retail packs and is therefore easy to use. However, fogging rooms with Bacoban is a professional activity and should therefore only be carried out by specialist companies.

**13. How much Bacoban liquid should I use per m<sup>2</sup>?**

It is recommended to use 10 ml liquid per m<sup>2</sup>.

**14. I have read that there are three types of Bacoban. What is the difference between these variants?**

Two are water-based – one is alcohol-based. All are equally effective against pathogens.

Water-based: Less expensive version, can be used in 95% of all cases:

- a) Ready-to-use solution, stable for 2 years
- b) Concentrate:
  - Shelf life of the concentrate: 2 years
  - Shelf life of mixed liquid: 8 hours ("you mix what you need", for hospitals building cleaners, aviation, etc.)

Alcohol-based:

Recommended for "hot spots", i.e. areas that are used a lot, such as cash machines, door handles, lift buttons etc.. This version dries faster and has a slightly stronger adhesion to the surface.

**15. Can Bacoban be repolished after application if a haze has formed?**

If there is a slight haze after application (e.g. on glass plates), the surface can be polished carefully after approx. 10 minutes.

**16. Can Bacoban be used on textiles?**

Bacoban can be used on textiles such as mattresses. We recommend the water-based version for this purpose. Nevertheless, please always test on an inconspicuous area first.

**17. Can Bacoban be removed again?**

Bacoban resists abrasion and therefore cannot be removed by simple wiping. However, you can use alcohol (e.g. ethanol or isopropyl with at least 70% alcohol content) to remove it.

**18. Can Bacoban be used as a cleaning agent and is it true that it creates an „easy-to-clean“ effect on surfaces?**

Yes, Bacoban is very suitable as a cleaner and with the duration of use there is an "easy-to-clean" effect.

**19. Can Bacoban be used for disinfecting public transport?**

Yes, this is an optimal area of application for Bacoban, e.g. buses, trains, taxis, cars and ships.

**20. Is Bacoban FDA certified?**

Yes, Bacoban is approved by the Thai FDA.

**21. How to dispose of the Bacoban wipes & wrappers?**

Bacoban wipes, packaging, empty bottles and canisters can be disposed of with household waste, in accordance with applicable local regulations.

**22. Can I prove the efficacy of Bacoban via ATP tests?**

Unfortunately, this question cannot be answered in one sentence.

ATP (adenosine triphosphate) is present in all living cells as well as in bacteria. When bacteria are killed, the ATP level on the surface drops considerably. Therefore, ATP testers are a good tool to get a general overview of the effectiveness of a disinfection process.

A working example would be as follows:

1. The steering wheel of a car is swabbed using an ATP tester and the value is 1000. This means that the steering wheel is contaminated with bacteria and also ATP from other cell structures that are not bacteria (e.g. it could be that someone has just eaten an apple and applied apple juice to the steering wheel).
2. The steering wheel is now thoroughly disinfected with Bacoban.
3. After 10 minutes, the steering wheel is dabbed again and the score is now e.g. 10. This shows that the steering wheel is now obviously disinfected. But why is there a score of e.g. 10 and not zero?

There are two reasons for this:

1. The test equipment may have a fault tolerance.
2. Certain types of necrotic cells can also release ATP, and this ATP is recognized by the test device, even if it comes from dead cells.

**Are ATP testers suitable for measuring and detecting the reduction of viruses on surfaces?**

No.

**Are ATP test devices suitable for detecting fungi on surfaces?**

It is not recommended to use ATP test equipment for this purpose.

**Conclusion**

An ATP tester is a useful tool for determining the general cleanliness level of a surface before and after cleaning, but should not be used as a test method for detecting bacteria and viruses.

**23. Can I use Bacoban on “disposable masks”?**

We have not carried out any long-term tests on disposable masks and therefore cannot approve its use.

**24. Can I use Bacoban on „Face Shields“?**

Yes, this is possible. We recommend Bacoban alcohol-based for this purpose, as it dries faster and adheres better to the surface. However, please check whether your "Face Shield" is alcohol-resistant before use (check in an inconspicuous place or read the instructions for use). If the "Face Shield" is sensitive to alcohol, the water-based Bacoban version can also be used.

**25. Can I wipe or rinse the surface with a damp cloth without affecting the protective layer?**

We recommend to use Bacoban also for cleaning, so the surface is cleaned and at the same time the protective layer is renewed again and again and not damaged. 3 in 1: Cleaning, disinfection and sealing in one. When using other chemical cleaners, interactions may occur or the Bacoban layer may be removed.

**26. What is the maximum area I can wet with Bacoban wet wipes?**

The maximum coverage per wet wipe is 1m<sup>2</sup>.