

BioKube ULTRA/bag

Clean and Safe Water made simple

BioKube ULTRA/bag is a portable water filter that provides clean, safe water for one person for a period of up to 6 months. It is made for people who have no access to reliable drinking water.

The BioKube ULTRA/bag can also be seen as a simple Proof of Concept for the bigger BioKube Ultra systems which can treat up to 250 m³ / day. See more on www.biokube.com.

Water sources that can be used to fill the **BioKube ULTRA/bag** are:

- unreliable municipal water supplies
- rainwater
- water from rivers, ponds, lakes
- ground water

BioKube ULTRA/bag works simply with the force of gravity. Untreated water is filled into the bag at the top nozzle. It then flows through a cleaning membrane, acting as a barrier for microbiological contamination. The filtered water leaves the **BioKube ULTRA/bag** at the side nozzle, where it is collected in a bottle

The **BioKube ULTRA/bag** does not plug as a result of the extreme small filtration pressure that is gently applied by the small amount of water above the membrane. Solids and Particles collected on the membrane surface are washed out simply by turning the bag upside down.

All materials used are approved by the FDA for the contact with food.

How does it work?

1. Fill the **BioKube ULTRA/bag** with approx. 5 l of untreated water.
2. Collect the water in a bottle.
3. Drink clear and safe water.
4. After one filtration cycle empty the bag and refill for the next cycle.



Technical Data

Volume: 5 l

Volume per filtration cycle: 4 l

filtration rate: approx. 1 l/h

retention rate bacteria: 99,9999%*

retention rate virus: 99,9999%*

shelf-life: 10 years

Size on the filtration holes: < 0,4 µ

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Which contaminants in the water will BioKube ULTRA/bag eliminate?

- Bacteria, Virus, Protozoa
- organic contaminants
- all particles, suspended solids

What makes the difference?

The BioKube ULTRA/bag is an ultrafiltration membrane which has extremely small holes of defined size (less than $0.4\ \mu$) to filter out microbiological contaminants and solids. Only clear water can pass the membrane, which is essential for the effectiveness

Can BioKube ULTRA/bag be reused?

Yes, hundreds of times. Nevertheless, we recommend not to use it in continuous operation for a period of more than 6 months for hygienic reasons.

How can it be stored after use?

After use, empty the bag and let it dry. Store with open lid. When it is used for the first time again, discard the first 4 liters of water.

Bigger BioKube ULTRA devices

BioKube also offers large ultrafiltration devices for up to $250\ \text{m}^3$ / day. Or larger is several systems are operated in parallel.

The use is typically for generating drinking water from flood water or to enable safe reuse of wastewater free from E-coli and Nematode.



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*Analytical Analysis

carried out by Biological Consulting Services, Florida 05/2017.

Raw Water: General Test water according to NSFP231:

GTW1

measured retention rate bacteria for AQQA-bag:

99,99992%

measured retention rate virus for AQQA-net:

99,99998%