



## Hello, I am PAUL, the WaterBackpack ....!

### What I can do for you ... ?

I can remove **pathogen bacteria** from water by a **membrane filtration** inside of me. Thus, the filtered water will most likely not contain pathogenic bacteria causing **cholera, typhus, typhoid fever or other diseases**.

### What I **CANNOT** do for you ... !

I cannot remove **toxics, heavy metals**, or any other **pollutants** that are **soluble** or are **smaller than about 0.1 µm (100 nm)**. Also, **I am not a wastewater treatment device!** **I cannot replace a wastewater treatment plant!** **Do not fill me with raw wastewater!** (OK: if your **only choice** is to drink raw wastewater, use me ...)

### What you have to keep in mind

I do not know what water you use to fill me up. So I cannot give any guarantee whatsoever concerning the quality of the filtrate. However, the filtered water will be of **better quality** than the water you fill me up with. You should select the best available water you can find, like river water or well water, to fill me up and let me filter this water to remove pathogenic bacteria ....

### When using me for the very first time

1. Open my tap and then fill me up **completely**.
2. At the beginning the air from the membrane filter will be released. Then you get the filtered water – a little patience, please.
3. Filter at least 2 hours nonstop and pour that water away.
4. Then you can drink the water coming from my tap.

### How to use me

1. **The best I like is to filter nonstop (day and night).**  
**The less operation breaks I have to take, the better it is for me.**  
**During continuous operation empty me weekly via the outlet at my bottom or my side to get out the settled solids.**
2. But when **operation breaks over night** are not to avoid, I have to be **rinsed out** after daily use. To do so, empty me via the outlet at my bottom or my side and rinse me with several buckets of **raw water** while the outlet is open. Close the outlet and fill me up with **roughly 8 buckets (80 L) of filtrated water** (at least enough to filter) and filtrate as much as possible. Fill me up again with this filtrated water and cover the filling, e.g. with a foil. Close as well the tap. If possible, close the outlet hose with some clean material (cork or some piece of plastic). Starting filtration again the next morning, **pour away the first roughly 50L**.
3. During **prolonged storage fill me with filtrated water and check weekly**, that water is still inside of me and refill with filtrated water if necessary. My membrane **must not fall dry!** Storage: humid, dark, cool, **but no frost!** Close my outlet hose with some clean material (cork or some piece of plastic). Starting again filtration I have to be emptied via the outlet at my bottom or my side and rinsed with raw water. **Pour away the first five buckets (50 L) of the filtrated water.**
4. **Flow will decrease** after you started to use me **within the first five to ten days**, but should then reach a stable flow level for months.

Kassel/Germany, 18.05.2015