



Enhanced
NANO-BUBBLES



AQUAVOLTA®

NANO

Hydrogen-Water
Booster 5th generation



MANUAL

By Karl H. Asenbaum
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2 - What is AquaVolta®?

- The brand name AquaVolta® is composed of the Latin term for water (**Aqua**) and the name of the inventor of the battery, Alessandro **Volta**. It stands for electrically-activated water.
- In Germany, it was originally referred to as electrolyte water, later as "active water". In the English-speaking world it is often referred to as "reduced", "ionized" or "hydrogen-rich" water.
- The characteristic of AquaVolta® is that it has a negative electrical voltage with respect to a measuring electrode, a so-called **negative redox potential**.
- The lower the redox potential, the higher the readiness of the water to give up electrons. For every 0.018 volts (18 millivolts) lower redox potential, this readiness doubles. AquaVolta® water has a 400 to 800 millivolts lower redox potential than tap water or bottled mineral water.
- Due to its high readiness to release electrons, AquaVolta® is also called **antioxidant water**. However, it is not only used by doctors for therapy, but is also establishing itself as a modern everyday drink due to its pleasant taste.
- From today's scientific point of view, the **dissolved hydrogen (dH2) content** is mainly responsible for the antioxidant power of AquaVolta®. **AquaVolta® NANO** was developed to enhance this. It reflects the state of the art in 2021.



3 - NANO: The 5th generation of hydrogen boosters



- Hydrogen gas, H_2 , was not recognized by medical research as the "gas of life" until the 21st century. When drunk dissolved in water, it can produce antioxidant, anti-inflammatory and anti-apoptotic effects. In recent years, a mitohormetic effect has also come into focus, which has similar benefits to athletic training.
- When people began to understand this, an industry first developed that pressed hydrogen at high pressure into aluminum cans or bags, where the H_2 content could be preserved for several months. This is not only very expensive, but also causes **major waste problems**.



- Effervescent tablets were also developed that could produce hydrogen-rich water. However, they are also relatively expensive and have an acidic aftertaste that is rather annoying.
- European consumers in particular therefore preferred a do-it-yourself solution, for which Karl H. Asenbaum coined the term "hydrogen booster" in his book "Electrically oactivated Water", published in 7 languages.



- The basis of the do-it-yourself solutions is always the electrolysis of water. Stationary water ionizers work with a diaphragm electrolysis, while mobile electrolysis devices work with a so-called PEM cell, in which the electrolysis gases H_2 and O_2 are cleanly separated and only the hydrogen accumulates in the water. In addition, boosters like the Aquavolta® NANO use pressure systems to dissolve as much H_2 as possible in the water. In the 5th booster generation, it has now been possible to keep the gas bubbles so small that the efficiency of the booster has been significantly increased.

4 - Always fresh hydrogen (almost) free water selection

You can always use your booster on the go, thanks to its long-lasting battery.

We have designed the AquaVolta® NANO Hydrogen Booster so that you do not have to rely on a single type of water. If you don't trust the tap water you have on the way, you can fill filtered tap water and even water from a reverse osmosis system (RO water) into your booster.

You can also fill the BPE-free Tritan container with your favourite mineral water. It is even possible to unscrew the Tritan container and screw on a mineral water bottle with a 30 mm thread (plastic bottles only!) instead.

Important limitation:

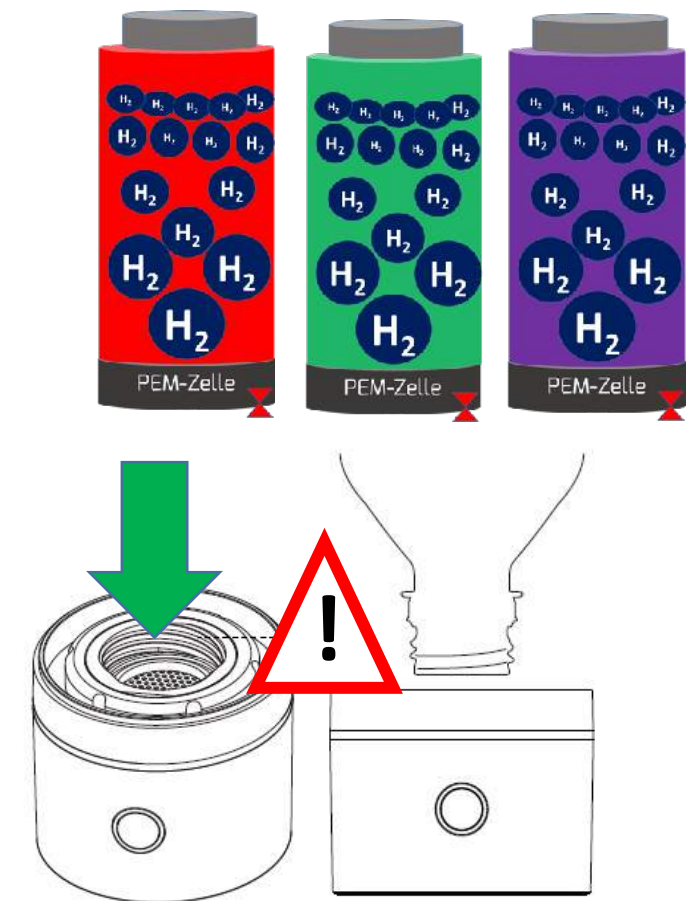
The water must not contain any carbonic acid.

Otherwise the gas pressure will exceed the capacity of the overpressure system and the booster could be damaged or even burst.

Drinking
water
Any type

RO water
fit!

Bottle-
fit!

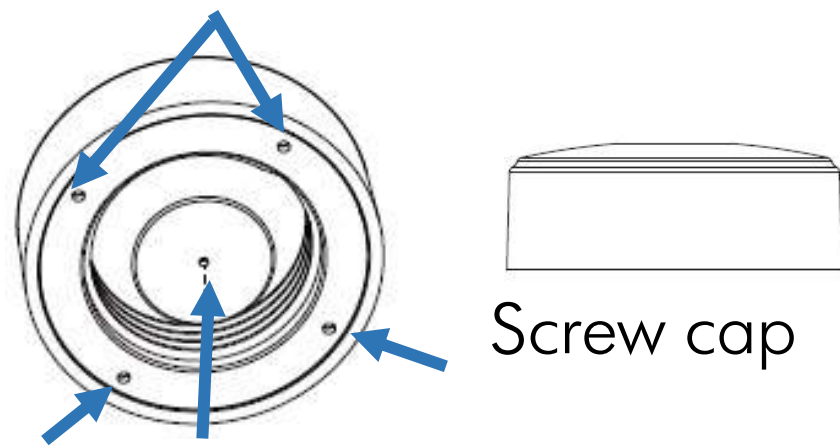


As bottles do not have pressure equalisation holes, this method is always 2nd choice. Maximum production time 2x5 min.

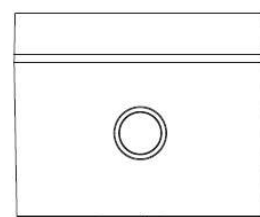
5 - Unit description / scope of delivery

Pressure equalisation holes
in the screw cap

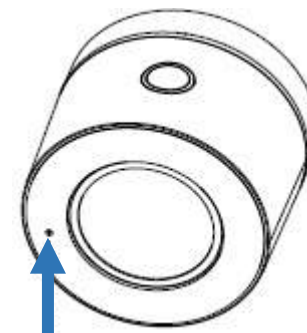
Do not block!



Screw cap



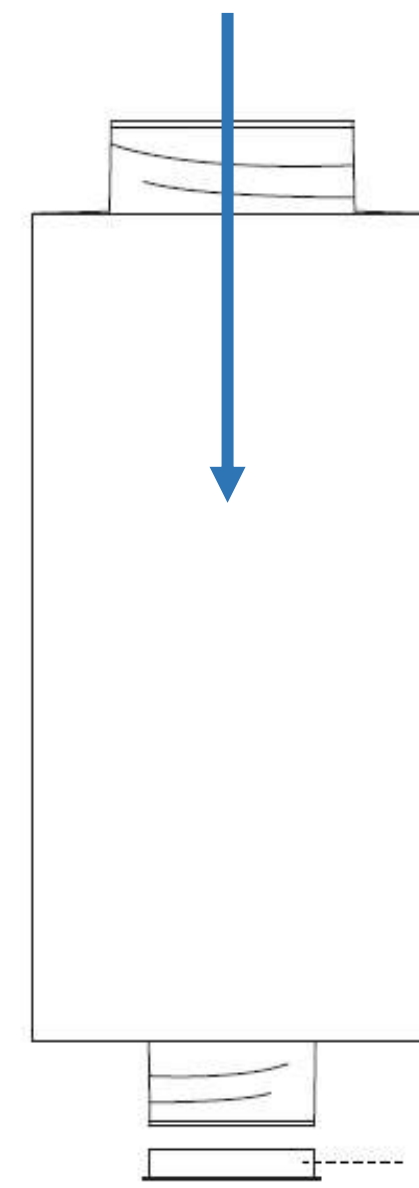
Base
part



Pressure equalisation
hole in the base part.
Do not block.
Drops can escape
here.

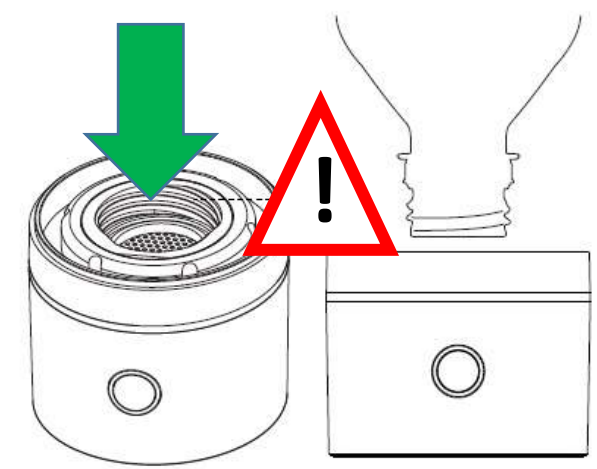


Screw-in production
container 240 ml made
of Tritan



Seal

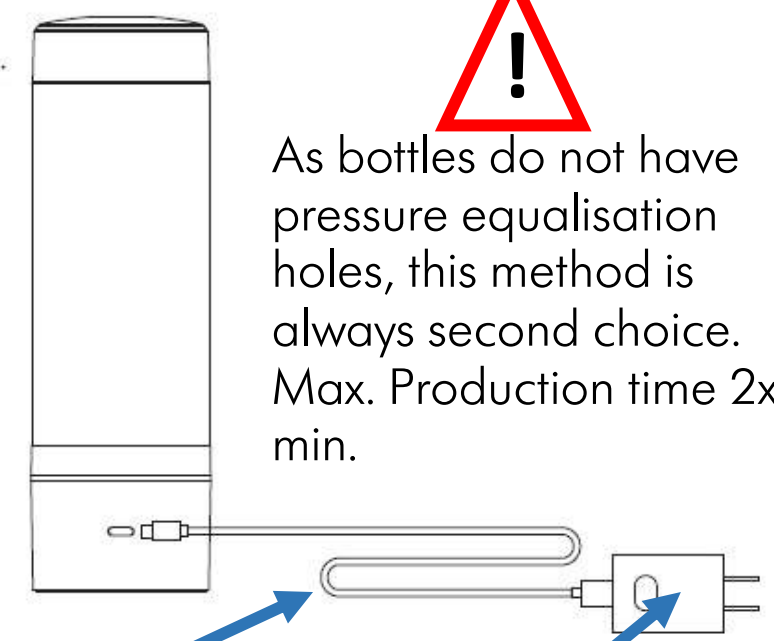
Bottle thread for 30
mm bottles



As bottles do not have
pressure equalisation
holes, this method is
always second choice.
Max. Production time 2x5
min.

USB-C cable

USB-C Power supply (not
included)



6 - Note



1. Remove the orange silicone plug before commissioning and keep it. With a new unit, there may still be residual water under the plug for membrane protection. Pour this away and rinse with clean water.
2. If you do not use the unit for more than a week, fill water into the electrolysis cell to a height of max. 1 cm and close it with the silicone plug.

Tips

- Before first use, fill the production vessel with water for at least 30 minutes to soak the electrolysis membrane. Then pour the water away.
- The production vessel should be kept moist at all times.
- Water filled in must never be above 60° C.
- Never immerse the unit in water.
- Do not start the hydrogen production several times in a row without opening the lid in between.



7 - General instructions for use

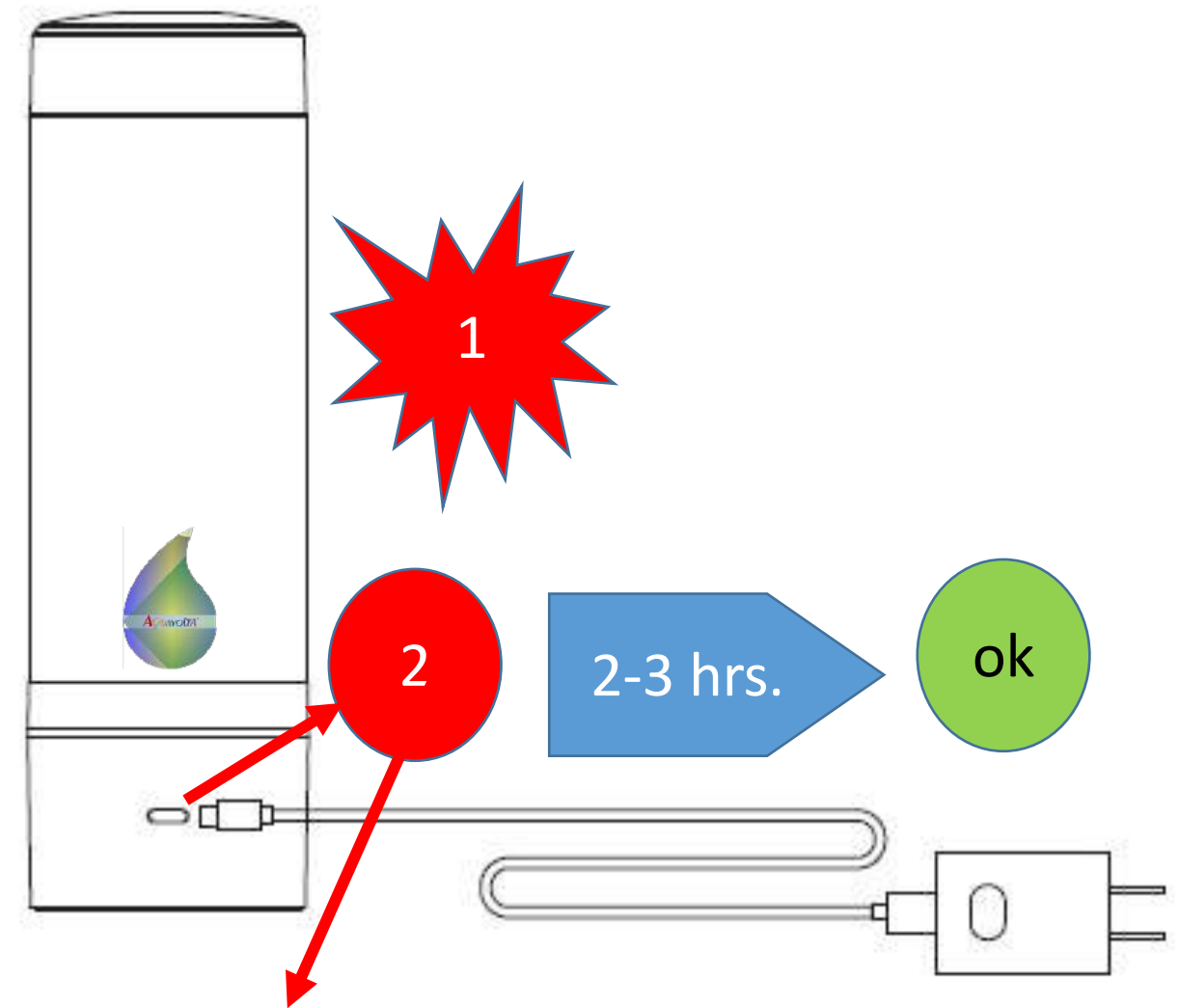


- Only operate the appliance if you have read and understood the operating instructions.
- Before you switch on the appliance, the water tank must be filled with water. Otherwise, the electrolytic cell will be damaged and the warranty will be invalidated.
- You must not fill water above 60 degrees C.
- Only use the power supply unit with 220 volts.
- Ensure that children do not have access to the unit.
- Never put the appliance under water. A damp cloth is sufficient for cleaning. Do not use chemical cleaning agents.
- Never drop the unit.
- Use cold water max. 30° C)
- Do not expose the unit to direct sunlight or temperatures below 0 or above 50 degrees C.
- Do not place the unit in damp or dirty rooms.
- Do not place the unit outdoors
- Do not use the USB-C cable if it is damaged or the cable has been bent.
- Do not place heavy or pointed objects on the mains cable.
- Do not touch any parts connected to the mains with wet fingers.
- Only use water of drinking quality if you want to drink the water afterwards.
- You must **not** use **carbonated water (sparkling water)**. This could cause the appliance to explode.
- Do not open the power supply unit or the base unit and do not attempt any repairs in the event of a defect. In the event of a defect, disconnect the unit from the mains immediately and inform your dealer.
- Do not dispose of the appliance in household waste.



8 - Preparation for operation and charging

1. Place the unit on a dry flat surface.
2. Insert the USB-C plug of the power supply and charging unit into the socket. Before first use, the battery must be fully charged.
3. The LED starts flashing red.
4. Before **first use**, fill the glass container with max. 60o C warm water and let it stand for **at least 2 hours** to moisten the membrane cell completely. Finally, renew the water and shake for about one minute.
5. Then you can fill in the water that you want to enrich with hydrogen and drink. **You should only fill in so much water that the water level does not touch the pressure cap, so that no water penetrates there.**
6. At the end of the charging process, the LED lights up permanently green.
7. Remove the plug from the mains and charging part and close the tab. **The generator must not be operated during the first charging.**
8. If the LED starts flashing during operation, the mains and charging unit must be reconnected until the battery is charged.



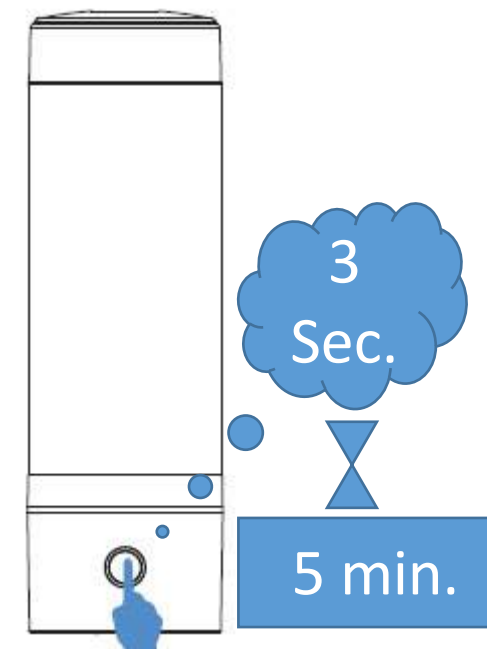
It is normal for there to be some water/moisture in the production tank when the unit is delivered, as the membrane between the electrodes should always be kept moist.

9 - Produce hydrogen water for drinking

Important: the device must be filled with drinking water before you press the start button.

Press the start button for 3 seconds. A beep indicates the start. The light goes on and you can recognize the hydrogen production by the fine rising bubbles. One production process takes 5 minutes.

- If you want to stop a running production, press the start button again for 3 seconds.
- If the light changes to red and flashes, the device should be charged soon. During the charging process, the LED lights up permanently until a green light indicates that the battery is fully charged. Hydrogen water can also be produced at the same time during the charging process.
- Each 5-minute production phase ends automatically with a beep. This can also be seen from the fact that the LED goes out and the formation of bubbles has stopped.
- You are welcome to repeat the production cycle a second time **WITHOUT** opening the lid, if even higher hydrogen values are desired.
- With the H₂ measuring drops available as accessories, you can test which production time you have to set for your target value for hydrogen concentration for the water you are using.

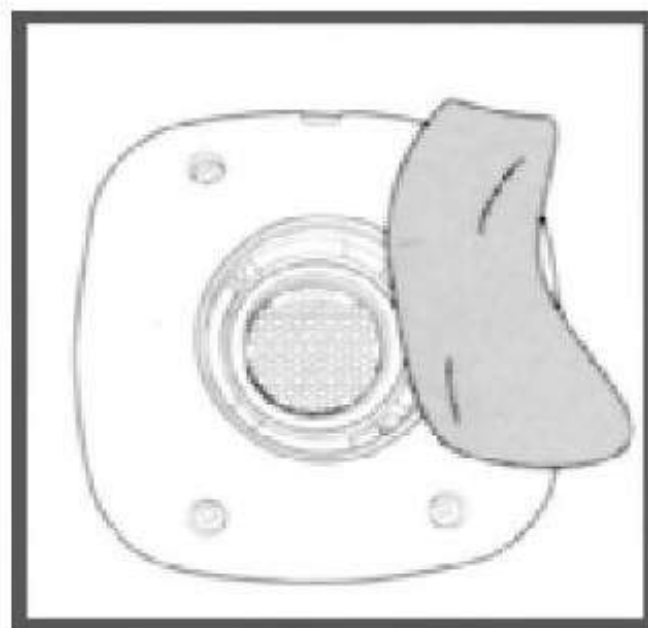


Why better use the standard container with 240 ml content and not screwed-in bottles?

- Because this is an amount that anyone can drink in 10 minutes.
- Remember: hydrogen outgasses quickly!
- Do not produce in advance, but often drink small amounts immediately.

10 - Cleaning / Equipment hygiene / Technical data

- The inside of the glass container and the grid-shaped round minus electrode that produces the hydrogen must be cleaned with 1 teaspoon of citric acid dissolved in lukewarm water if there are visible traces of limescale.
- Close the screw cap and shake vigorously for 30 seconds. Leave the citric acid solution to soak in for 1 hour and then rinse the container with lid and the electrode several times with warm water.
- This cleaning is also **necessary** for hygienic reasons **at least every 2 weeks** or if unpleasant odors are noticeable in the unit. In this case, the water should be approx. 50 - 60 degrees C hot.



- Wipe the exterior of the unit with a damp soft cloth.
- You can also remove coarse soiling by half-filling the pressure vessel with warm water and shaking it vigorously. Then pour away the rinsing water.
- Store the unit at room temperature and out of direct sunlight.

Aquavolta® NANO	Technical data
Weight (empty)	330 g
Voltage/Power	DC 5V / 2A
Power reserve	Approx. 18 applications (5 min.) - fully charged
Charging time	Approx. 90 minutes
Battery operating time	Approx. 90 minutes (water-dependent)
Power supply unit (USB-C)	100 - 240 V, 50/60 Hz. DC 5V, 2 A
Hydrogen power	Water and time dependent. Approx. 0.3ppm/min. Up to 5 mg/l (ppm)
Temperature range	5-40°C

11 - Error Check/Service/Warranty



Problem	Root cause analysis	Solution
Booster does not work (no bubble development)	Battery charged? Foreign body in the pressure vessel?	Connect the power supply unit if necessary Unscrew the production container and cover and clean them separately
LED does not light up	Battery charged?	Load again
Charging does not work	Check plug and cable	If the USB-C cable is defective. substitute.
Leakage	Check the fit and condition of the seals	Adjust seals, otherwise contact your dealer
Battery life is low	Less than 10 production cycles?	Recharge fully 1 hour after charging (green)
Smell in the lid	Unscrew the cover	Treat the lid recess with disinfectant

Your retailer is responsible for and the contact person for warranty services. This applies in particular to promises that exceed the two-year legal warranty. All warranty commitments are therefore listed on your retailer's proof of purchase (invoice).

Manufacturer (general importer and service centre):

Aquacentrum, owner Yasin Akgün

Münchener Str. 4 a

D-85748 Garching near Munich

www.aquacentrum.de

- Aquavolta® is a word trademark protected by the German Patent and Trademark Office and the EUIPO
- Waste electrical equipment register: WEEE reg. No. DE 93599565

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