



Technical Solution

A portable dosing unit or cartridge packaging with gas generating cells from VARTA Microbattery. Small, with fewer components, easy to handle and easy to control. Only a resistor is necessary to activate the gas production (= dosing) without any additional energy source.



Dosing, Packaging, Cosmetics, Flavour & Fragrances, Scent Dispensers

In many of these application fields a dosing of a liquid or viscous material (gels or creams) over a variable time period is required or can have a benefit. In other cases the dosing application needs continuous dosing (no puffs), e.g. for scent dispensers. For packaging applications VARTA's H₂ Cell offers a "power-free" energy reservoir which can be activated at the time of use, can be stopped, can be used intermittently. So a unique customer-binding packaging concept is possible.

Gas generating Cells from VARTA Microbattery

VARTA offers two products which generate typically 130 cc or 260 cc of gas to elevate or dose your liquids or gels.

Characteristics	VARTA H ₂ Cell 1/V 130 H2
Gas Output	130 – 150 ml
Dimensions / Weight	D = 11.55 mm, H = 5.45 mm W = 1.85 g
Capacity Retention	> 90%, after 12 months storage at 20 ° C
Operating Temperature Range	0 ° C up to + 50 ° C (Discharge)
Expandable	300 ml or ½ litre gas etc. (with 2, 3, .. or more cell assembly)

VARTA H₂ Cells – for innovative short-term or long-term dosing / packaging applications

Depending on the resistor the gas output can be controlled. e.g. for short-term use (within minutes) up to long-term use (weeks, months, up to a year). This small, safe and pressure-free gas reservoir, with a volume of only 0.5 ml can provide you with 250 – 300 times higher volume up to 150 ml.

- Small, portable, energy independent system
- Continuously dosing (no puffs) or pulse dosing
- Long term dosing (within minutes up to 12 months)
- Safe energy-, gas-, pressure- storage reservoir
- Easy controllable gas delivery
- Ultrapure hydrogen (99.99 % H₂) level 4.0
- Customer-binding cartridge design gives guaranteed follow-up business
- Operation over a wide temperature range
- Long shelf life
- Economical & handling advantages
- Made in Germany

For more details to our gas generating cells please contact VARTA Microbattery at: <http://www.varta-microbattery.com/top/h2>

* The demonstrator is not a product available from VARTA Microbattery.



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Subject to change without prior notice!