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H2HUBB Official Test Report

Evaluation Introduction

Our report summarizes our analysis of the OCE-6000 PRO Hydrogen Water Bottle offered by the company Ocemida. H2HUBB classifies this device as a high-pressure (psi) H2 water portable system. The device features a PEM/SPE membrane to ensure H2 gas production regardless of source water conductivity (TDS). Its session time-frame or cycle time-frames are 5 minutes and 10 minutes. We evaluated the system's dissolved hydrogen performance at 5-10 minutes. The unit contains a 3.7 V +1400 mAh battery, as stated by the battery specs. Our investigation was to analyze whether the product would meet our H2 product performance standards, which must be achieved to be approved and recommended by H2HUBB. To learn more about our H2 performance standards for hydrogen water bottles, visit **H2HUBB.**

H2 Products

- Company: Ocemida
- Product Name: Professional Hydrogen Water Bottle Generator
- Type: High-Concentration H2 Water Device
  - PEM/SPE
  - Portable hydrogen water generator
  - High-PSI bottle
- Model: OCE-6000 PRO
- URL Link: **https://ocemida.com/**

Method and Procedure

- Distilled water: 6.0 pH (verifies that unit can function with low water conductivity)
- ΔpH (delta pH): Did not increase
- Water Temperature: 65~70°F/ 18~21°C
- Bottle Vol Size: 0.260 L or 260 mL
- Cycle Time Frame:
  - 5-minutes
  - 10-minutes
- Contamination Tests:
  - Chlorine generation (Cl2)
  - Ozone Generation (O3)
- Test Location: 277 meters (909 ft elevation)
- Test Methodology:
  - Titration: H2Blue® Test Reagent
- All Dissolved H2 Concentration Tests Converted to SATP (water temp and pressure)
- Claimed Dissolved H2 mg/L: 4.0-6.0 mg/L (post 5~10 minutes)

Test Results

To perform a dissolved hydrogen gas concentration test on the bottle, we began by filling it with distilled water slightly above the bottom of the threads. We then secured the lid on the bottle and activated the hydrogen water bottle for either the 5-minute setting or the 10-minute setting. All of the dissolved molecular hydrogen concentration tests were conducted using H2Blue. We performed a minimum of eight tests and averaged the results. The results displayed in this report are averages rather than peak concentrations.

H2 Concentration at SATP:

- 5-mins avg mg/L (ppm): ≅ 4.13 mg/L (ppm)
- 10-mins avg mg/L (ppm): ≅ 5.71 mg/L (ppm)

Peak H2 Concentration at SATP:

- 5-mins peak mg/L (ppm): ≅ 4.35 mg/L (ppm)
- 10-mins peak mg/L (ppm): ≅ 5.80 mg/L (ppm)

Avg H2 mg Produced in Designated Vol:

- 5-mins: ≅ 1.07 mg (≡ 13 mL Dissolved)
- 10-mins: ≅ 1.49 mg (≡ 18.08 mL Dissolved)

- **Claimed H2 mg/L (ppm) confirmed:** Yes

H2HUBB Hydrogen Concentration Assessment

- According to our testing, the OCE-6000 PRO Hydrogen Water Bottle exhibits a dissolved molecular hydrogen concentration of 4.13 - 5.71 mg/L (ppm) throughout its cycle durations of 5 to 10 minutes. Based on current scientific literature in human studies, the dissolved hydrogen concentration on the 5-10 minute settings is deemed sufficient to induce therapeutic effects. The bottle surpasses our H2HUBB standards for both **H2 Concentration and Daily Dose of H2**, and we recommend users utilize the 10-minute cycle time for consuming hydrogen water from the device.

Contamination Test:

- Chlorine (Cl2): No detectable levels
- Ozone (O3): No detectable levels

Internal Performance

Manufacturer's Rated Electrical Values: (as stated on the power supply)

- **Type of device/electrolytic cell**
  - Pure H2: PEM/SPE membrane
- **Applied volts:**
  - 3.7 volts
- **Total Amps:**
  - 1400 mAh (1.4 amps)
- **Total watts:**
  - 5.18 Wh (watts)

- **Electrolysis volts:**
  - 3.0 volts
- **Electrolysis amps:**
  - 1.0 amps
- **Total watts:**
  - 3.0 watts

H2 Production vs. Dissolved Hydrogen:

- **Theoretical Max H2 production:**
  - 7.61 mL/min or 0.63 mg/min
- **Theoretical Max Dissolved H2 Level**
  - 5-mins: ≅ 12.05 mg/L (ppm)
  - 10-mins: ≅ 24.11 mg/L (ppm)
- **Measured Dissolved H2 reading:**
  - 5-mins: ≅ 4.13 mg/L (ppm)
  - 10-mins: ≅ 5.71 mg/L (ppm)
- **Percentage of Max H2 Dissolved (as measured):**
  - 5-mins: ≅ 34.26% dissolved
  - 10-mins: ≅ 23.64% dissolved
- **Percentage of Max H2 Undissolved (loss):**
  - 5-mins: ≅ 65.74% undissolved
  - 10-mins: ≅ 76.36% undissolved

Product Assessment

Functionality:

- Power on/off button
  - Located on the H2 generator.
  - Press the power button to initiate electrolysis for hydrogen gas production and initiate a 5-minute session, then shuts off.
  - Press the power button twice to initiate a 10-minute session time then shuts off.
- USB-C charging port
  - Located on the backside of the device.
- Anode reservoir off-gas port
  - Pin-hole located on the bottom of the bottle.

Reliability:

- New: Yes
  - Initial test results and evaluation are currently on the report. (see Overall Opinion)

Cost:

- Professional Hydrogen Water Bottle Generator: $249.00 USD
- H2 Hubb discount: TBA
- H2 Hubb recommendation cost: TBA

Overall Opinion

The Ocemida OCE-6000 PRO Hydrogen Water Bottle is a well-engineered portable hydrogen water unit. Our evaluation found that the device produced approximately 5.71 mg/L (ppm) of dissolved H2 in 260 mL of water during a 10-minute session, resulting in 1.49 mg of H2 (≡ 18.08 mL) dissolved in the bottle. The total mass of hydrogen gas (in milligrams) dissolved by the bottle within 10 minutes falls within the acceptable range for a portable H2 water generator (>0.4 mg). Additionally, the milligram dosage of H2 after the 10-minute cycle time exceeds H2HUBB's daily standard of 0.8 mg of H2 per day with just one bottle, putting it on par with some of the best-performing hydrogen water bottles we have tested and currently recommend.

Dissolved hydrogen concentration (mg/L (ppm)) is a critical performance metric, as research suggests that 1-3 mg of H2 or more per day appears to be therapeutic for humans. Furthermore, the **IHSA** standard for this type of product is a minimum of 0.5 mg/serving or 0.5 mg/L. H2HUBB's performance standard for hydrogen water devices is slightly higher than IHSA, as we require the device to provide a concentration of 0.8 mg/L (ppm) and 0.8 mg/day consistently. The Ocemida OCE-6000 PRO Hydrogen Water Bottle surpassed H2HUBB standards for both **H2 Concentration and Daily Dose of H2**. Based on current research data, we believe the device's mg/L (ppm) performance provides adequate levels of hydrogen gas to induce therapeutic effects in humans. **According to our test results, the product will be featured on our website as a Level 3 hydrogen water device**. You can view the meaning of this rankings **here**. We are pleased with the device's dissolved hydrogen concentration.

The device came very close to achieving Level 4 status on our H2 performance levels but fell short by just 0.2-0.3 mg/L (ppm). We conducted additional tests to see if the bottle could reach a hydrogen concentration of 6.0 mg/L (ppm), but the highest recorded peak was 5.8 mg/L (ppm), with an average of 5.71 mg/L (ppm). As a result, the bottle was awarded Level 3 status, which is still an exceptional achievement for a hydrogen water bottle.

Overall, the Ocemida OCE-6000 PRO hydrogen water bottle is aesthetically appealing, engineered with high-quality materials, and effectively dissolves a therapeutic concentration of hydrogen gas into its 260 mL capacity. The validity of the manufacturer's claims regarding the bottle's hydrogen gas performance is not in question and the device's performance aligns closely with the product's marketing materials. We have no safety concerns with the system, as it appears to have implemented sufficient safety measures and effectively prevents the production of chlorine and ozone in the drinking water. We are generally pleased with the performance of the device. The OCE-6000 PRO Hydrogen Water device performed above our minimum performance standards and, in the opinion of H2HUBB, the system appears to be safe and suitable for in-home H2 Water Therapy.

We desire to move forward with recommending the product to the public.

Approved By: Tywon Hubbard

Tywon Hubbard

CEO, H2HUBB LLC