

RUHENS

Rest assured.

RUHENS ELECTROLYZED WATER GENERATOR_WCE-200

manufactured with proven technical skills.





RUHENS ELECTROLYZED WATER GENERATOR

Human Coronavirus (OC-43) Test

TESTING CERTIFICATE

NOROGENE CORP.
#2042, 2F, Annex, Seoul St.Mary's Hospital,
Catholic University of Korea, Banpo-dong, Seocho-gu,
Seoul, Korea TEL.: +82-2-2258-7345

Certificate No. : 2020-0171
Page(1) / (1) Pages The end.




- Recipient: WONBONG
- Title: WCE-200
- Test Conditions
 - 1) Microorganism: Human Coronavirus (OC-43)
 - 2) Stock Concentration: $>4.4 \times 10^5$ PFU/ml
 - 3) Running Solution: 1.0 g NaCl/1.0L sterile dis
 - 4) Running Time (min): 5
 - 5) Test Product: 1:1 reaction of Running Solution and Virus Solution

Condition Time(min)	Quantity(PFU/ml)		Reduction(%)
	Before treatment	After treatment	
10	4.40×10^5	3.33×10^0	≥ 99.99

Drafter(position) Yu-Jung Wong (researcher) Reviewer(position) Ah-Ra Lee (researcher)
Approver(position) Soon-Young Paik (president) Implementation Research
Supporting Division 200623/2020.06.23

1. The results shown in this test report refer only to the offered sample by client.
2. The microorganism of this test, Human Coronavirus (OC-43) is a species of coronavirus which has the same origin as Corona Virus Disease 19 (Covid-19).

2020. 6. 23

NOROGENE CORP. President Soon-Young Paik 

Certificate No. : 2020-0171

NOROGENE CORP.

Condition Time(min)	Quantity(PFU/ml)		Reduction(%)
	Before treatment	After treatment	
10	4.40×10^5	3.33×10^0	≥ 99.99

- The test indicates that RUHENS electrolyzed water removed Human Coronavirus (OC43) by 99.99% which has the same origin as Corona Virus Disease 19 (Covid 19).



RUHENS ELECTROLYZED WATER GENERATOR

[Check Point](#)



Microbubble technology with the triple deodorizing, cleaning and sterilization function

Chemical free product that can remove 99.9% of harmful bacteria



Mega mesh triple layered electrodes

With the triple layered mega-size electrode, it can generate highly efficient electrolyzed water



Tritan material

Eco-friendly material that has a clarity, toughness, heat resistant, Chemical resistant and BPA free



RUHENS ELECTROLYZED WATER GENERATOR

[Check Point](#)



3 different operating settings are possible

Deodorizing (LOW)
Cleaning (MID)
Sterilizing (HIGH)



Smart control technology

Turns off the power automatically when the electrolyzed water reaches a concentration 200 ppm



High-capacity electrolyzed water

450ml spray enables you to generate a large capacity of electrolyzed water



ELECTROLYZED WATER GENERATOR

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How to make the "electrolyzed water"

RUHENS ELECTROLYZED WATER GENERATOR

- ① Deodorizing effect that removes fish smells, food waste and pet odors.
- ② Cleaning effect that removes pesticide components such as diazinon.
- ③ Sterilizing effect that gets rid of bacteria such as Escherichia, Salmonella, and Pseudomonas aeruginosa.

What is "Electrolyzed Water" ?

Electrolyzed water is produced by the electrolysis of ordinary tap water containing dissolved sodium chloride. It can be used for deodorization, cleaning, and sterilization of homes, hospitals, schools, vehicles, and gyms.



* It generates hypochlorous acid (HClO) through the electrolysis of water decomposing into oxygen and hydrogen.

3 levels of settings available to choose from

The mode('LOW'/'MID'/'HIGH') can be changed by single touch of 'POWER' button. More powerful electrolyzed water can be made by adding one teaspoon of refined salt.



Concentration of the electrolyzed water

Mode	Tap Water	Tap Water+Salt
Deodorizing	2~3ppm	20~50ppm
Cleaning	5~8ppm	60~120ppm
Sterilizing	9~13ppm	140~190ppm

Deodorization Test

KCL

TEST REPORT

1. NO : CT20-014100E

2. Client

○ Name : RUHENS CO., LTD

○ Address : 77, Wapikjeong 6-ro, Gangseo-gu, Seoul, Korea

3. Date of Test : 2020.01.30 ~ 2020.02.18

4. Use of Report : Quality control

5. Test Sample : K20-050210 (electrolyzed water)

6. Test Method

(1) Provided by client

7. Test Results

1.1 K20-050210 (electrolyzed water)

Test Item	Unit	Result	Test Results	Remarks	Unit
Deodorization test	%	(1)	Attached page	DEA 9.8% (1)	%

8. Conclusion

A : K20-050210 (electrolyzed water) : Satisfactory

2020.02.18

Korea Conformity Laboratories President Yoon, Kap Seok

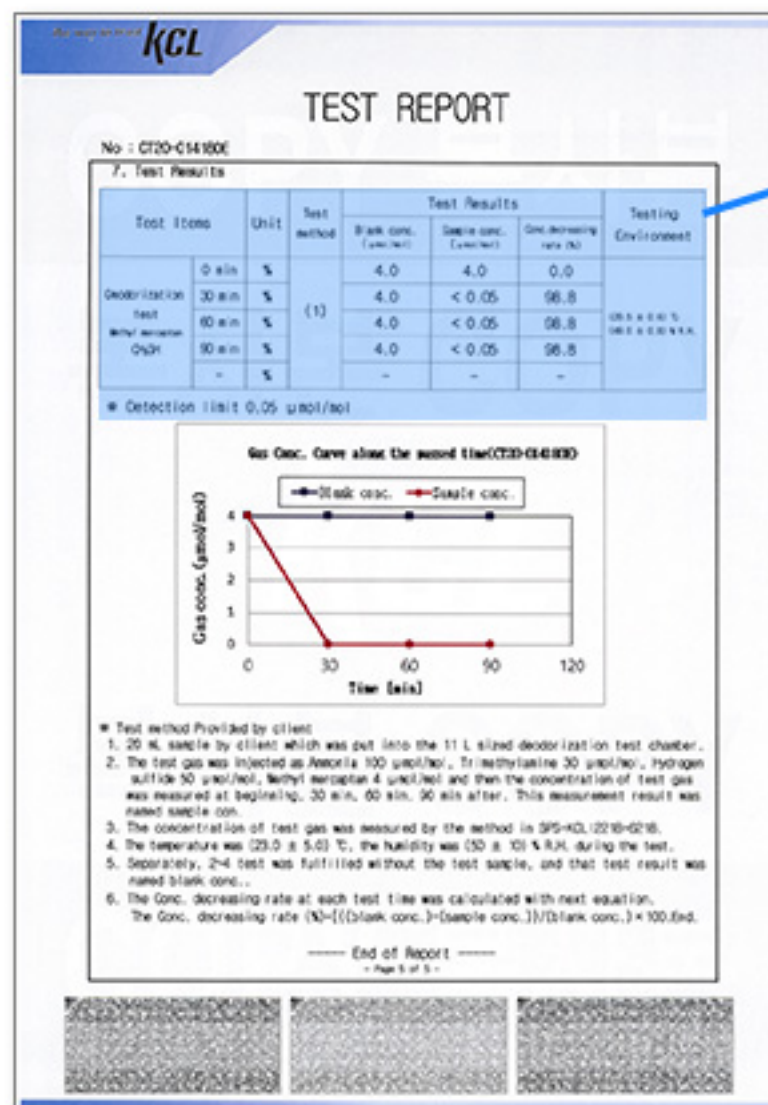
2020.02.18

2020.02.18

2020.02.18

Test Item

- **Ammonia** (toilet odor)
- **Trimethylamine** (fish smell)
- **Hydrogen sulfide** (food waste smell)
- **Methyl mercaptan** (pets smell)



Test Items	Unit	Test method	Test Results			Testing Environment
			Blank conc. (μmol/mol)	Sample conc. (μmol/mol)	Conc. decreasing rate (%)	
Deodorization test Methyl mercaptan CH ₃ SH	0 min	(1)	4.0	4.0	0.0	(20.5 ± 0.6) °C (49.0 ± 0.8) % R.H.
	30 min		4.0	< 0.05	98.8	
	60 min		4.0	< 0.05	98.8	
	90 min		4.0	< 0.05	98.8	
	—		—	—	—	

※ Detection limit 0.05 μmol/mol

- Deodorization test indicates that after 30 minutes, RUHENS electrolyzed water decreased the odor by 98.8%.

Detergency Test

TESTING CERTIFICATE

Korea Environment & Water Works Institute <small>28, Yanggyung-ro 28a-gil, Yeongdeungpo-gu, Seoul, 07201, Korea Tel : +82-2-2637-1234 Fax : +82-2-2631-8767</small>		Certificate No. : ID-200083 C Page(1) / (1)Pages The end.
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1. Client Name : WONBONG CO., LTD
 Address : 77, Magokjungang 8-ro, Gangseo-gu, Seoul

2. Sample Description : WCE-200/210

3. Use of Report : Quality Management

4. Sample Classification : the offered sample by client

5. Date of Test : Feb. 5, 2020. ~ Feb. 6, 2020.

6. Location of Test : ☒ Permanent Testing Lab (28, Yanggyung-ro 28a-gil, Yeongdeungpo-gu, Seoul, Korea)
☐ On Site Testing

7. Test method used : Korean Standard Test Method for Water pollution (NE. NO. 2018-66)

8. Testing Environment : Temperature : (Lowest 21 °C, Highest 23 °C), Humidity : (Lowest 15 % RH, Highest 25 % RH)

9. Test Results

Sample Name	The synthetic water	Result (mg/L)				Remark
		After 10 minutes (Test group)	Removal Rate (%)	After 10 minutes (Control group)	Removal Rate (%)	
Diazinon	0.058 2	Not Detected	100	0.004 5	92	-

Affirmation Tested by Name Kim Sunho _____ Technical Manager Name Song Minhyung _____

1. The results shown in this test report refer only to the offered sample by client.
 2. The test report cannot be used for the purpose of litigation or advertising, and shouldn't be republished without document approval.
 • These test results are in the scope of KS Q ISO/IEC 17025 and part of the KOLAS accreditation ☐ Yes ☒ No.

Korea Environment & Water Works Institute

KEWI-QP-15-F04C(0) Korea Environment & Water Works Institute

Test Item

- Diazinon (pesticide)

Sample Name	The synthetic water	Result (mg/L)				Remark
		After 10 minutes (Test group)	Removal Rate (%)	After 10 minutes (Control group)	Removal Rate (%)	
Diazinon	0.058 2	Not Detected	100	0.004 5	92	-

- Detergency test indicates that after 10 minutes, RUHENS electrolyzed water 100% removed Diazinon.

Sterilization Test

Test Item

- **E. coli** (causing diarrhea, cystitis, pyelitis, peritonitis and septicemia)
- **Staphylococcus aureus** (causing food poisoning, purulent inflammation, otitis media and cystitis)
- **Salmonella** (causing stomachache, diarrhea, chill, fever, vomiting, and food poisoning)
- **Pseudomonas aeruginosa** (causing cystitis, otitis media and empyema)

TESTING CERTIFICATE

Korea Environment & Water Works Institute <small>29, Yangpyung-ro 28a-gil, Yeongdeungpo-gu, Seoul, 07201, Korea Tel : +82-2-2637-1234 Fax : +82-2-2631-8767</small>		Certificate No. : ID-200054 Page(1) / (1)Pages The end.	
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1. Client Name : WONBONG CO., LTD
 Address : 77, Magokjungang 8-ro, Gangseo-gu, Seoul
 2. Sample Description : WCE-200/210
 3. Use of Report : Quality Management
 4. Sample Classification : the offered sample by client
 5. Date of Test : Jan. 29, 2020. ~ Feb. 5, 2020.
 6. Location of Test : ☒ Permanent Testing Lab (29, Yangpyung-ro 28a-gil, Yeongdeungpo-gu, Seoul, Korea)
 ☐ On Site Testing
 7. Test method used : Pour Plate Method
 8. Testing Environment : Temperature : (35 ± 0.5) °C, Relative Humidity : (51 ± 5) % R.H.
 9. Test Results

Test Item	Unit	Result		Remark
		Control group Conc.	Test group Conc.	
<i>Escherichia coli</i>	CFU/mL	5.4 × 10 ⁴	0 (100 %)	-
<i>Staphylococcus aureus</i>	CFU/mL	8.7 × 10 ⁴	0 (100 %)	-
<i>Salmonella</i>	CFU/mL	9.2 × 10 ⁴	0 (100 %)	-
<i>Pseudomonas aeruginosa</i>	CFU/mL	6.8 × 10 ⁴	0 (100 %)	-

Affirmation Tested by Name Lee Jun Suk Technical Manager Name Song Minhyung

1. The results shown in this test report refer only to the offered sample by client.
 2. The test report cannot be used for the purpose of litigation or advertising, and shouldn't be republished without document approval.
 • These test results are in the scope of KS Q ISO/IEC 17025 and part of the KOLAS accreditation ☐ Yes, ☐ No.

KEWI-QP-15-F04C(0) Korea Environment & Water Works Institute

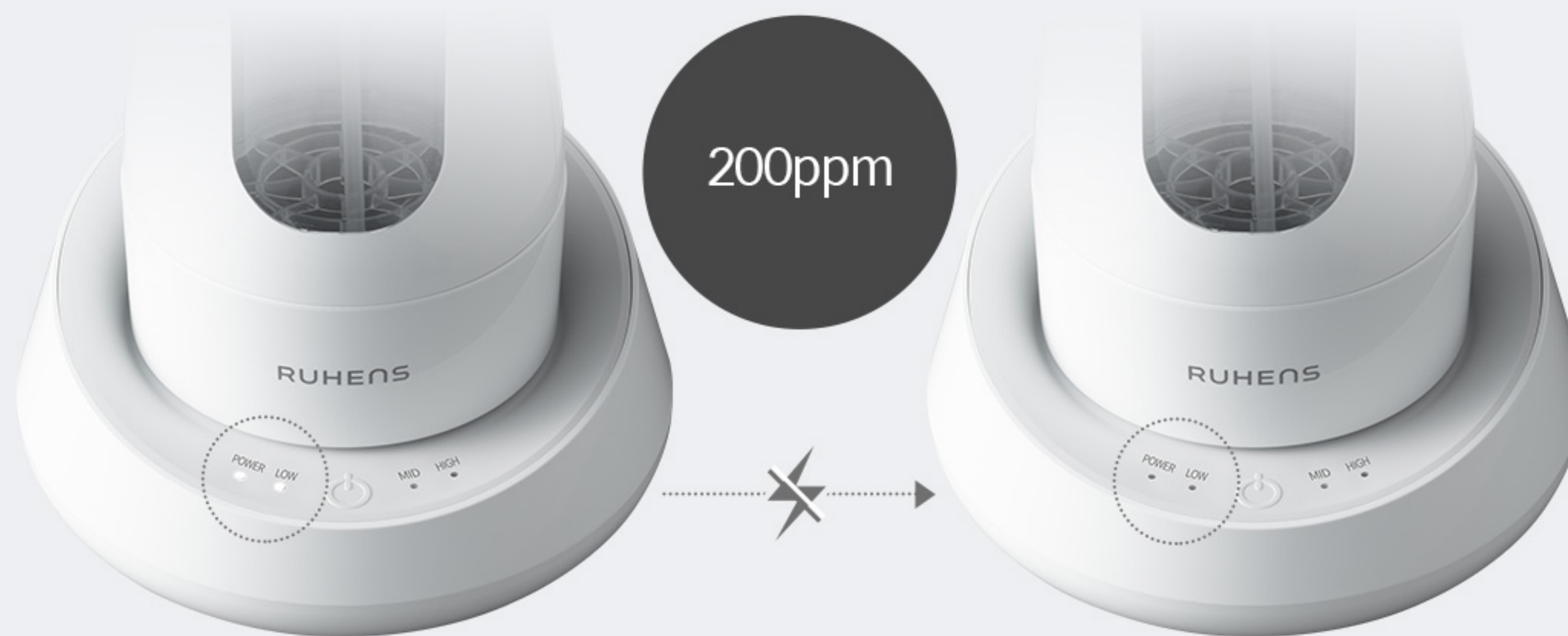
Test Item	Unit	Result		Remark
		Control group Conc.	Test group Conc.	
<i>Escherichia coli</i>	CFU/mL	5.4 × 10 ⁴	0 (100 %)	-
<i>Staphylococcus aureus</i>	CFU/mL	8.7 × 10 ⁴	0 (100 %)	-
<i>Salmonella</i>	CFU/mL	9.2 × 10 ⁴	0 (100 %)	-
<i>Pseudomonas aeruginosa</i>	CFU/mL	6.8 × 10 ⁴	0 (100 %)	-

- Sterilization test indicates that RUHENS electrolyzed water 100% removed four kinds of genral germ.

Smart Control Technology

To prevent the generation of high-density electrolyzed water, the over-current detection control system is adapted to ensure the generation of safe electrolyzed water at all times.

In order to maintain the safe level of sterilized water concentration, it automatically turns off the power when the electrolyzed water reached a concentration 200 ppm.



Fine mist injection sprayer

Semi-automatic spray makes it easier to use and the fine mist from the spray makes it more effective at deodorizing, cleaning and sterilizing.





Convenient and hygienic structure

The electrode module can be easily disassembled to allow for easy cleaning of the spray bottle.



User Instruction



STEP 01

Fill the spray bottle with 450ml of tap water.



STEP 02

If you wish to add salt, please ensure you use the correct amount per spray bottle.



STEP 03

Shake the spray bottle to dissolve the salt and assemble.



STEP 04

Put the assembled spray bottle on the base.



STEP 05

Touch the Power button to select the desired mode.
※ The process of generating electrolyzed water starts within 3 seconds after selecting the mode.



STEP 06

Spray the electrolyzed water after the process of generating the electrolyzed water is over.



ELECTROLYZED WATER GENERATOR

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Suggested Use In

01



For a baby

Feeding bottle, fabric doll,
plastic toy

After spraying, wash and
rinse under running water
or wipe it off with a dry cloth.

02



For a pet

Cushion, pet toilet pads,
dog bed, toy

After spraying, wash and
rinse under running water
or wipe it off with a dry cloth.

03



For single-person

Coat, jacket, laptop

For leather goods, it may cause
discoloration and deformation
when it is sprayed and left
for a long period of time.

04



For housework

Washing machine, appliances,
sofa, kitchen, bathroom

For leather goods, it may cause
discoloration and deformation
when it is sprayed and left
for a long period of time.

※ Do not spray directly onto face



You can enjoy outdoor activities more safely, with RUHENS ELECTROLYZED WATER GENERATOR

Keep you and your family safe from invisible virus exposure
when you play outdoors.



Prepare dry cloth or tissues with
the electrolyzed water generated.



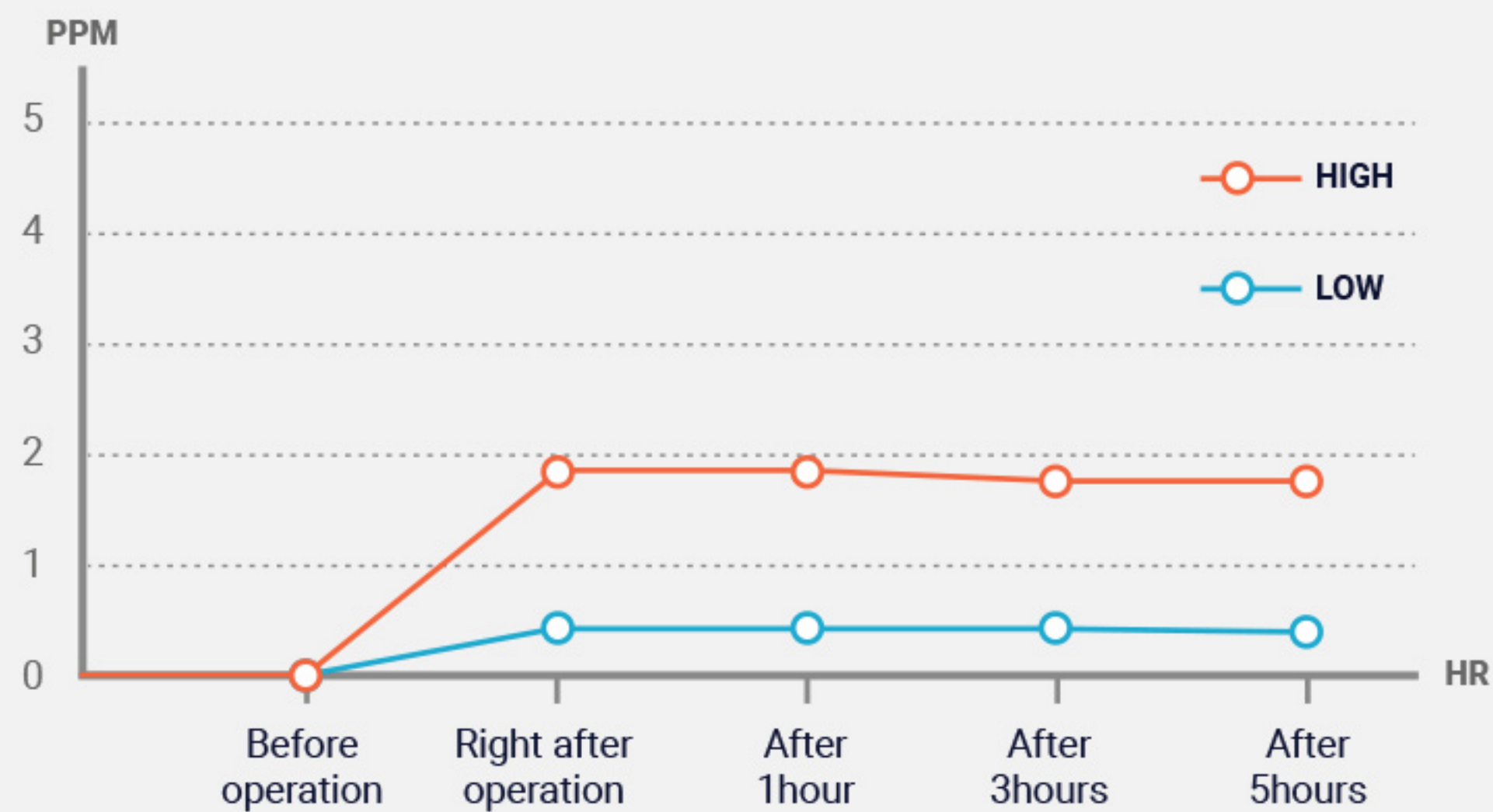
Wet the dry cloth or tissues with
electrolyzed water and take it
with you when you go out.

How long does **electrolyzed water** last at room temperature?

RUHENS ELECTROLYZED WATER can last from 5 hours to 3 days.
You can keep it in empty bottle and take it out with you.

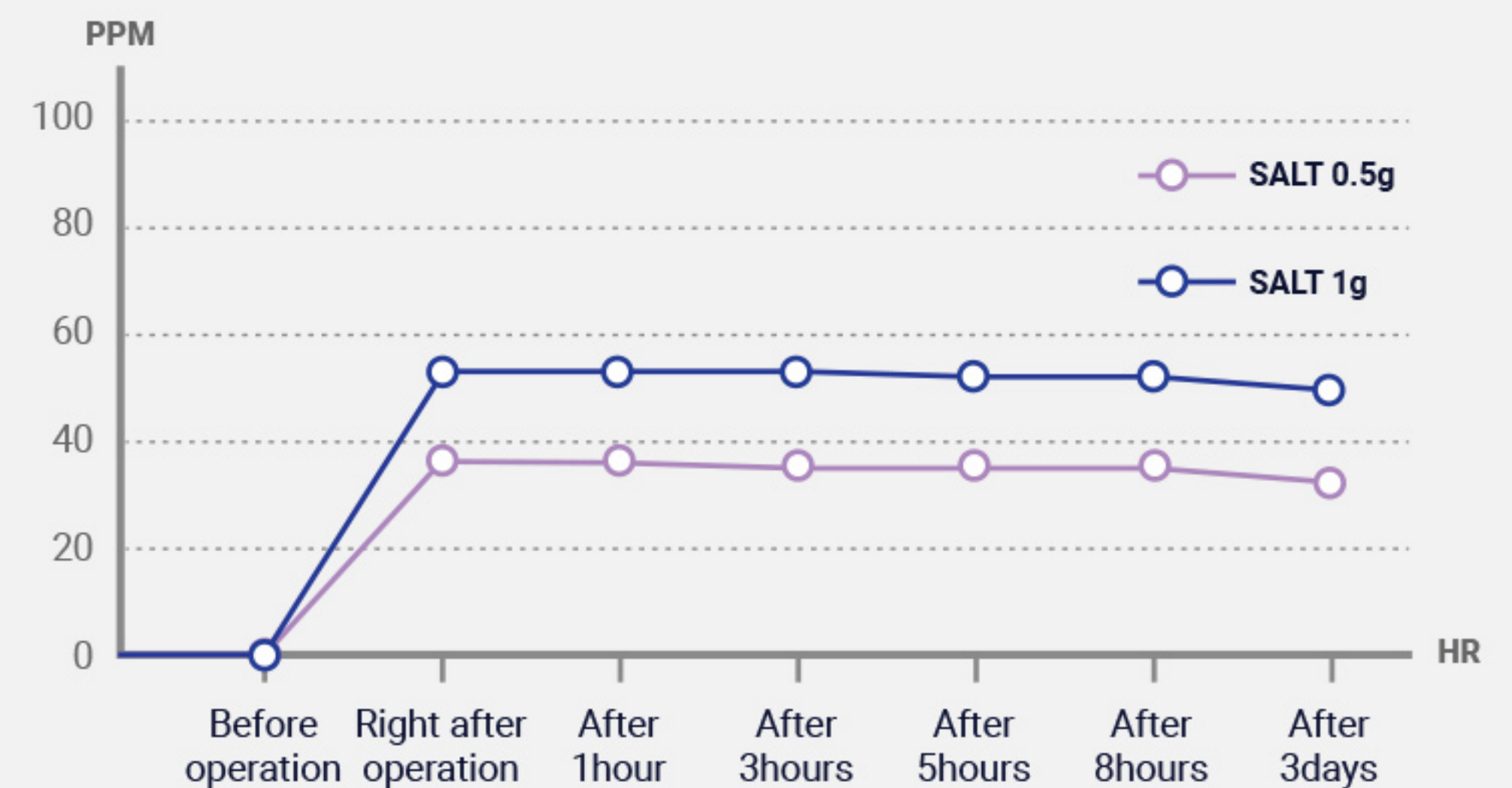
Tap water 1ℓ

	Before operation	Right after operation	After 1hour	After 3hours	After 5hours
LOW	0.01ppm	0.4ppm	0.4ppm	0.4ppm	0.36ppm
HIGH	0.01ppm	1.92ppm	1.92ppm	1.80ppm	1.80ppm



Tap Water 1ℓ + Salt

	Before operation	Right after operation	After 1hour	After 3hours	After 5hours	After 8hours	After 3days
SALT 0.5g	0.01ppm	38ppm	38ppm	36ppm	36ppm	36ppm	32ppm
SALT 1g	0.02ppm	55ppm	55ppm	55ppm	53ppm	53ppm	50ppm



ELECTROLYZED WATER GENERATOR



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Sold separately

PITCHER BOTTLE

for RUHENS ELECTROLYZED WATER GENERATOR



Tritan materials

Tritan, light and transparent materials, but not to be deformed or break easily.



Extended structure

Wider outlet and extended internal structure for easy and clean use.



Integrated handle

The integrated handle reducing the burden on the user's arms and wrists.



RUHENS ELECTROLYZED WATER GENERATOR

Product composition





Product Specification

Product Name	Electrolyzed Water Generator	
Model no.	WCE-200	WCE-210
Rated Power	100V~240V 50Hz, 60Hz	
DC Output	9V/3A	
Dimensions(W x D x H)	BASE : 137(W) x 137(D) x 67(H) mm SPRAY BOTTLE : 90(W) x 90(D) x 275(H) mm	PITCHER BOTTLE : 115(W) * 175(D) * 238(H) mm
Weight	BASE : 210g SPRAY BOTTLE : 285g	PITCHER BOTTLE : 471g
Capacity	450mL	1.25L
Material	BASE : TRITAN(PCT), ABS, TRANSPARENT ABS, SILICONE SPRAY BOTTLE : TRITAN(PCT), ABS	PITCHER : TRITAN(PCT), ABS

FDA
Registered



RUHENS Electrolyzed Water Generator
passed the standard for
FDA registration (medical device).

CE
Certification



RUHENS Electrolyzed Water Generator
has **CE certification** that
meets EU safety, health and
environmental protection requirements.

ETL
Certification



RUHENS Electrolyzed Water Generator
passed the standard for
ETL Certification.