




Product Information

Test Report – COVID-19



KR BIOTECH

KR Biotech Co., Ltd.
Institute of Infectious Disease Control
(BSL3 No. KCDC-09-3-01)

Neungdong-ro 120, Konkuk university
Bld#12, Rm 406, Kwangjin-gu, Seoul

Test Report

Personnel Dustin

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Test Virus	COVID-19 (SARS-CoV-2)	Cell Line	Vero E6
Test No.	KR-2006-014-ECW02-C	Test Period	2020.06.13-06.26
Sample State	Liquid: Colorless, transparent	Sample Concentration	Stock solution
Reaction Time	30 sec, 1 min, 5 min	Titration	CPE
Test Temperature	Room Temperature (Approx. 20°C)	Tester	Hansam Cho <i>W</i>

Test Result

Product Name	Virus Titer TCID ₅₀	Treatment time	Virus Reduction Rate	
			(log)	(%)
HOMEGUARD (EEH-E11111)	3.16x10 ⁶	30 sec	≥ 3.50	99.97%
	3.16x10 ⁶	1 min	≥ 3.75	99.98%
	3.16x10 ⁶	5 min	≥ 4.00	99.99%

Result: HOMEGUARD (EEH-E11111) used in the test showed 99.97% of virucidal effect after 30 seconds of sample treatment on COVID-19 (SARS-CoV-2).

KR Biotech Co., Ltd. 

* This test report is a result limited to the sample and sample name provided by the client and does not guarantee the quality on the overall product.
* This report cannot be used for PR, advertising and litigation purposes, and use of this report other for its original purpose is prohibited.

For the first time, we have obtained the test report for the proof of efficacy to COVID-19 (SARS-CoV-2). The laboratory that issued this report is specialized in virus inactivation and certified as an excellent laboratory for safety management by the Ministry of Science and ICT of the Republic of Korea.

The test for COVID-19 conducted by the laboratory above used electrolyzed water generated by Homeguard and confirmed that the novel coronavirus is inactivated by 99.9% or more within 30 seconds of contact.

As a representative brand of Electrolyzed Water Maker, Ecowell is focusing on research and development with engineers at its R&D center, feeling a sense of responsibility and mission. In addition, we continue to study how electrolyzed water makers can be used safely by anyone, not just for convenience.

WHO Guideline to cope with COVID-19

Sodium Hypochlorite is the best solution to repel coronavirus!

Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected

Interim guidance
25 January 2020

World Health Organization

WHOQ119-nCoV IPCv2020.2

Introduction

This is the first edition of guidance on infection prevention and control (IPC) strategies for use when infection with a novel coronavirus (2019-nCoV) is suspected. It has been adapted from WHO's infection prevention and control during health care for probable or confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection,¹ based on current knowledge of the situation in China and other countries where cases were identified and experiences with severe acute respiratory syndrome (SARS)-CoV and MERS-CoV.²

WHO will update these recommendations as new information becomes available.

This guidance is intended for healthcare workers (HCWs), healthcare managers and IPC teams at the facility level but it is also relevant for the national and district/provincial level. Full guidelines are available from WHO.³

Principles of IPC strategies associated with health care for suspected nCoV infection

To achieve the highest level of effectiveness in the response to an nCoV outbreak using the strategies and practices recommended in this document, an IPC programme with a dedicated and trained team or at least an IPC focal point should be in place and supported by the national and facility sector management.⁴ In countries where IPC is limited or incipient, it is critical to start by ensuring that at least minimum requirements for IPC are in place as soon as possible, both at the national and facility level, and to gradually progress to the full achievement of all requirements of the IPC care components according to local priority plans.⁵

IPC strategies to prevent or limit transmission in healthcare settings include the following:

1. ensuring triage, early recognition, and source control (isolating patients with suspected nCoV infection);
2. applying standard precautions for all patients;
3. implementing explicit additional precautions (droplet and contact and, whenever applicable, airborne precautions) for suspected cases of nCoV infection;
4. implementing administrative controls;
5. using environmental and engineering controls.

Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected Interim guidance

- alcohol-based hand rubs are preferred if hands are not visibly soiled;
- wash hands with soap and water when they are visibly soiled.

The relevant, correct, and consistent use of PPE also helps to reduce the spread of pathogens. The use of PPE effectiveness strongly depends on adequate and regular supplies, adequate staff training, appropriate hand hygiene and specifically appropriate human behaviour.^{1,2,6}

It is important to ensure that environmental cleaning and disinfection procedures are followed consistently and correctly. Thoroughly cleaning environmental surfaces with water and detergent and applying commonly used hospital-level disinfectants (such as sodium hypochlorite) are effective and sufficient procedures.⁷ Medical devices and equipment, laundry, food service utensils and medical waste should be managed in accordance with safe routine procedures.^{1,4}

3. Implementing explicit additional precautions
 - 3.1 Contact and droplet precautions
 - in addition to using standard precautions, all individuals, including family members, visitors and HCWs, should use contact and droplet precautions before entering the room where suspected or confirmed nCoV patients are admitted;
 - patients should be placed in adequately ventilated single rooms. For general ward rooms with natural ventilation, adequate ventilation is considered to be 60 L/s per patient.⁸
 - 3.2 Airborne precautions for aerosol-generating procedures
 - Some aerosol-generating procedures have been

신종 코로나바이러스(nCoV) 감염 예방 관련 가이드라인 중 발췌

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Approval – Medical Equipment for Animals

제 267 - 001 호

동물용의약품등 제조 수입 품목 허가증

1. 업 체 명 : (주)에코웰

2. 업 종 : 동물용의약품등 제조업

3. 제 품 명 : 의료용살균소독수생성장치(VSP-A62 외 5건)[2]

4. 구 분 : 동물용의료기기

5. 허 가 조 건 : _

6. 허가번호 : 제 267 - 001 호


7. 최초 허가 연 월 일 : 2020.06.08

8. 부 표 : 별 첨

동물용의약품등취급규칙 제 11 조 및 제 16 조 제 4 항 따라 위와 같이 허가 (조건부허가)합니다.

2020 년 06 월 08 일

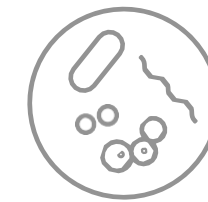
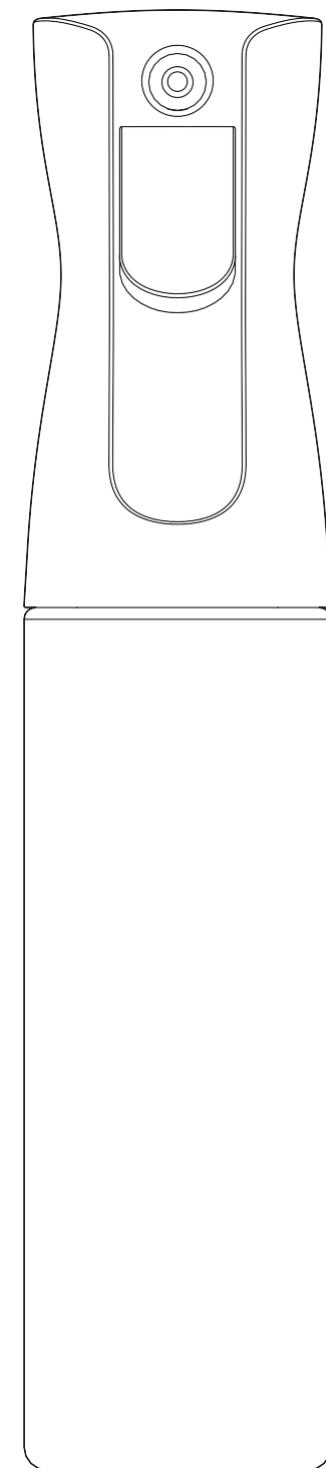
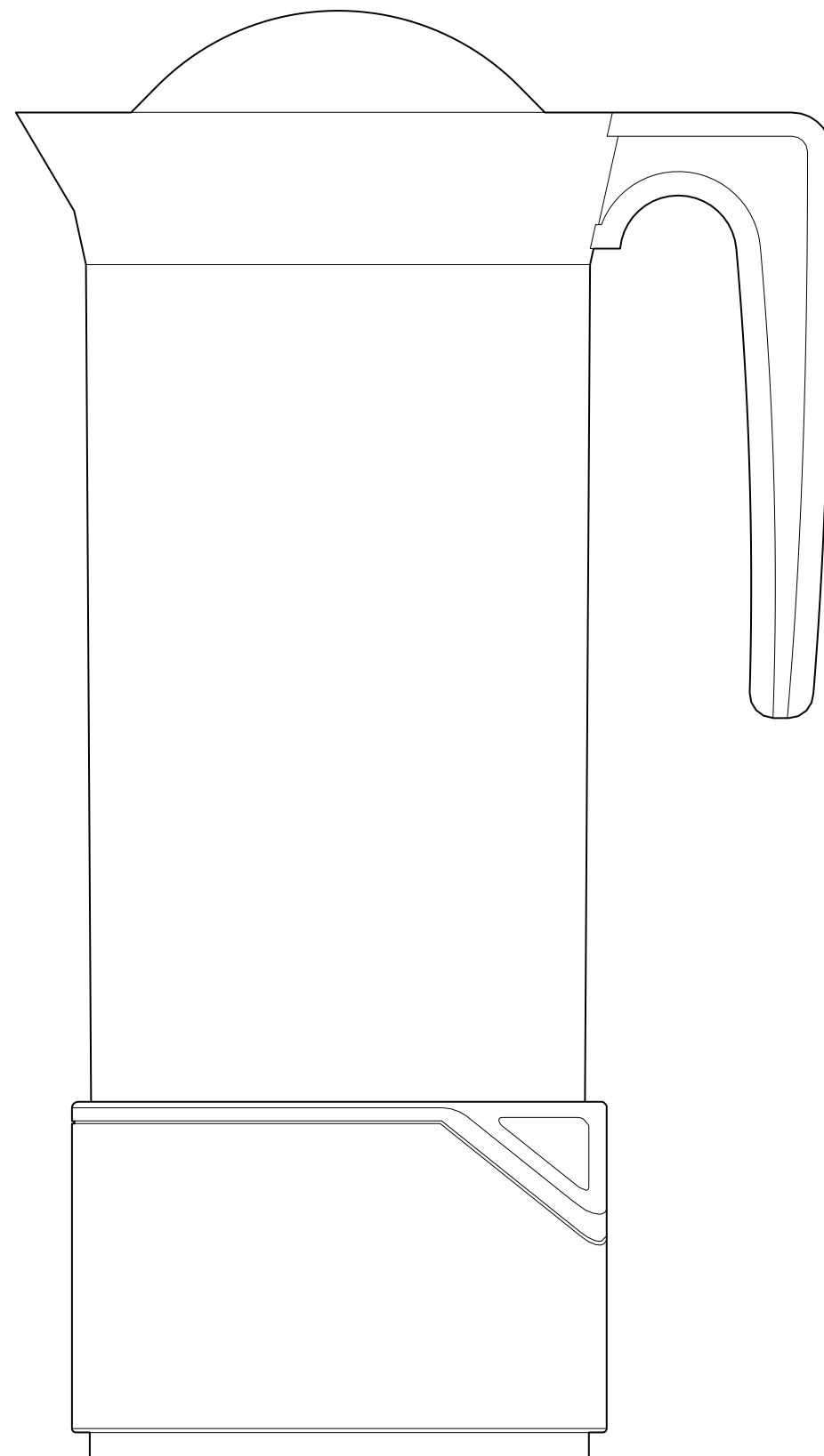
농림축산검역본부장



Approval
to manufacture
medical equipment
for animals

Our R&D Center have passed rigorous verification procedures and obtained the approval of medical device for animals by the government of Korea.

Check Point



Sterilization & Deodorization

Fast and strongly + Over 99%



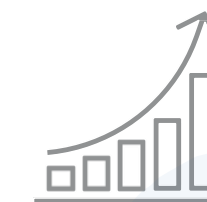
Safety

Sterilization with no worries



Technology

R&D Center with doctors and masters
Various patents and unitality models

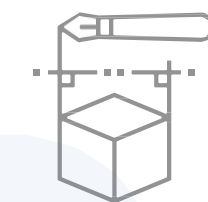


Convenience

Less effort in maintenance

Economical

The long use, the less cost



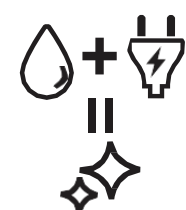
Excellent Design

Fits anywhere you live

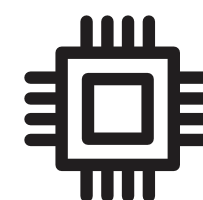
99%

Features

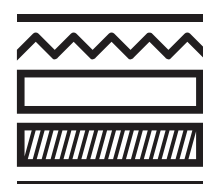
Homeguard generates electrolyzed water to sterilize and deodorize



Generating strong, safe sterilizing, deodorizing water using electrolysis technology with tap water



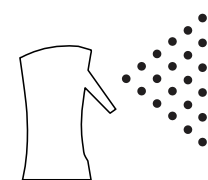
Securing safety based on the K-FDA regulation by prevention of generating over 200 ppm with SCC (Smart Current Control) technology



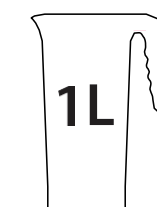
Quick operation & low voltage by TLE (Triple Layered Electrodes) by patented technology



Passed the test of skin irritation, eye irritation, and oral dose toxicity



Convenience & Usability by Semi-Auto spray



Generating sterilizing water of high-capacity by the pitcher of Homeguard

Intellectual Properties

특허증
CERTIFICATE OF PATENT

특허 제 10-0741741 호
Patent Number

출원번호 제 10-2005-0013419 호
Application Number

출원일 2005년 02월 18일
Filing Date

등록일 2007년 07월 16일
Registration Date

발명의 명칭 Title of the Invention
수동 리프트의 수동 리프트의 발생장치

특허권자 Patentee
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

발명자 Inventor
김희우(811228-*****)
서울특별시 강서구 화곡로 296, 강서아이파크 101-506 (화곡동)

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-0976086 호
Patent Number

출원번호 제 10-2009-0123595 호
Application Number

출원일 2009년 12월 11일
Filing Date

등록일 2010년 08월 10일
Registration Date

발명의 명칭 Title of the Invention
수동 리프트의 발생장치용 권취 구조물

특허권자 Patentee
주식회사 에코웰(11011-*****)
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특허증
CERTIFICATE OF PATENT

특허 제 10-0770628 호
Patent Number

출원번호 제 10-2007-0040140 호
Application Number

출원일 2007년 04월 25일
Filing Date

등록일 2010년 10월 22일
Registration Date

발명의 명칭 Title of the Invention
자동 리프트의 발생장치용 구비한 세척 및 살균기

특허권자 Patentee
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서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

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2016년 03월 03일
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KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-1362966 호
Patent Number

출원번호 제 10-2011-0114047 호
Application Number

출원일 2011년 11월 03일
Filing Date

등록일 2014년 02월 06일
Registration Date

발명의 명칭 Title of the Invention
발화나뭇잎 수송체로부터 고농도 차아염소산 수송체를 얻기 위한 전극 구조물 및 이를 이용한 살균수 제조 방법

특허권자 Patentee
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

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김희우(811228-*****)
경기도 고양시 덕양구 세곡로 25, 2212호 205호(율산동, 용산마을 22단지 호반베르디움)

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2016년 03월 14일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-1182659 호
Patent Number

출원번호 제 10-2010-0117137 호
Application Number

출원일 2010년 11월 23일
Filing Date

등록일 2012년 09월 07일
Registration Date

발명의 명칭 Title of the Invention
분할 객체를 가진 살균수 생성 장치

특허권자 Patentee
주식회사 에코웰(11011-*****)
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2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-0918474 호
Patent Number

출원번호 제 10-2008-0035210 호
Application Number

출원일 2008년 04월 16일
Filing Date

등록일 2009년 09월 15일
Registration Date

발명의 명칭 Title of the Invention
롤리츠의 발생장치를 구비한 구강세정기

특허권자 Patentee
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

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2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

실용신안등록증
CERTIFICATE OF UTILITY MODEL REGISTRATION

등록 제 20-0441848 호
Registration Number

출원번호 제 20-2008-0002929 호
Application Number

출원일 2008년 03월 05일
Filing Date

등록일 2008년 09월 05일
Registration Date

고안명칭 Title of the Invention
자동 리프트의 발생장치용 구비한 가청음 살균 소독기

발명인명칭 Inventor
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

고안자 Inventor
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서울특별시 강서구 화곡로 296, 강서아이파크 101-506 (화곡동)

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This is to certify that, in accordance with the Utility Model Act, a utility model for the device has been registered at the Korean Intellectual Property Office.

2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

실용신안등록증
CERTIFICATE OF UTILITY MODEL REGISTRATION

등록 제 20-0451601 호
Registration Number

출원번호 제 20-2010-0004765 호
Application Number

출원일 2010년 05월 06일
Filing Date

등록일 2010년 12월 20일
Registration Date

고안명칭 Title of the Invention
자동 리프트의 발생장치용 이용된 휴대용 살균 세정수 생성 장치

발명인명칭 Inventor
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

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COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

실용신안등록증
CERTIFICATE OF UTILITY MODEL REGISTRATION

등록 제 20-0464612 호
Registration Number

출원번호 제 20-2010-0012093 호
Application Number

출원일 2010년 11월 23일
Filing Date

등록일 2013년 01월 04일
Registration Date

고안명칭 Title of the Invention
유수식 살균수 발생 장치

발명인명칭 Inventor
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

고안자 Inventor
김희우(811228-*****)
서울특별시 강서구 화곡로 296, 강서아이파크 101-506 (화곡동)

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2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

실용신안등록증
CERTIFICATE OF UTILITY MODEL REGISTRATION

등록 제 20-0462534 호
Registration Number

출원번호 제 20-2010-0012094 호
Application Number

출원일 2010년 11월 23일
Filing Date

등록일 2012년 09월 07일
Registration Date

고안명칭 Title of the Invention
저압수 또는 압수용 이용된 살균수 생성 장치

발명인명칭 Inventor
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

고안자 Inventor
김희우(811228-*****)
서울특별시 강서구 화곡로 296, 강서아이파크 101-506 (화곡동)

위의 고안은 「실용신안법」에 따라 실용신안등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Utility Model Act, a utility model for the device has been registered at the Korean Intellectual Property Office.

2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-0918474 호
Patent Number

출원번호 제 10-2008-0035210 호
Application Number

출원일 2008년 04월 16일
Filing Date

등록일 2009년 09월 15일
Registration Date

발명의 명칭 Title of the Invention
롤리츠의 발생장치를 구비한 구강세정기

특허권자 Patentee
주식회사 에코웰(11011-*****)
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발명자 Inventor
김희우(811228-*****)
서울특별시 강서구 화곡로 296, 강서아이파크 101-506 (화곡동)

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This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2016년 03월 03일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

특허증
CERTIFICATE OF PATENT

특허 제 10-1461441 호
Patent Number

출원번호 제 10-2014-0023737 호
Application Number

출원일 2014년 02월 27일
Filing Date

등록일 2014년 11월 07일
Registration Date

발명의 명칭 Title of the Invention
한이 발이 장치 및 한이 발이 방법

특허권자 Patentee
주식회사 에코웰(11011-*****)
서울특별시 강서구 양천로 553-17, 1107호(가양동, 한화비즈니스센터1차)

발명자 Inventor
김희우(811228-*****)
경기도 고양시 덕양구 세곡로 25, 2212호 205호(율산동, 용산마을 22단지 호반베르디움)

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2016년 03월 14일
특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE
최동규

Protect yourself from COVID-19

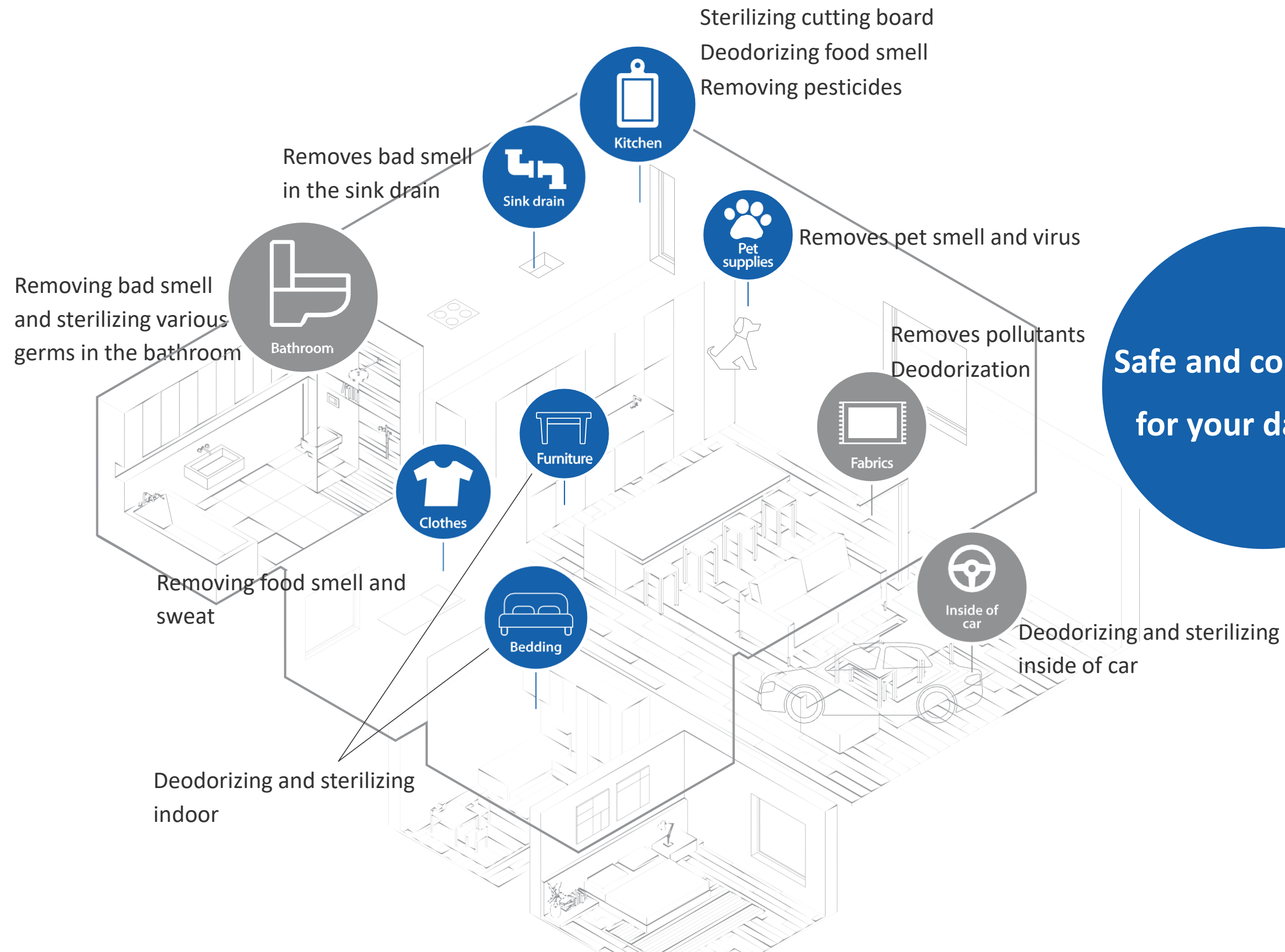
What do you do for Virus-control in your daily life?



Homeguard! Protect your family from COVID-19

- Do you just pay attention to your hands and masks?
- Do you just step in your house after going out?
- Do you ventilate your house and office regularly?
- Do you wipe your pets' paws by baby wipes only?
- What do you do to sterilize your mobile phone which you touch thousands times a day?
- Do you think your keyboard and mouse are clean?

Applications



Safe and convenient
for your daily life



For your furry friends

Sterilize pet toys, food dish and remove unpleasant smells. Also, clean pet soles after walking outside.



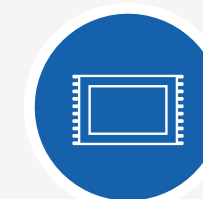
Humid Kitchen

Your humid kitchen is breeding grounds for germs. Keep your cutting board, kitchen knife, dishcloth, washing pad clean and sterilized.



Your bathroom must be clean

Sterilize and deodorize your toothbrush, razor, comb as well as toilet, basin.



Bedding, sofa, clothing

Fabric is good place for germs to live in. You can sterilize and deodorize blanket, pillow, sofa and clothing, which cannot be washed often.

Safety rules in your daily life with Homeguard

Clothing Sterilization

Whenever you cough and sneeze, you will cover your mouth with your sleeves. But you don't need to wash it. Just sterilize your clothes easily.

Tap water



1 or 3 mins



Spray



Dry



Hygienic care in your office

Sterilize doorknob, electric switch and common use space including office supplies at once!

Tap water



Refined salt
0.5 g



3 mins



Spray



Wipe



Sterilization
for 24 hours

Sterilizing public toilet

You know well, the public restroom is real breeding ground of bacteria and germ! Electrolyzed water can be the relief.

Tap water



Refined salt
0.5 g



3 mins



Spray



Wipe



Sterilizing Anywhere!

The electrolyzed water will protect you and your family by sterilizing anything you have concerns for infection.

Tap water



Refined salt
0.5 g



3 mins



Spray



Wipe



Check before you buy sterilizing water maker



Choose the VALUE, not price.

They can copy our designs - but our technology can be copied in no way.

We're second to none in Sterilizing Water Maker

1. Check the origin.

'Made in Korea' is one of our strengths in quality and customer supports as well as in innovation.

2. Check the technology.

Our patented and trusted technologies will protect you and your family's health and hygienic life. This device must be durable since high temperature follows during the generation of EW.

3. Check the ppm of EW.

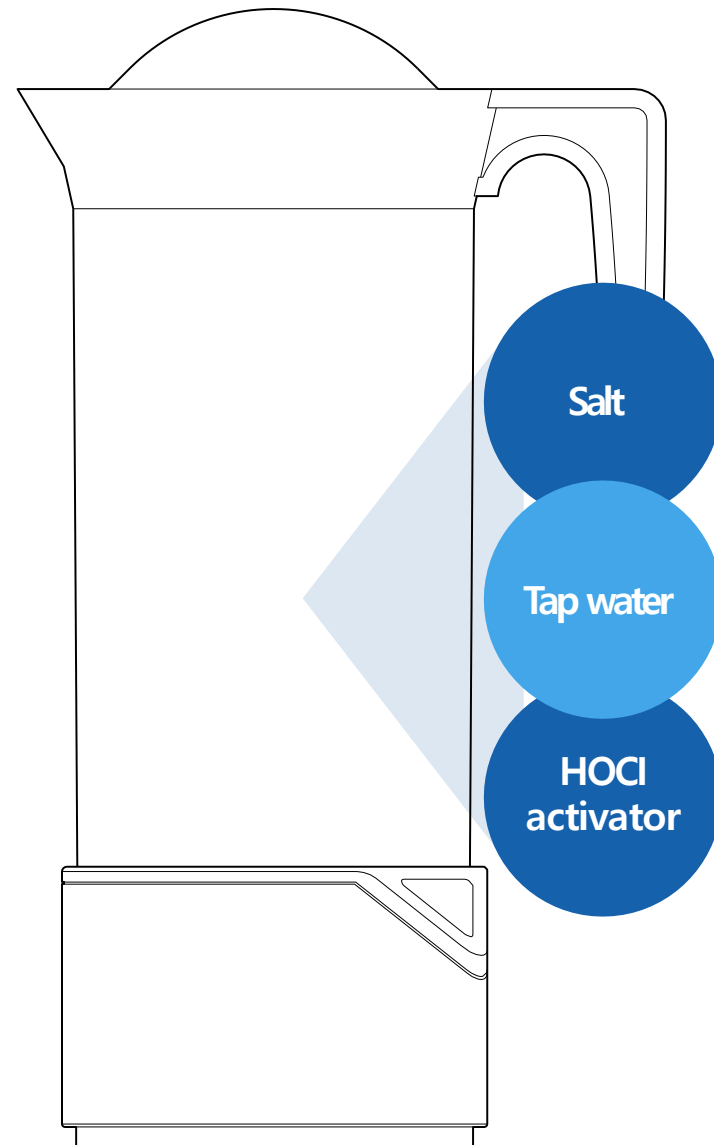
K-FDA strongly recommends the ppm of EW (Electrolyzed Water) must be below 200 ppm so that the safety of users can be secured when it's used at home. Also, over 100 ppm is the minimum ppm for efficacy, according to K-FDA.

4. Check the test reports.

You know the test reports are the only proof of the efficacy device has to a certain bacteria or virus. Do not buy it without the test reports.

Various Electrolyzed Water

Adding refined salt is not the only way to make EW.



Depending on Activator

Homeguard can make different electrolyzed water.

Salt



HOCl activator



Activator	5 mins	10 mins	30 mins
Salt	6.88	6.88	>7.13
HOCl activator	>7.13	>7.13	>7.13

Unit : Log reduction (LR)

Homeguard inactivates over **99.99%** of H1N1 (Influenza A virus subtype).

Principles

How is Electrolyzed Water made?



The special technology in Homeguard enables tap water to become sterilizing and deodorizing solutions by electrolysis. This is called electrolyzed water. The electrolysis of tap water ($\text{Cl}^- + \text{H}_2\text{O} \rightarrow \text{OCl}^- + 2\text{H}^+ + 2\text{e}^-$) which contains a small amount of chlorinated ion (Cl^-) will generate hypochlorous acid.

Should you need to get stronger sterilizing effect, you can add the solution of Hypochlorous acid or refined salt.

How safe is Electrolyzed Water?

EW is well-known to be safe and effective as followings;

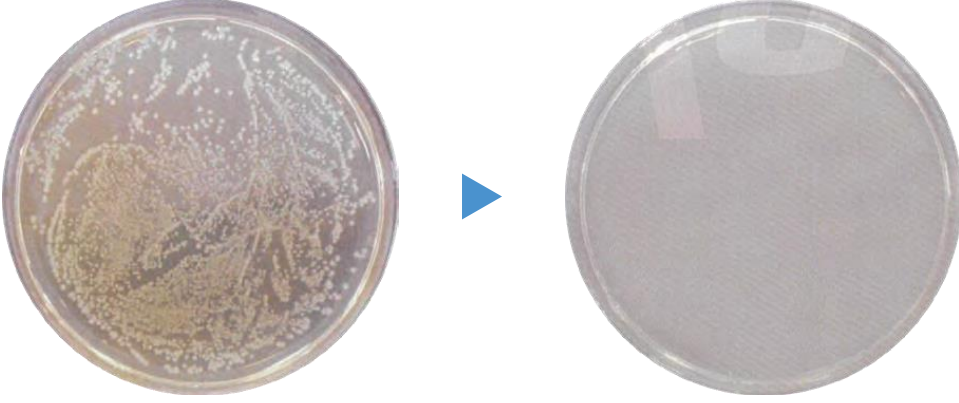

Institution	Approvals on EW	Year
EPA	Approved the equipment generating Hypochlorous Acid as disinfectants maker.	1998
USDA	Approved to be used to sterilizing E-Coli, O-157, salmonella ,etc.	1999
FDA-FSIS	Disinfectants	2006
K-FDA	Food additives and food manufacturing equipment	2007/2008

HOCl (hypochlorous acid) is a high-sterilizing substance produced by electrolysis of dilute hydrochloric acid (HCl) in anisotropic electrolyte. It is mainly used for food hygiene control, sterilization of crops, prevention of infection in hospitals and sterilization of equipment.

It is a safe sterilizing solution approved by the Ministry of Food and Drug Safety as a food additive in November 2007 with a low concentration of FAC (Free Active Chlorine) of 50 to 60 ppm in the range of pH 5 to 6.5.


Test of Sterilization

Fill the inner tank of the product with 1 L of tap water with 2 g of salt and operate it for 5 minutes to generate test solution. Inject the test strains to the test solution, react for 30 seconds, and measure the reduction rate.

Bacteria	Escherichia coli	Staphylococcus aureus
Symptoms	Diarrhea, bladder infection, pyelitis, peritonitis, septicemia	Food poisoning, inflammation of middle ear, bladder infection
Initial concentration (CFU/mL)	3.1×10^5	5.0×10^5
After 30 sec. (CFU/mL)	<10	<10
Reduction Rate (%)	99.9%	99.9%
Report	<p>Before After 30 seconds</p>  <p>사진1 대장균- BLANK(0h) 사진2 대장균- 전해수기(30sec)</p>	<p>Before After 30 seconds</p>  <p>사진1 황색포도상구균 -BLANK(0h) 사진2 황색포도상구균 -전해수기(30sec)</p>

Test of Removing Pesticide Residue

시험 성적서

(재)한국환경수도연구원 우)07201 서울특별시 영등포구 양평로28사길 29 Tel : 02-2637-1234 Fax : 02-2631-8767		성적서 번호: ID-200051 페이지 (1) / (총 1) 끝.	
----------------------------------------------------------------------------------------	--	-----------------------------------------	-------------------------------------------------------------------------------------

1. 의뢰자 기관명 : (주)에코웰
주 소 : 서울특별시 강서구 가양동 449-4 한화비즈메트로1차 1107호

2. 시험대상 품목/물질/시료 설명 : 홈가드 (Homeguard)

3. 성적서 용도 : 참고용

4. 시 료 구 분 : 자삼시료

5. 시 험 기 간 : 2020. 1. 17. ~ 2020. 1. 31.

6. 시 험 장 소 : 고정시험실 (서울특별시 영등포구 양평로28사길 29) 현장시험

7. 시 험 방 법 : 먹는물수질공정시험기준 (국립환경과학원고시 제2018-66호)

8. 시 험 환 경 : 온도 : (최저 21 °C, 최고 23 °C), 습도 : (최저 15 % R.H., 최고 25 % R.H.)

9. 시 험 결 과

시료명	조제수 농도	다이아지논 (mg/L)		비고
		5분 작동 후 농도	제거율	
시험군	작동 후 0.0600	불검출	100	-
대조군	5분 후	0.0013	98	-

* 시험조건 (시험군, 고객제공)
1. 제공된 검체에 조제수 (수도수 이용) 1L 와 제공된 정제소금 1g 을 넣고 완전히 녹인다.
2. 시작 버튼을 눌러 5분 작동 후 완료 후 분석

* 시험조건 (대조군, 고객제공)
1. 제공된 검체에 조제수 (수도수 이용) 1L 와 제공된 정제소금 1g 을 넣고 완전히 녹인다.
2. 5분 후 분석

확 인	시험자	검 선 호	기술책임자	송 민 령
-----	-----	-------	-------	-------

1. 이 성적서는 의뢰자가 제시한 시료 및 시료명으로 시험한 결과로서 전체 제품에 대한 품질을 보증하지는 않습니다.

2. 이 성적서는 KS Q ISO/IEC 17025 와 KOLAS 인정과 관련 없으며 용도 이외의 홍보, 선전, 광고 및 소송용 등으로 사용될 수 없고, 서면승인 없이 재발행하지 못합니다.

2020. 1. 31.

(재)한국환경수도연구원장 (인)

Specimen		Concentration	Diazinon (mg/L)	
			Concentration after 5 minutes	Reduction Rate
Test group	After operation	0.0600	Not detected	100
Control group	After 5 minutes		0.0013	98

Test of Deodorization

Ammonia (toilet)

TEST REPORT

1. NO : CT20-008563E

2. Client
 ○ Name : ECOWELL
 ○ Address : #1107, 551-17, Yangcheon-ro, Gangseo-gu, Seoul, 157-804, Korea

3. Date of Test : 2020.01.16 ~ 2020.01.23

4. Use of Report : Quality control

5. Test Sample : Deodorant (Homeguard)

6. Test Method
 (1) EL608:2017

7. Test Results

1) Deodorant (Homeguard)

Test Item(s)	Unit	Test Method	Test Results	Remark	Loc.
Deodorization : Ammonia (Conc. decreasing rate)	%	(1)	90.0	(19.5 ± 0.5) °C (48.3 ± 0.6) % R.H.	A

※ The Deodorization test method (Open space condition Products Used)
 - 50 mL sample (undiluted solution)
 - 11 L sized deodorization test bottle, End.
 ※ Location
 A : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea

End of Report

Affirmation Tested By **CHH** Technical Manager
 Name : Cho, Hyung Ho Name : Park Hun Il

This report is not accredited by KOLAS.
 Our report apply only to the standards or procedures identified and to the sample(s) tested unless otherwise specified. The test results are not indicative of representative of the qualities of the lot from which the sample was taken or of apparently identical or similar products. The results of using only a portion of this report cannot be guaranteed. The authenticity of this test report can be checked on KCL website(www.kcl.re.kr).

2020.01.23
 Korea Conformity Laboratories President Yoon, Kap Seok / *kapseok*

Result Inquiry : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea (82-31-399-9127)

Page 1 of 1 TOP-12-01-04(1)

Trimethylamine (fish smell)

TEST REPORT

1. NO : CT20-008564E

2. Client
 ○ Name : ECOWELL
 ○ Address : #1107, 551-17, Yangcheon-ro, Gangseo-gu, Seoul, 157-804, Korea

3. Date of Test : 2020.01.16 ~ 2020.01.23

4. Use of Report : Quality control

5. Test Sample : Deodorant (Homeguard)

6. Test Method
 (1) EL608:2017

7. Test Results

1) Deodorant (Homeguard)

Test Item(s)	Unit	Test Method	Test Results	Remark	Loc.
Deodorization : Trimethylamine (Conc. decreasing rate)	%	(1)	87.5	(19.5 ± 0.5) °C (48.3 ± 0.6) % R.H.	A

※ The Deodorization test method (Open space condition Products Used)
 - 50 mL sample (undiluted solution)
 - 11 L sized deodorization test bottle, End.
 ※ Location
 A : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea

End of Report

Affirmation Tested By **CHH** Technical Manager
 Name : Cho, Hyung Ho Name : Park Hun Il

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2020.01.23
 Korea Conformity Laboratories President Yoon, Kap Seok / *kapseok*

Result Inquiry : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea (82-31-399-9127)

Page 1 of 1 TOP-12-01-04(1)

Hydrogen Sulfide (garbage)

TEST REPORT

1. NO : CT20-008565E

2. Client
 ○ Name : ECOWELL
 ○ Address : #1107, 551-17, Yangcheon-ro, Gangseo-gu, Seoul, 157-804, Korea

3. Date of Test : 2020.01.16 ~ 2020.01.23

4. Use of Report : Quality control

5. Test Sample : Deodorant (Homeguard)

6. Test Method
 (1) EL608:2017

7. Test Results

1) Deodorant (Homeguard)

Test Item(s)	Unit	Test Method	Test Results	Remark	Loc.
Deodorization : Hydrogen sulfide (Conc. decreasing rate)	%	(1)	40.0	(19.5 ± 0.5) °C (48.3 ± 0.6) % R.H.	A

※ The Deodorization test method (Open space condition Products Used)
 - 50 mL sample (undiluted solution)
 - 11 L sized deodorization test bottle, End.
 ※ Location
 A : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea

End of Report

Affirmation Tested By **CHH** Technical Manager
 Name : Cho, Hyung Ho Name : Park Hun Il

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2020.01.23
 Korea Conformity Laboratories President Yoon, Kap Seok / *kapseok*

Result Inquiry : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea (82-31-399-9127)

Page 1 of 1 TOP-12-01-04(1)

Methyl mercaptan (Pet smell)

TEST REPORT

1. NO : CT20-008566E

2. Client
 ○ Name : ECOWELL
 ○ Address : #1107, 551-17, Yangcheon-ro, Gangseo-gu, Seoul, 157-804, Korea

3. Date of Test : 2020.01.16 ~ 2020.01.23

4. Use of Report : Quality control

5. Test Sample : Deodorant (Homeguard)

6. Test Method
 (1) EL608:2017

7. Test Results

1) Deodorant (Homeguard)

Test Item(s)	Unit	Test Method	Test Results	Remark	Loc.
Deodorization : Methyl mercaptan (Conc. decreasing rate)	%	(1)	98.8	(19.5 ± 0.5) °C (48.3 ± 0.6) % R.H.	A

※ The Deodorization test method (Open space condition Products Used)
 - 50 mL sample (undiluted solution)
 - 11 L sized deodorization test bottle, End.
 ※ Location
 A : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea

End of Report

Affirmation Tested By **CHH** Technical Manager
 Name : Cho, Hyung Ho Name : Park Hun Il

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2020.01.23
 Korea Conformity Laboratories President Yoon, Kap Seok / *kapseok*

Result Inquiry : #805, 1 Valley, 149, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea (82-31-399-9127)

Page 1 of 1 TOP-12-01-04(1)

How to Use



01. Pour 1L of tap water to the pitcher.



02. Add salt as necessary.
*Refer to the recipe book



03. Stir lightly in the pitcher with a long spoon.



04. Press the button briefly

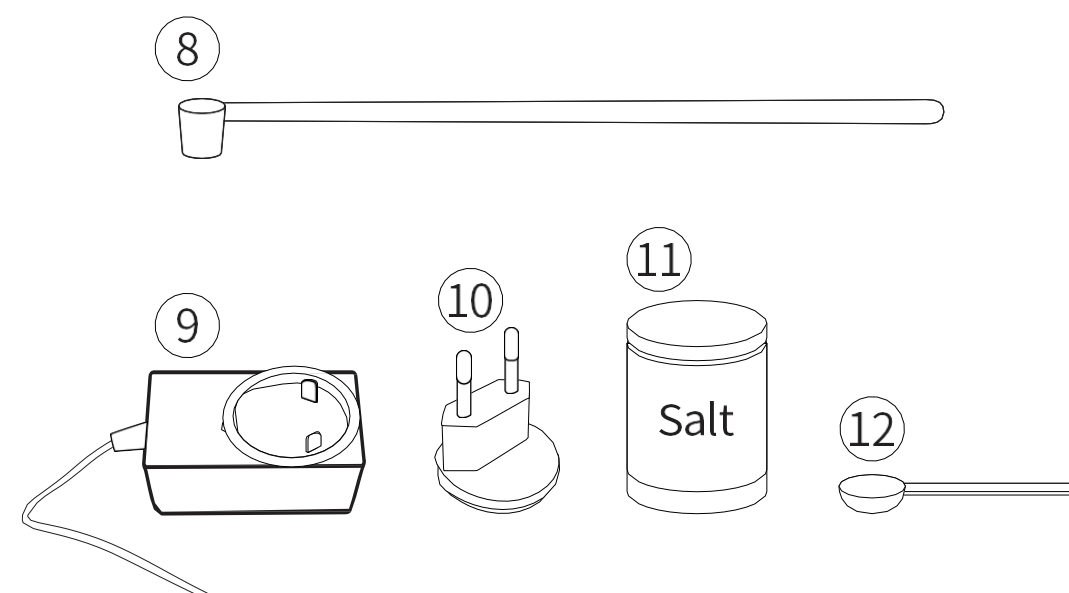
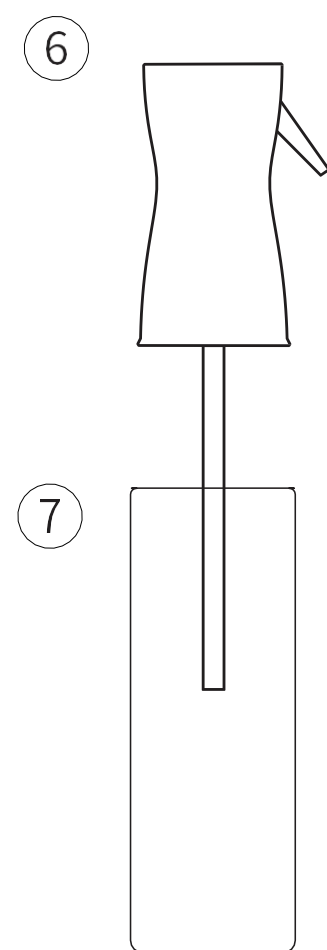
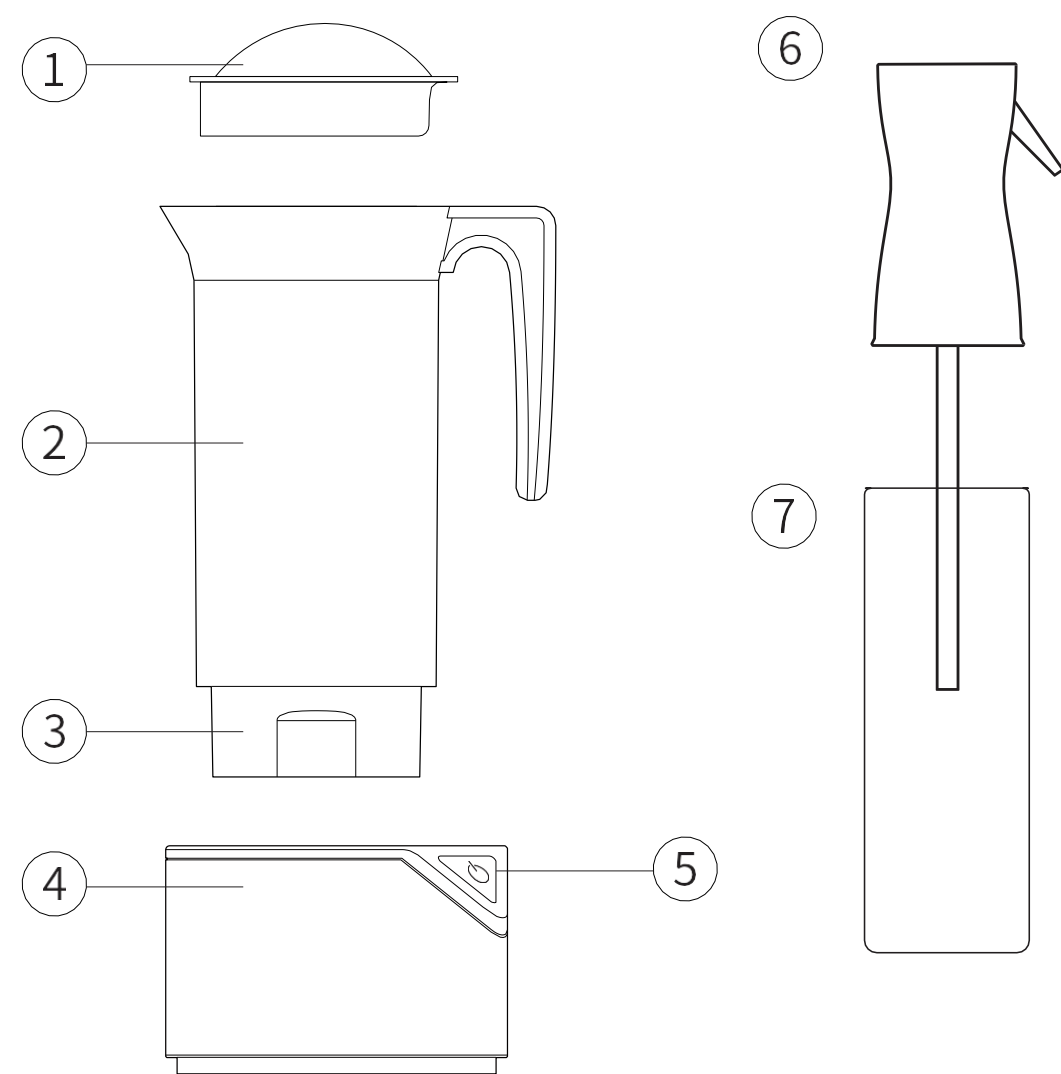


05. After operation, pour the electrolyzed water to the spray.



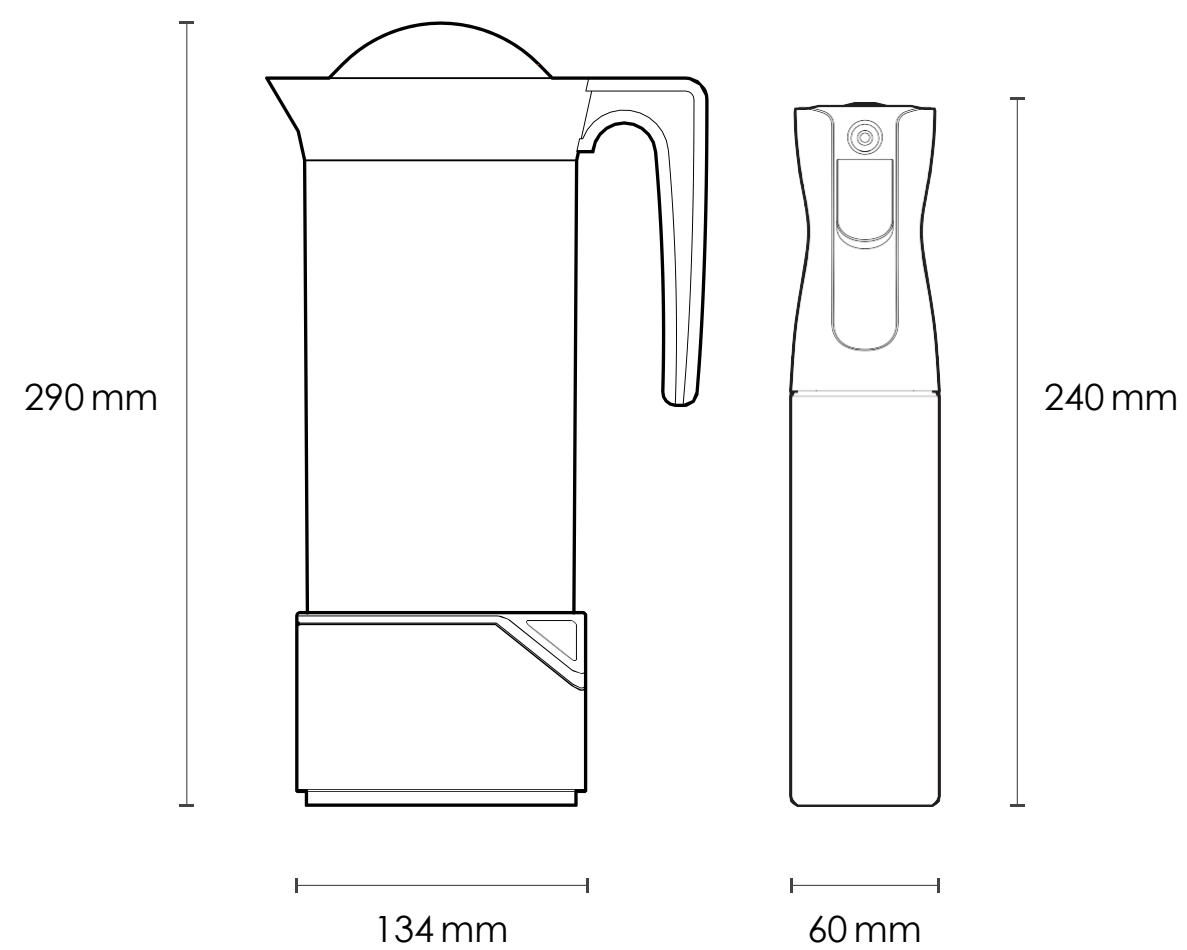
06. Sterilize or Deodorize with semi-automatic spray.

Components



- 1.Spray Head
- 2.Spray Water Bottle
- 3.Electrode Part
- 4.Body
- 5.Operation Button
- 6.Spray Head
- 7.Spray Water bottle (300ml)
- 8.Stick for dissolving salt
- 9.Adapter
- 10.Adaptor Plug
- 11.Salt (70g)
- 12.Spoon (adding 2g Salt)

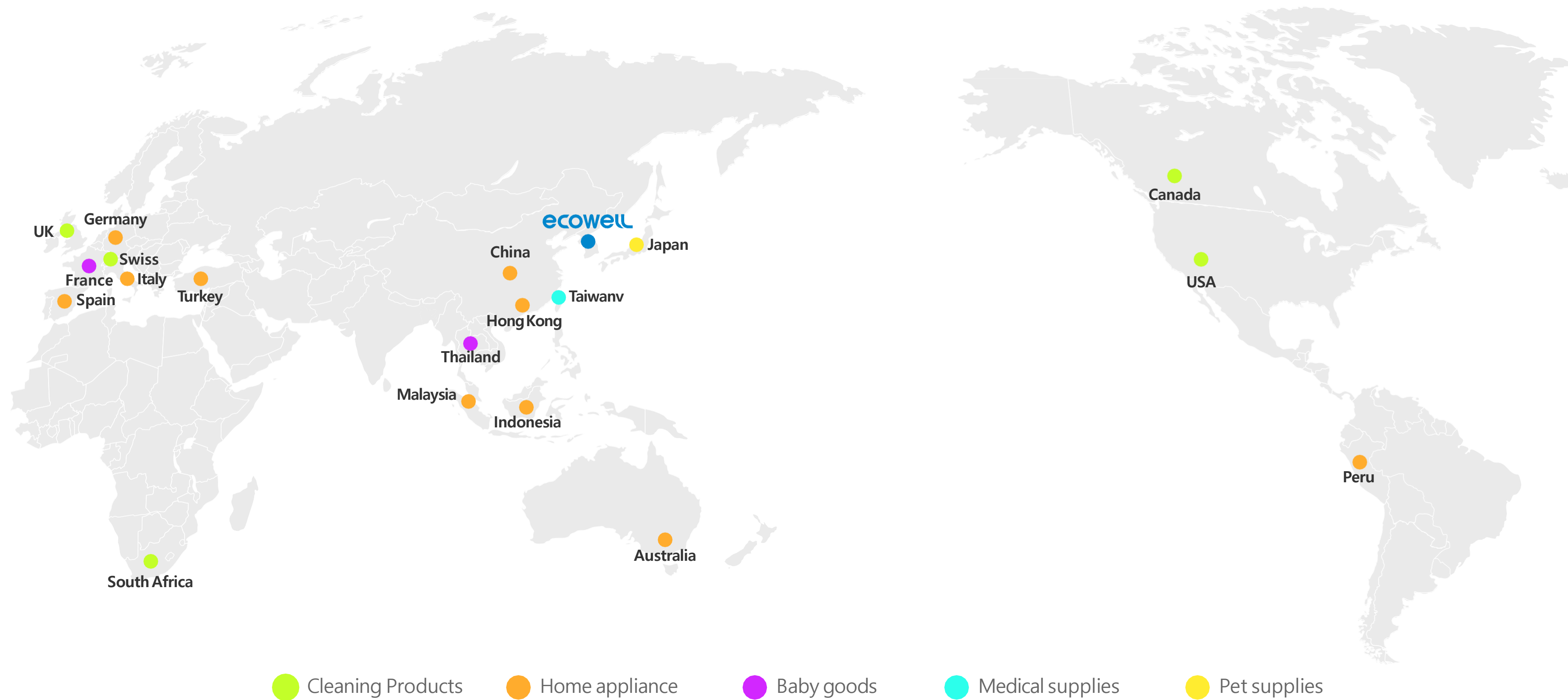
Specifications



Product	HOMEGUARD
Manufacturer	Ecowell Co., Ltd.
Properties of Production	Hypochlorous Acid,(WI+) Sodium Hypochlorite (with salt)
Rated Voltage	Input AC 220V 60Hz Output DC 9V 3.0A
Product Standard	Feature: 134X134X290(mm) Spray: 60X60X240(mm)
Weight	478 g
Capacity	Spray: 300ml Pitcher: 1L
Material	ABS + PP

The countries we export

We're expanding the markets and opportunities



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