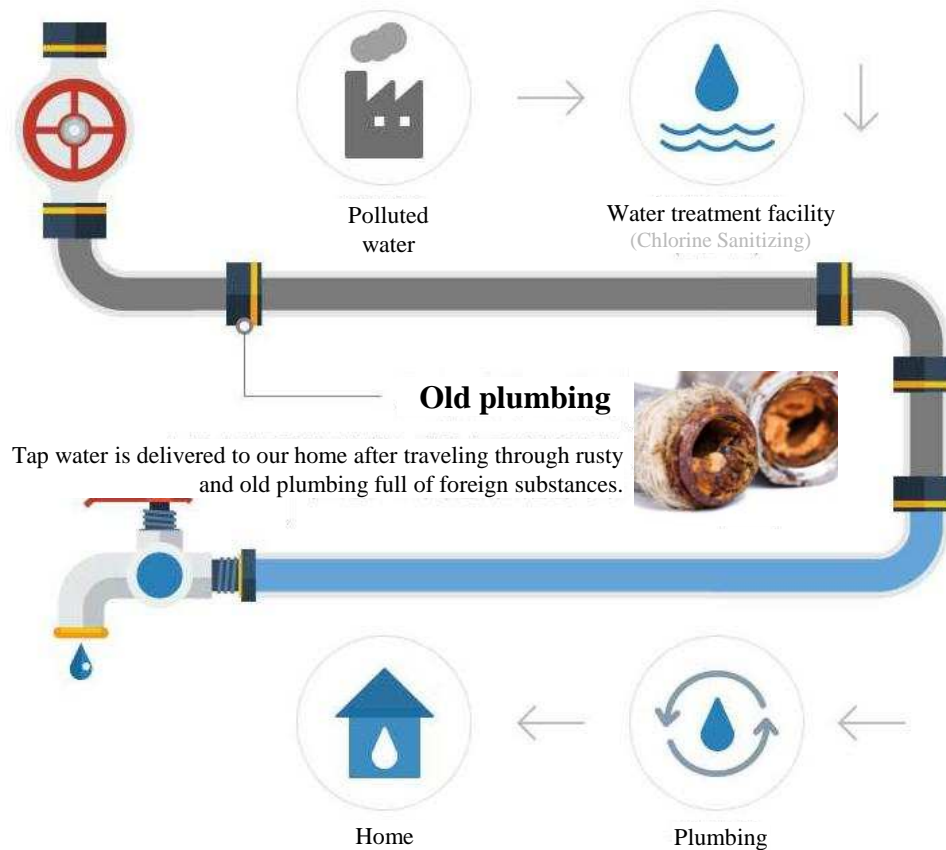


Water purifier and shower filter using activated carbon fiber



## • How does water get to us?



## The truth about the pipe that we often turn a blind eye to.



If you dismantle the pipe of the washstand, you will be surprised.  
We are exposed to corrosion and residual harmful substances left in old pipes and faucets since we do not clean pipes often.

Q. Is this limited to old houses? Are new houses safer?

More than 50% of domestic plumbing is old as it has been around for **more than 10 years**

Old pipes are full of foreign substances that could end up in our homes without us noticing it. **It may be harmful to skin, triggering all kinds of skin diseases.**



- Major problems we face when using polluted water coming from old plumbing.

Infancy - atopic dermatitis, pruritus



Adolescence - acne



Men's hair loss



Elderly - body odor



E. coli/ Heavy metal/ Bacteria

- Water purifier and shower filter using activated carbon fiber



Defense water purifier filter



Defense purifier kit



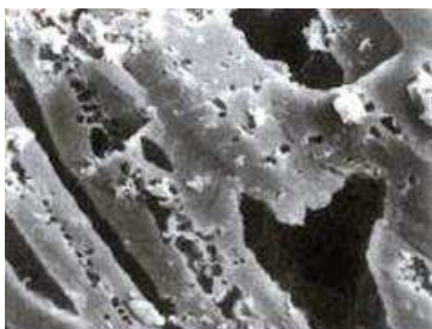
Defense vitamin shower filter



## • What is Activated Carbon Fiber (ACF)?

Porous carbon fiber is made by activating tons of micro pores.

Absorbs 10 times stronger and more than 100 times faster than activated carbon



Carbon (activated) Filter

3000 magnification



Activated Carbon Fiber (ACF)-contained filter

3000 magnification

Classification	Activated Carbon Fiber	Carbon
Pore (pore size)	Nano (1/1000 of carbon)	micron
BET measurement	1,490m <sup>2</sup> /g	700~900m <sup>2</sup> /g
bacteria	O	X
E. coli	O	X
Heavy metal	O	X

- Direct purifier filter is a cleaner that filters foreign substance directly

# DEFENSE WATER FILTER

Defense water purifier filter

Electricity **NO!**, water waste **NO!**, storage tank **NO!**



- Mineral water, which tastes better after purification
- Multi-purpose water, used for drinking, cooking, and cleaning.
- Efficient use of sink space and low management cost.
- Less pressure reduction, so massive amounts of water (6-7L per minute) can flow even when water pressure is low.

## Applications



Water supply facility



Water fountain



Vending machine



School



Coffee machine



washstand



sink



Highway rest stops

- Defense purifier filter: assemble the filter that best fits the environment of the region and country where you live.

Defense purifier filter, the most optimized filter system, is a customized product meeting the requirement of every environment and is effective for water quality improvement.



## SED

NSF-certified material was used to make the filter  
The filter removes rust and suspended solids in water



## ACB

A high-quality carbon filter that maintains a sophisticated purifying system using compressed carbon filters.



## ACL

NSF/ANSI Standard 60-approved safe materials are added, which can automatically make the level of water PH concentration between 7.5 and 9.5.



## UFM

The filter is effective for bacteria, virus, and E.coli removal as it is made of NSF-certified material.



## STC

A sediment and carbon integrated filter removing rust, suspended solids, and residual chlorine simultaneously.



## ACF

A filter with supreme absorption capability using the micro pores of ACF and benefiting from the highly porous design.



## CBH

Carbon composite filter is capable of removing heavy metals; in particular, it is expected to get rid of 7 major heavy metals: arsenic, lead, mercury, cadmium, copper, iron, and aluminum.



## DI

The NSF-certified ion exchange resin-applied filter normally used in machines removes ion in water under the deionization process and changes it into natural water.

## Dismantle



## Mount



## • What is Defense Purifier Kit?

A filter kit that changes contaminated water into clean water, can be easily applied to washstand faucet, shower head, and tub





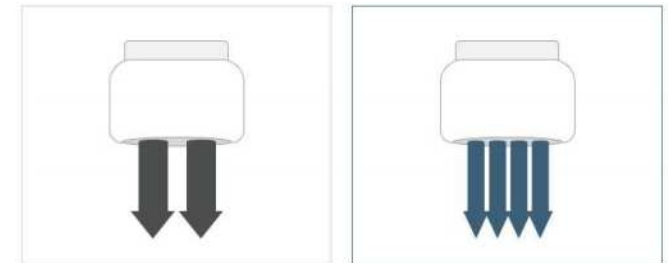
### Defense Purifier Kit

<b>Product Contents</b>	Case+1 filter+7 adapters +1 spanner
<b>Filter replacement</b>	Every 1-2 months
<b>Ingredients</b>	Main body -PC (polycarbonate, adaptor-ABS, shower faceplate-stainless
<b>size</b>	approximately 4.9x4.8cm
<b>manufacture</b>	Republic of Korea
<b>Applicable models</b>	Washstand, sink, tub, etc.

※ Please check the shape and size of the filter before making your purchase.

## What is a shower faceplate?

Precisely processed stainless plate will increase the water pressure Micro pores on stainless plate create waterfalls of anions as water falls, and this helps relieve fatigue and stress and boost vitality.



General faucet

Defense Purifier Kit

Pores where water passes are big, making the water pressure weak. Micro stainless plates are mounted to make the water pressure stronger.

- Ultra-fine faceplate enables smooth but powerful water pressure
- Remove fine rust particles and residues, residual chlorine
- Ion occurrence
- Save water
- Easy to install
- Refreshing when brushing your teeth



## What is Defense Purifier Kit?

### Examples of Defense Purifier Kit installation



Photo of washstand installation



Photo of sink installation

### Sediment Filter Contamination Level



New filter



1 month after



3 months after

It is normally better to replace the filter every 1 to 2 months, although it may vary depending on the environment. Please replace the inner filter when the water pressure gets weaker or the color changes.



- 1 The inner filter should be replaced when water pressure is weak or the color changes.
- 2 Remove the lower cap, take out the old filter, and insert a new filter faceup and tighten.

### Filter Specifications

#### Regular model (SED)



6 for a year

#### Advanced model (ACF)

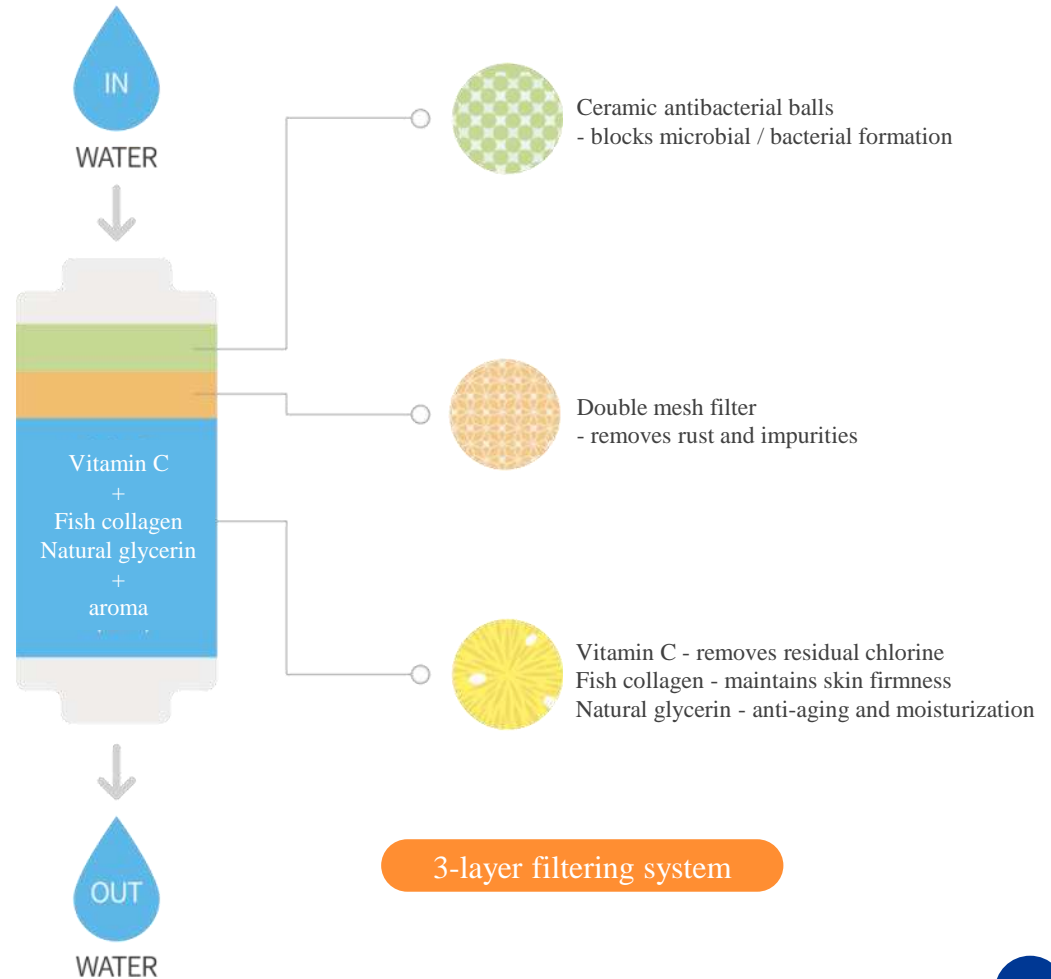


6 for a year

- Defense vitamin shower filter

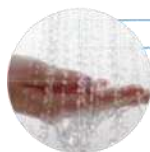
## DEFENSE VITAMIN SHOWER FILTER

Defense vitamin shower filter



## Defense vitamin shower filter specifications and functions

### Vitamin shower filter



#### Removes residual chlorine in tap water

Vitamin C removes residual chlorine in tap water, so it is good for skin troubles such as atopy.



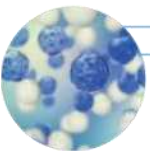
#### Effects of vitamin C

Abundant vitamin C provides effective anti-aging, skin elasticity improvement, and whitening.



#### Aromatherapy effects

Aroma scent provides sedation effect, increases concentration, and relieves stress.



#### High-quality moisturization

Moisturizing ingredients (natural glycerin) and fish collagen make skin maintain moisture and elasticity after having a shower.

### Product lineup



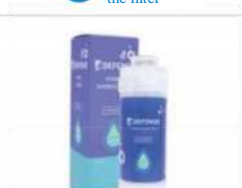
size 142mm



body weight 145g (Vitamin C cartridge weight 86-88g)



Life cycle of the filter 7,200L (45 to 60 days) \*The filter's life cycle may vary depending on the quality of water



Lavender scent



Cherry scent



Lemon scent



Freesia scent



Green grape scent



Pine needle scent

### Defense shower head



#### Defense vitamin shower

Install like this!



Defense shower head



Easy to install



Increase water pressure and save water



Prevent the reproduction of microorganisms

first

Lightweight product that's easy for anyone to install

second

Micro-perforated holes enable water pressure increase and water use reduction

third

Ochre ceramic balls prevent the reproduction of microorganisms in the shower head

Item	Defense shower head
size	7.8cm x 12.5cm
color	transparent
Contents	pc+stainless
Major ingredient	Ochre ceramic balls
weight	117g



Water pressure increase and water use reduction



Shower head (contains ochre ceramic antibacterial balls)



Atopy-free



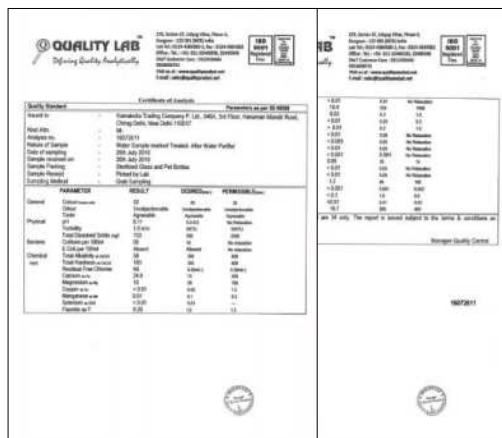
Skin irritation clinical trial

## Approval status



KC certification

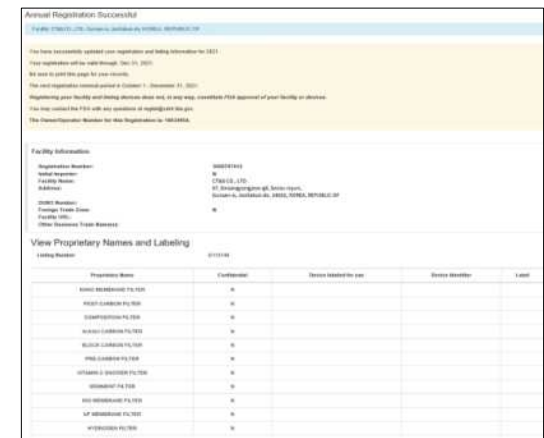
Water quality analysis certification (China)



Water quality analysis certification (India)

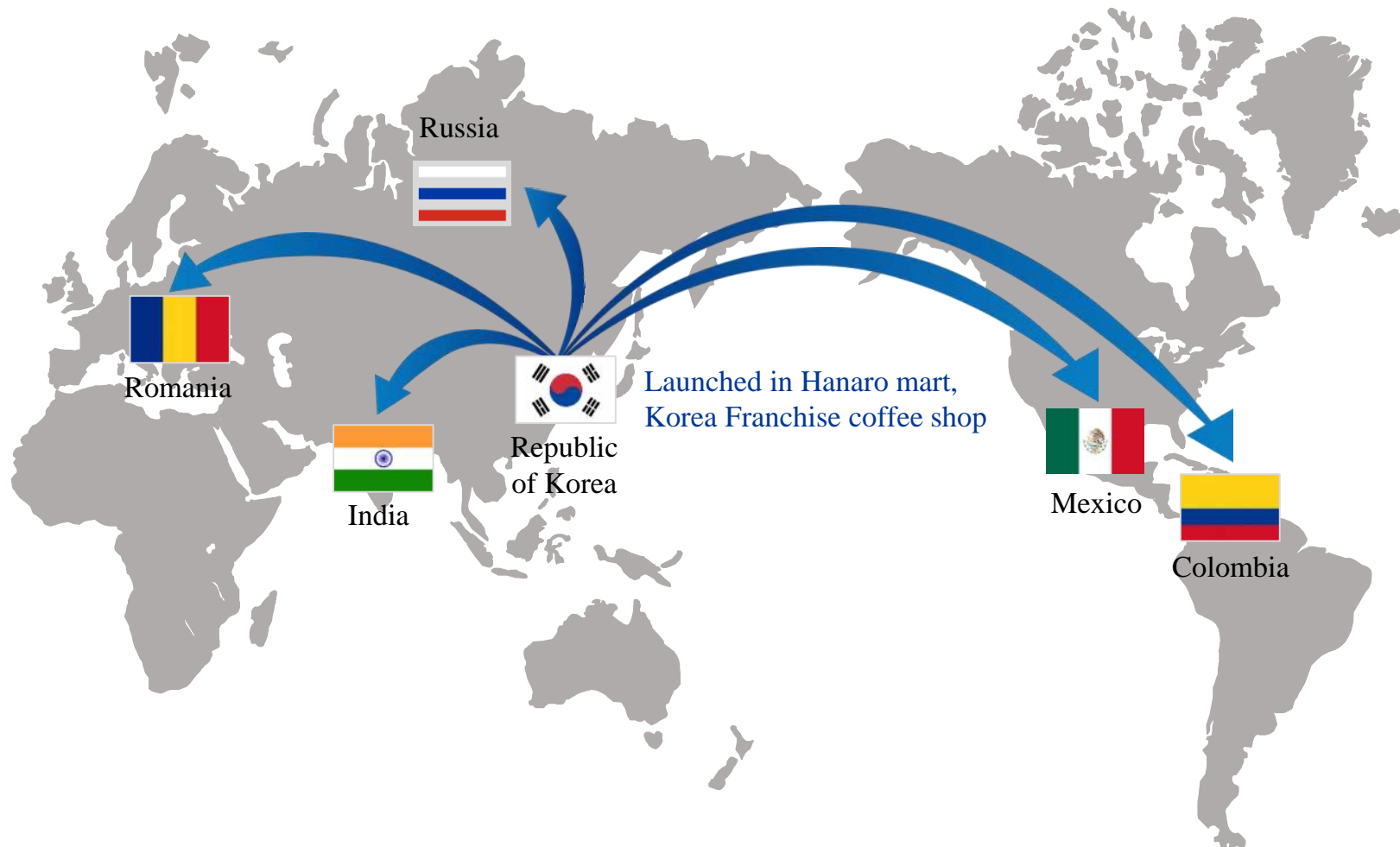


Water quality analysis certification (Philippines)



FDA members 2021

- Enterprises and countries where it is currently sold/traded





## ● Company Introduction



CT&S set “make a world of clean water” as the company's special vision following its inception in 2015.

CT&S produces purifier filter, shower filter, and other related products by using Activated Carbon Fiber (ACF) and activated carbon. In particular, CT&S produces carbon fiber-applied filters, which boast of high absorption capability, and exports them to 5 different countries.

CT&S is obligated to safeguard customers' health.

It continues to focus on R&D, making best efforts to become a leading global company.



(Patent No. 10-1629209)

(Patent No. 10-1604294)

(Patent No. 10-1604293)

(Patent No. 10-1689872)

(Patent No. 10-1659547)

(Patent No. 10-16972589)

(Patent No. 10-1831728)

(Patent No. 10-1904396)



A company solving customers' inconvenience  
through creative technologies.

A company prioritizing  
customers and families' health.