



World's finest
reverse
osmosis (RO)
membrane:
0.0001
micron pores

Water purification system
using reverse osmosis membrane

Crystal Valley®

Water, the Source of Life

Safe, Healthy Water



NEW MEDICAN TECH CORP.

World's
most effective
removal of
harmful
substances

P U



**“I want safe water, for the good health
of my family and myself.”**

RE WATER LIFE



◎ What kind of water do you want to give your children?

Tap water is no longer clean or safe. Although this has been repeatedly emphasized in the media, few consumers are aware of just how hazardous tap water is. For the sake of your children, spouse and parents, find out.



◎ Over 16 million types of harmful substances can be found in tap water.

Tap water available in Japan is believed to contain over 16 million types of harmful substances, including bacteria, agricultural chemicals, endocrine disruptors and other organic substances. Among these substances, dioxin and lead are particularly dangerous, since once they enter the body they are never eliminated. Nor does boiling the water eliminate these substances; in some cases, boiling can concentrate them, making harmful substances even more dangerous.



◎ The greatest hazard: nitrate nitrogen in tap water

Of all the many harmful substances that can be found in tap water, nitrate nitrogen is the most hazardous. Nitrate nitrogen is produced when nitrogen fertilizer (used in large quantity on farmland), livestock manure or household wastewater decomposes in the soil. Once it has been taken into the human body, nitrate nitrogen combines with hemoglobin in the blood, causing oxygen deficiency (anemia and drowsiness). Even worse, it reacts with food protein, changing into the carcinogen nitrosoamine. Boiling contaminated water only concentrates such toxic ingredients. Despite the horrible nature of nitrate nitrogen, conventional water purifiers do not eliminate it at all, nor do public water purification plants. Today, tap water in virtually all regions of Japan contains this terrible chemical.



◎ Crystal Valley: The only water purifier that ensures your safety and good health!

Employing the reverse osmosis membrane used by NASA, our Company has successfully developed a water purifier capable of removing nitrate nitrogen, in addition to virtually all harmful substances contained in tap water. Only Crystal Valley can ensure safe and healthy water for you and your family.

Crystal Valley water purification systems were first to receive contaminated well water purification approval from Japanese municipalities, which provide special subsidies to purchasers of such products. (Subsidy systems vary among municipalities.)

Crystal Valley will

Crystal Valley purifies tap water to the quality of Yaku Island natural crystal water, believed to be the healthiest in Japan.



Similarities of Crystal Valley purified water and Yaku Island natural water

- 1 Contains no harmful substances.
- 2 Optimal balance of organic minerals
"Minemarine filter" made from natural coral produces ionized alkaline water, easily absorbed by the body.
- 3 Small molecular clusters enhance water permeability.
Small clusters ensure excellent permeability, thereby enhancing cell metabolism.
- 4 Super "softness" (hardness: 15 - 35)
Average hardness of Japanese tap water is 100 - 120.

The secret to superior safety: 0.1-nanometer reverse osmosis membrane that purifies even salt water

Crystal Valley uses the reverse osmosis membrane, a cutting-edge water purification system originally developed by NASA. Through application of hydraulic pressure to the membrane, the system eliminates almost all harmful substances contained in tap water. Crystal Valley uses the world's finest reverse osmosis membrane (0.0001 micron pores), resulting in truly safe and sweet water.

Crystal Valley reverse osmosis membrane water purifier: advantages over traditional purifiers

Crystal Valley reverse osmosis membrane water purifier

The Crystal Valley purifier's reverse osmosis membrane allows only water molecules to pass through. Hydraulic pressure is applied to the membrane to filter out impurities. Since the impurities are then discharged from the purifier as wastewater, the filter element seldom clogs. Additional outstanding features of this purifier, therefore, are that it is more hygienic and offers a longer service life than conventional systems.

Traditional water purifiers using activated carbon etc. (Dead-end filtration)

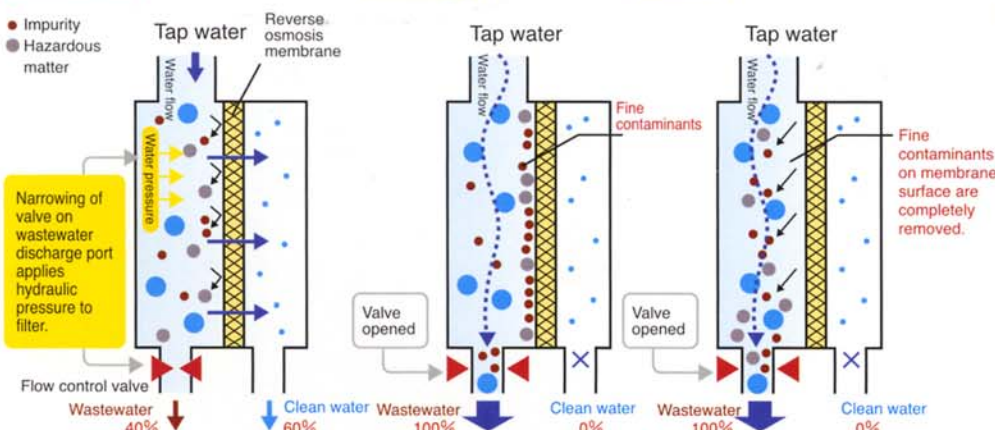
Traditional purifiers continually filter the entire volume of influent. Impurities that cannot pass through the filter accumulate over time, eventually clogging the filter and sustaining various kinds of minor germs, rendering the purifier unsanitary.

Water purifier in operation

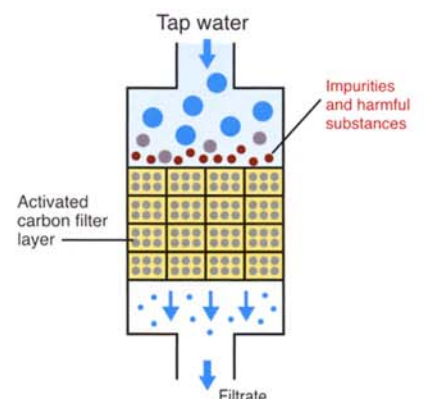
1. Start of washing

2. During washing

Patented



※ Flush filter for 30 seconds to one minute per day, so that it does not clog. Adjust flushing time, depending on raw water quality.
<For reference> 1 nanometer = 0.001 micron, 1 micron = 0.001 millimeter



Enhance Your Health

Outstanding advantages of Crystal Valley purification system over conventional water purifiers

Photograph of tap water ice crystal (courtesy of MRA Laboratories, Inc.)

1.0 micron pore

Activated carbon filter

Removable impurities:

- Foul odor/taste ○ Musty odor
- Chlorine odor
- Residual chlorine
- Phenols

Chlorine odor

Musty odor

0.1 – 0.01 micron pore

Hollow fiber membrane

Removable impurities:

- Dirt ○ Algae ○ Rust ○ Water mold
- Cryptosporidium ○ Bacteria
- Asbestos

Of all the purifiers seen frequently on TV and in magazines, only Crystal Valley can remove **nitrate nitrogen**.

Even smaller than a virus, the smallest particle suspended in water ***

0.0001 micron diameter pores

Reverse osmosis membrane

Removes:

- Nitrate nitrogen ○ Formaldehyde ○ Dissolvable lead
- Trihalomethane ○ Arsenic ○ Endocrine disruptors
- Morbific bacterium/protozoa ○ Dioxin
- Radioactive substances ○ Agricultural chemicals
- Aluminum ○ Trichloroethylene ○ Tetrachloroethylene
- Viruses ○ Sulfuric acid

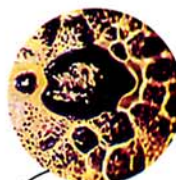
Virus (0.01 micron)

Nitrate nitrogen (0.00044 microns)

Trihalomethane (0.00028 microns)

Lead (0.00034 microns)

Dioxin (0.00060 microns)



How dirty tap water is! I don't feel like drinking it anymore!



Photograph of ice crystal of water passed through Crystal Valley purifier (courtesy of MRA Laboratories, Inc.)

Water molecule

Water cannot contain harmful substances smaller than 0.0001 micron. Therefore, water passed through the Crystal Valley purifier is sanitary.

Water purification principle	Harmful substance											
	Residual chlorine	Musty odor	Nitrate nitrogen	Trihalo-methane	Dioxin	Endocrine disruptors and other organic matter	Radioactive substances	Viruses	Agricultural chemicals	Lead	Arsenic	Aluminum
Concentration for accelerated test	20 ppm	※ 1	100 ppm	※ 1	※ 1	2,200 chromaticity ^{※1}	※ 1	※ 1	※ 1	50 ppm	10 ppm	20 ppm
Activated carbon	○	△	×	△	×	×	×	×	△	△	×	×
Activated carbon + hollow fiber membrane	○	△	×	△	×	×	×	×	△	△	×	×
Ionized alkaline	○	△	×	△	×	×	×	×	×	×	×	×
Electrolytic reduction	○	△	×	△	×	×	×	×	×	△	×	×
Ion exchange resin	×	×	×	×	×	×	×	×	×	×	×	×
High performance carbon block	○	△	×	△	×	×	×	×	△	△	△	×
Ceramic	○	△	×	△	×	×	×	×	×	×	×	×
π-water	○	△	×	△	×	×	×	×	×	×	×	×
Conventional reverse osmosis membrane	○	○	△	○	○	△	△	○	△	△	△	×
Crystal Valley	○	○	○	○	○	○	○	○	○	○	○	○

○ = Can be removed

× = Cannot be removed

△ = Can be removed until water flow reaches certain limit

△ = Some agricultural chemicals can be removed until water flow reaches certain limit

※1: Result of chromaticity removal test for theaflavin, organic substance of molecular weight MW = 564 (approx. 0.7 nanometers)^{※2}, nearly equal that of endocrine disruptors.
 ※2: MW stands for molecular weight (or size of molecule).

Six patents are under examination. Most advanced tap water and well water purification system in the world

● High-grade, titanium-coated stainless steel used for hygiene

The inner surface of the stainless steel enclosure is coated with antifouling, antibacterial, high-purity titanium photocatalyst. The photocatalytic action of titanium is caused by light energy entering through the window located in the upper center of the enclosure; this action automatically cleans the inner surface of the stainless steel enclosure, preventing the accumulation of various minor germs and contaminants, keeping the interior sanitary at all times.

Patent pending

● 7.2-liter water tank is made of ABS resin used for medical applications

The water tank and stopcock lever are made of a special resin that complies with the Food Sanitation Law of Japan. Unlike polycarbonate and vinyl chloride, this resin does not elute endocrine disruptors such as bisphenol A and phthalate ester.

● Environment-friendly materials ensure a final product recycling rate of 83% or higher

Careful selection and use of highly durable, environment-friendly and hazard-free materials enable a purifier service life of ten years or more, with a final product recycling rate of 83% or higher.

Patent pending

● Quick connection to faucet through single action connector

This connector does not detach from the faucet even with negative pressure caused by water hammer or other abnormal phenomena.

Specifications



CV-2000SR
(counter-top installation type)

Patented

● Use of antibacterial air filters

An antibacterial catechin element, a fiber element impregnated with silver, zinc and a special type of zeolite, as well as an electrostatic HEPA-filter element, are used in the air filter unit to keep various minor airborne germs from entering the purifier and contaminating the water as the tank water level rises and falls.

Patent pending

● Inspection window blocks 99.9% of ultraviolet rays

The inspection window on the purifier front is made of high polymer resin that blocks ultraviolet rays, suppressing the proliferation of blue-green algae. Window and water tank are of double-layer structure. This keeps the window free of water drops and facilitates visual water level check.

● Specially designed antibacterial resin for bottom plate and top cover

The bottom plate and top cover are made of special purpose antibacterial resin that meets the resin dissolution test requirements specified by the Ministry of Health, Labor and Welfare of Japan, and has been authorized by the EPA (Environmental Protection Agency of the U.S.A.). No resin components used in the Crystal Valley water purifier ever elute any endocrine disruptors.

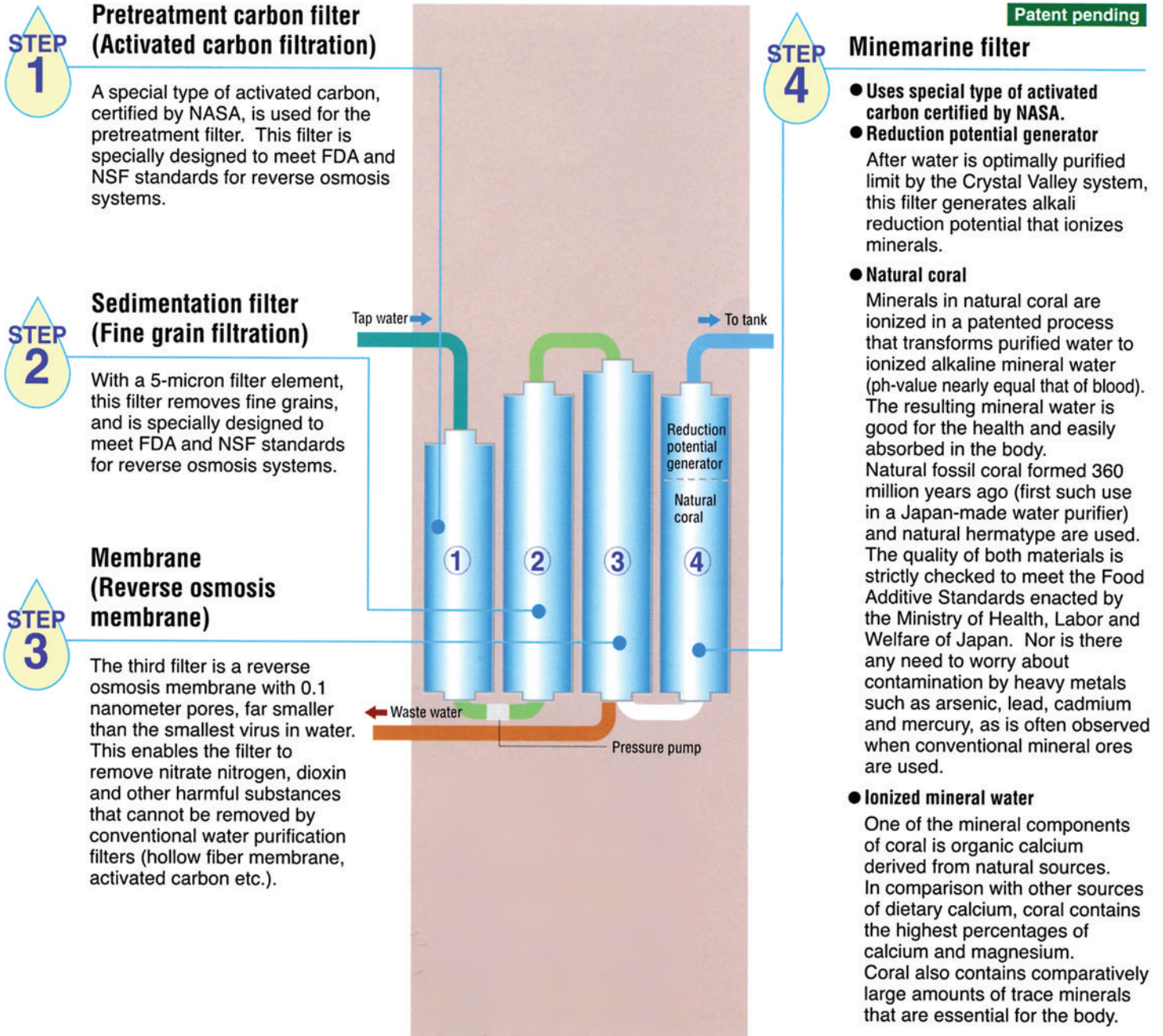
● Automatic tap water replenishment and high purification power

With a purification capacity of 360 liters per day, the Crystal Valley water purifier produces pure, tasty water containing ionized minerals. Use this abundance of pure water for various purposes.

Dimensions	: Main body: 307W × 269D × 438H mm Tank: See label on main body.	Power supply	: 100 VAC (50/60 Hz)
Dry weight	: 11.0 kg (incl. filter)	Feed water temperature	: 4 - 43°C
Tank capacity	: 7.2 liters	Feed water pressure	: 0.1 - 0.4 MPa
Purification capacity*1	: 360 liters per day	Automatic raw water replenishing system	: float type
Pure water yield rate	: 60%		

* 1: Purification capacity is based on 0.4 Mpa water pressure and 25°C water temperature.
Capacity varies depending on water pressure and temperature.

Four high-performance filters, including reverse osmosis membrane, keep out harmful substances. minemarine filter generates power to ionize minerals of natural coral



Patent pending for water purification system

* The Crystal Valley water purification system contains four different types of filters: activated carbon, fine grain, reverse osmosis membrane, and Minemarine filters.

Replacement filter (purchased separately)*2

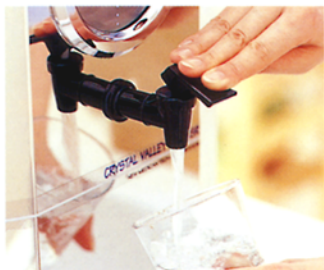
Parts	Rough standard replacement interval (for average use of 20 liters per day)
● 1st stage Pretreatment carbon filter	3 years
● 2nd stage Sedimentation filter	3 years
● 3rd stage Membrane (reverse osmosis membrane)	3 years
● 4th stage Minemarine filter	3 years

*2: Filter replacement interval may vary depending on water quality, water pressure, and volume of water purified.

Good Water Enhances Quality of Daily Life.



Various uses: Not only for cooking but also for beautification, health promotion and emergency care



As drinking water for daily life

Comprises extremely small water clusters (molecule clusters). Crystal Valley water reaches every point in the body and cleanses it of impurities. Drink Crystal Valley water every day for your health.



Safe for babies

Babies are very sensitive to contaminants. Use Crystal Valley water to make powdered milk and baby food, as well as for baby's bath. Crystal Valley water is also safe for those prone to atopy.

*Some published documents in the U.S.A. state that water to be used in baby food should be free from impurities (distilled water or water treated in a reverse osmosis membrane filtration system).



For making tea, coffee, and diluting whiskey

Crystal Valley water does not contain any impurity other than ionized minerals. Therefore it enhances the flavor of coffee, sake and other beverages. To cool refreshment, use Crystal Valley water ice. It will not affect refreshment flavor.



For cooking

Because Crystal Valley water contains no impurities other than ionized minerals, vitamins and other nutrients contained abundantly in foods are not destroyed when cooked in this water. Crystal Valley water is also ideal for boiling foods and washing vegetables.



For beauty

Water molecule clusters as small as 0.0001 micron remove fats and metabolic decomposition products from the body, enabling blood to flow smoothly. Nutritive elements are carried to every point in the body, making skin spotless.

*The thinnest capillaries in the body are 0.08 microns thick.



For emergency care

Be prepared for earthquakes and typhoons, as well as for terrorist attacks. The Crystal Valley water purifier, which can change even river water to drinking water, will ease your fears.

*Emergency kit additionally required.

Please note:

- Some types of faucets are unsuitable for purifier connection. Check your faucet before purchasing the purifier.
- Connect purifier to specified power source.
- For ground water (well water) purification, pretreatment is required.
- The Crystal Valley water purifier is manufactured in Japan.

The Crystal Valley water purifier uses the world's most advanced reverse osmosis membrane technology, developed by the National Aeronautics and Space Administration (NASA) of the U.S.A. Official certification by the Water Quality Association and the National Sanitation Foundation of the U.S.A. shows that the excellent performance of the Crystal Valley water purifier is widely acknowledged throughout the world.



National Sanitation Foundation
Reverse osmosis membrane purifier

* Key components that come into contact with water meet NSF requirements.



Certificate of National
Water Quality Association

For inquiries and information, contact:

Distributor:

Manufacturer: New Medican Tech Corporation

* Prices in this brochure do not include sales tax. * Actual product colors may differ slightly from those in this brochure.
* Purifier specifications and design are subject to change without notice, for performance improvement or other reasons.