

Be sure to read this Instruction Manual before using the product.

## Instruction Manual

## Portable Water Purifier

Made in Japan

# Delios



Thank you for purchasing our portable water purifier, DELIOS.

Please read the "Instruction Manual" carefully to correctly understand the instructions before using. After reading it, be sure to keep it together with the product and check with it when you have any question or find a problem.

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### Before using

#### Warning

#### The following water cannot be used

DELIOS cannot remove such things as harmful substances that are dissolved in the water, viruses, or salts, so the following types of water cannot be used.

- River or lake water into which have flowed domestic wastewater, factory wastewater, etc.
- River or lake water into which agricultural chemicals, herbicides, etc., might have flowed.
- Water in which poisonous substances, organic solvents, harmful heavy metals, etc. (agricultural chemicals, thinner, insecticide, detergents, etc.), might have become dissolved.
- River or lake water in which no fish or other organisms are living (there is a possibility poisonous substances are dissolved in the water).
- Water that might be contaminated with viruses.
- This cartridge does not guarantee the health of the user. You are responsible for using water that is as safe and sanitary as possible. The manufacturer of this product shall not be responsible in any manner for any damage or incidental damage that occur directly or indirectly from the use of this product.

#### The following water can be used

- Tap water, underground water, and well water
- River and lake water in which fish and other organisms are living
- Bathwater without bath additives, held water in plastic tanks etc., expired plastic bottled water, toilet tank water
- Pool water, melted snow water, rainwater, etc.

#### Objects that can be removed

Bacteria, mold, protozoa, suspended organic and inorganic substances, turbidity, rust, etc.

#### Caution

- Do not drop the product, hit or bump it strongly, or apply a sudden force or strong force using something other than your hand to the water pack with the cartridge loaded. Doing so could damage the product or cause water to leak out.
- Do not place the product near sharp or pointed objects, heat sources, or chemicals or cleansers during storage or use. Doing so could cause the product to deform, deteriorate, or break, causing water to leak out.
- When installing or removing the cartridge, do not hold the water pack by the spout and check the screw threads to make sure there is not dirt or debris on them. Installing the cartridge with dirt or debris on it could damage the product or cause water to leak out.
- Do not use a stiff brush or polishing powder, etc., to clean the product. Doing so could scratch it. If the product becomes dirty, use a cloth or sponge soaked in tap water to clean the product without using soap or cleaner.
- Do not directly touch the end of the nozzle with your hand or other object. Doing so could cause microorganisms and bacteria to grow on it.

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- When adding raw water to the water pack or installing a new cartridge, wipe off any water drops that get on the surface of the water pack. If the water drops get into the filtered water, they could contaminate it.
- Do not use in a microwave oven.
- The product is used, allow approximately 300 ml (about 1/3 from the bottom of the water pack) to flow out before using the product. This will clean any fouling around the nozzle.
- Do not use hot water heated to 35 °C or higher. Doing so could temporarily cause a bad smell. It could also damage the product or cause water to leak out.
- Do not refrigerate the product. Doing so could damage the product.
- Do not use the following in the product.  
Drinks such as juice, milk, tea, alcohol, and carbonated drinks. Doing so could remove their flavor and clog the cartridge.
- DELIOS is unable to change hard water to soft water.
- DELIOS is unable to change sea water to fresh water.
- Be careful not to cut your hand on the aluminum pouch of the cartridge or the welded areas of the water pack.

#### Precautions for storing

When DELIOS will be stored long term for emergency, such as for use during a disaster, keep used and unused components and supplies out of direct sunlight and do not store them in areas with high temperature or humidity. Also, be sure to discard the water before using.

#### Storage before use

When storing DELIOS, be sure to store the Instruction Manual with it.

\* When storing in an environment where the temperature will be 0 °C or lower, cracks could form in the cartridge's aluminum pouch, but the pouch is not penetrated, and the product is still preserved properly.

#### Safety functions of DELIOS

DELIOS is a portable water purifier that uses the action of the hollow fiber membrane and fibrous activated carbon in the cartridge to remove microorganisms and turbidity from the raw water to produce safe water. It also has a simple construction that can filter water simply by squeezing the water pack.

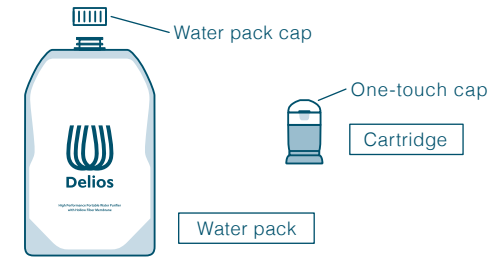
- ① Hollow fiber membrane: This has 0.1 μm pores and removes harmful bacteria, mold, protozoa, and the rust, micro particles, and suspended organic matter and other substances that cause turbidity from the raw water.
- ② Fibrous activated carbon: This removes chlorine odors and other odors in raw water.

#### Applications

- For outdoor activities (mountain climbing, camping, hiking, fishing): potable water, etc.
- For emergency and disastrous events: potable water, cleansing dirt on eyes, a mouth, a nose, and injured parts, etc.
- For overseas trip: potable water, washing teeth, taking drugs, making ice, etc.

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## Names of parts



\* The water pack is not included when just purchasing the cartridge.

## How to use

For use of DELIOS, discharge the bottom 1/3 of the water in the water pack (about 300ml. See illustration at right.)

(This is to remove the air from the cartridge and allow the water to soak into it.)

### 1.

Install the cartridge after removing the cap and filling the water pack with water. Partial fibrous activated carbon (black) in the cartridge may float in water due to contact with raw water in a container. This is not a problem because it will be filtered through a hollow fiber membrane.

### 2.

Open the one-touch cap and squeeze the water pack with your hands.

If all of the water in the container cannot be filtered, remove the cartridge and allow air in to balloon out the water pack before trying to push out the water again.

Strongly bending or twisting the water pack could cause it to crack, so please be careful.

The DELIOS is heavy when completely filled with water, so be careful when filtering.



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### 3.

After use, close the one-touch cap until you hear it snap shut.

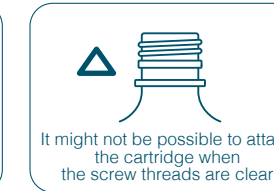
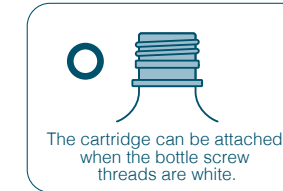
\* After filtering water, replace or discard the cartridge within one week.

\* Replace the cartridge when it becomes clogged and stops filtering the water.



#### Guidelines for when the cartridge can be attached to a plastic bottle

The cartridge cannot be attached to some foreign made and other plastic bottles.



#### When Carrying

- When water is contained
  - Hold it in your hands.
  - When placing DELIOS in a bag, etc., remove the cartridge from the water pack, place the included cap on the water pack, and place the cartridge in a sealed bag, etc.
  - \* The one-touch cap might open water leak out if the water pack bumps something.
  - \* Water might leak out if using a cap other than the included cap.

#### When water is not contained

Attach the cartridge or cap to the water pack, fold the pack in three, and store it.

#### When discarding a used DELIOS

Discard used cartridges and water packs as directed by the local government.

For information regarding the components, refer to page 6 "Product Specifications".

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## Product Specifications

Filter material	Hollow fiber membrane (polysulfone), fibrous activated carbon, unwoven cloth
Cartridge body material	ABS resin
One-touch cap material	Polypropylene
Water pack material	Nylon, polyethylene / Threads: Polyethylene
Water pack cap material	Polypropylene, polyethylene
Water pack capacity	1.2L
Water pack usage temperature range	0 to 60 °C
Water purification capacity	Approx. 500 L * Filtering results for test water (turbidity level 2). * The value will differ depending on the water used.
	1.2 L/min (tap water, hand squeezing pressure: Approx. 0.015 MPa at beginning of use) *The value will differ depending on the water used.
Bacteria removal rate	99.9999% *1
Size	Cartridge: φ44mm × 77mm Water pack: W158mm × H250mm
Weight	Approx. 60g (1,260g when filled with water)

\*1 Test method: The test results were obtained in accordance with ASTM F 838-20 Standard Test Method for Determining Bacterial Retention of Membrane Filters Utilized for Liquid Filtration.

○The specification and package are subject to change without prior notice.

#### Manufacturer

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