Berkey® Water Purifiers "Simply the Best"

Go Berkey® Kit

Introduction

Now that you have bought your **Go Berkey** water purifier, you have taken the first step toward protecting yourself from disease causing pathogens, parasites, harmful chemicals, heavy metals and other waterborne contaminates.

The ease of operation of this unit combined with a proven effectiveness at eliminating waterborne diseases such as cholera and typhoid, has led to **Berkey** systems being specified for field operations by many of the world's major aid and emergency relief organizations.

Contents:

- 1- Upper Chamber
- 1- Lower Chamber
- 1- Vinyl carrying case
- 1- Lid

 1. Purification of
- 1- Purification element, wing nut and washer
- 1- Priming Button
- 1- Generic Berkey® sport water bottle
- 1- Assembly instruction sheet

Assembly Instructions:

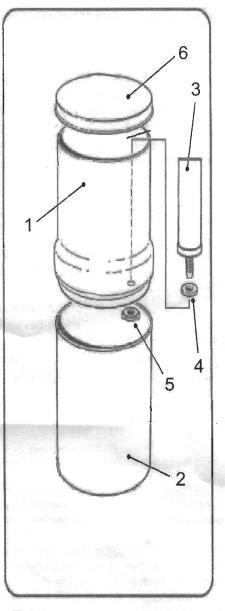
- 1. Extreme cleanliness is important. Wash hands and system before proceeding to assure that contamination of the components does not take place during assembly.
- 2. Remove the purification element and parts from their protective packaging, checking each item against the above list.
- 3. Prime **Black Berkey** purification element (see reverse side of instruction sheet).
- 4. Place the large sealing washer (4) over the threaded portion of the element (3.)
- 5. Place the element (3) into the hole in the base of the upper chamber (1).
- 6. Secure element in the chamber base by screwing on the wing nut (5) onto the threaded mount.
- 7._Place the upper chamber (1) onto the lower chamber (2) and place lid (6) in position.

Care and Use Fill the Sport Berkey®

Portable Water Purifier with water, screw on cap and tighten securely to eliminate leaks. Flush water through filter by pulling down lever, so that straw is exposed, and squeeze water through filter & out the straw. Repeat this flushing process twice before drinking. This removes excess process dust from the filter. After 2 flushes, rinse the bottle & cap. Your filter bottle is now ready for use. Enjoy!

Maintenance and Storage The Sport Berkey® Portable

Water Purifier has a shelf life of 50 years. When the filter system will not be used for an extended period, remove filter and flush the unit with a chlorinated solution of 1/4 tsp. per one half gallon of water. Allow parts to dry thoroughly with cap removed. Re-assemble and stow. Do not allow filter to freeze, do not place in microwave oven and do not run hot water through the filter. Note: All contaminants that this filter has the ability to remove or reduce may not necessarily be in the user's water



Notes:

- 1) If the system is left to stand for more than 3 days, it is recommended that any water left in the lower chamber be run to waste as well as the new water that is purified during the first 1 minute to also be run to waste.
- 2) When installing purification elements for the first time or replacing used elements, always prime and condition the new purification elements.
- 3) After cleaning elements, it is recommended that the elements be re-primed. This will back-flush any process dust from the pores of purification elements and prevent premature clogging.

Operation:

When lower chamber is partially filled, be cautious not to overfill upper chamber as this could cause lower chamber to overflow. For example, if the lower chamber is 1/3 full the upper chamber can be refilled by 2/3rds, if the lower chamber is ½ full, the upper chamber can be refilled by ½, etc.

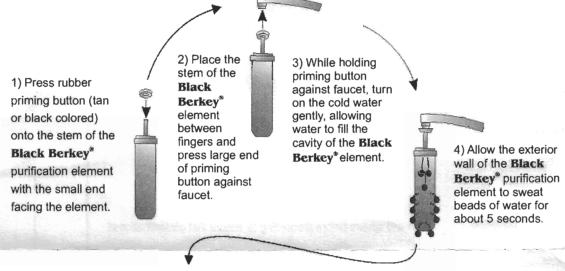
PRIMING THE Black Berkey PURIFICATION ELEMENTS

The micro-pores within the **Black Berkey** purification elements are extremely small, in fact they are small enough to filter food coloring from water. The benefit from having such extremely small pores is that an exponential increase is realized in the efficiency at removing pathogenic bacteria and other waterborne contaminates. Water tension may require that the purification elements be primed in order to flow properly.

Water tension is higher in certain parts of the country and can change from season to season. The higher the water tension, the more difficult it is for the water, using gravity pressure alone, to force the air from the micro-pores of a new element. Priming your purification elements forces the air from the micro-pores of the element

Notes when traveling: When using the system in an area where treated water is not available, we recommend that the user bring along a bottle of clean water or a **Sport Berkey*** purification bottle to prime the purification elements. Using bottled water, have one person hold the element, with the priming button attached and facing upward. Have a second person press the mouth of the bottled water against the priming button and squeeze until water is forced through the entire exterior wall of the element and it begins to sweat beads of water. Alternatively, a **Sport Berkey*** purification bottle can be used to prime the elements by inserting the straw into the hole in the priming button and then squeezing until water is forced through the entire exterior wall of the element and it begins to sweat beads of water.

Do not discard priming button after purification elements have been primed. Re-prime elements after cleaning (see maintenance instructions below) and when elements have been allowed to dry for a prolonged period of time.



5) Rinse process dust from exterior of purification element. The element has now been successfully primed. Repeat steps 1 - 5 for each additional element.

MAINTENANCE: Wash lower chamber once per month with soapy dishwater. In areas with hard water, calcium scale may build up on spigot and chambers after prolonged use. To remove, soak affected part(s) in vinegar or a 50-50% mix of vinegar and water for about 15 minutes. Then clean with soapy dishwater. After prolonged use the flow rate may decrease significantly. To speed up flow rate, scrub exterior of each purification element with a stiff brush or ScotchBrite® pad and re-prime elements.

ADDITIONAL INFORMATION: To purify the water when using a source of water that might contain extreme viral and bacteriological contamination, it is recommended that sixteen drops of plain bleach or iodine per gallon be added to treat the source water before purifying. This will kill minute pathogens such as viruses. The disinfectant will then be removed from the treated water removing its odor and taste entirely. When water purifier is not used regularly, remove purification elements from system and allow to air dry. Store purification elements dry. Until first activated, purification elements can be stored indefinitely. Do not allow wet purification elements to freeze. Do not place purification elements in dishwasher or microwave oven. Black Berkey® purification elements are self-sterilizing, do not boil. Never wash purification elements with cleaning detergents or soap. Not intended for use with saltwater. While this system can efficiently purify raw untreated pond, lake and river water, always use the cleanest, clearest water whenever possible

SYSTEM TEST: Your Black Berkey* purification elements are powerful enough to remove food coloring from water; this feature allows you to make sure your system is operating properly. Simply fill the upper chamber with water and add a tablespoon of food coloring per gallon capacity of your system. If the food coloring is removed entirely, your purification system is working properly. If not, check to make sure that the wing nuts on your elements are securely tightened then re-run the test. We recommend this test be done upon first use then at six-month intervals.

GENERAL WARRANTY INFORMATION

New Millennium Concepts, Ltd. warrants this product to be free from defects in materials and workmanship for a period of 6 months from date of purchase. **Black Berkey®** purification elements have a two-year prorated warranty calculated in six months intervals. New Millennium Concepts, Ltd. will replace or repair any product that it deems is not properly functioning during the stated warranty period. Relief under this warranty is limited to the replacement or repair of defective materials or workmanship only. New Millennium Concepts, Ltd. shall not be held liable for incidental or consequential damage to personal property from, but not limited to, a defective unit, improper use, abuse, accident, or neglect, etc. No warranty will apply to units which have been used for purposes not intended, which have been altered so as, in the manufacturers judgment, to affect adversely its performance. This warranty is for the original retail purchaser only, and cannot be transferred. Repair or replacement of parts will be made upon delivery to manufacturer's plant or authorized service dealer at customer's expense. The laws of the State of Texas, USA, will govern any disputes regarding this warranty or claim made. This warranty which is given expressly in lieu of all warranties, expressed or implied, or merchantability and fitness for a particular purpose, constitutes the only warranty made by New Millennium Concepts, Ltd.



Black Berkey® Purification Element Installation and operating Instructions

INTRODUCTION:

Congratulations on your purchase of **Black Berkey**® purification elements, you have taken the first step towards protecting you and your family from water born contaminants.

CONTENTS

2-Purification Elements, 2-Sealing Washers, 2-Wing Nuts, 1-Priming Button, 1-Instruction sheet

ASSEMBLY INSTRUCTIONS:

- Wash hands before proceeding to ensure that contamination of filter system components does not take place during assembly.
- 2. Remove parts from their protective packaging, checking items against contents list.
- 3. Prime **Black Berkey** purification elements (see reverse side for instructions).
- 4. Place the large <u>sealing washer</u> over the <u>threaded mount</u> of the **Black Berkey**® punification element.
- 5. Place the threaded mount stem into the hole in the interior base of the upper chamber.
- Secure element in the base of the chamber by screwing the wing nut onto the threaded mount. Repeat #3-#6 until all elements have been installed.

OPERATION:

Fill <u>upper chamber fully</u> with <u>cold or room temperature</u> water *(do not use hot or boiling water)* and cover with lid. Allow water to filter into lower chamber. Open the spigot to allow all water to run to waste. This will flush fines and process dust from inner bore of the purification elements. *(Note: Do not be concerned if particulate is visible within flush water, this is normal)*. Refill upper chamber, your system is now ready to purify water.

Note: Purification elements may take up to 15 minutes to begin dripping. Maximum flow rate will be achieved after the initial 12-20 hours of use as micro air pockets within purification elements are replaced with water.

MAINTENANCE:

As the elements filter out particulate from the water, the flow will gradually reduce over time. When this occurs, remove the element and scrub the outer surface with a stiff toothbrush or ScotchBrite® pad under running water. Re-Prime elements (optional). This procedure will restore the flow rate to normal. Take precautions not to contaminate the threaded portion of the purifying elements. If contamination does occur, wipe threads with an alcohol swab. Never wash purifying elements with soap.

Each **Black Berkey**® element is self-sterilizing and will give efficient filtration for 3,000 gallons (6,000 per set of two) on the following contaminants:

PATHOGENIC BACTERIA CYSTS AND PARASITES <u>removal to non-detectable levels:</u> (E. coli, Pseudomonas aeruginosa, Klebsiella, Giardia, Cryptosporidium).

TRIHALOMETHANES removed to below detectable limits: (Bromodichloromethane, Bromoform, Chloroform, Dibromochloromethane).

RADIOLOGICALS removed to below detectable limits: (Radon 222).

VOLATILE ORGANIC COMPOUNDS (VOCs) removed to below detectable limits (Alachlor, Atrazine, Benzene, Carbofuran, Carbon Tetrachloride, Chlorine, Chlorobenzene, Chloroform, 2,4-D, DBCP, p-Dichlorobenzene, o-Dichlorobenzene, 1-Dichloroethane, 1, 2-Dichloroethane, 1, 1-Dichloroethylene, cis-1, 2-Dichloroethylene, Trans-1,2-Dichloroethylene, 1, 2-Dichloropropane, cis-1,3-Dichloropropylene, Dinoseb, Endrin, Ethylbenzene, Ethylene Dibromide (EDB), Heptachlor, Heptachlor Epoxide, Hexachlorobutodiene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, MTBE, Pentachlorophenol, Simazine, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Toluene, 2,4,5-TP (Silvex), 1,2,4-trichloroethane, 1,1,1-trichloroethan, 1,1,2-trichloroethane, Trichloroethylene, o-Xylene, m-Xylene, p-Xylene) HEAVY METALS: Reduced by up to 95%: (Lead, Mercury, Aluminum, Cadmium, Chromium, Copper).

ALSO REDUCES: Nitrates, Nitrites Rust and Sediment.

The Black Berkey® element formulation has been tested by State & EPA accredited laboratories to exceed EPA & ANSI/NSF (Std. 53) protocol. Tested by the University of Arizona, Spectrum Labs. and the Department of Toxicology and Environmental Science, Louisiana State University.

NEW MILLENNIUM CONCEPTS, LTD.

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The Sport Berkey® Portable Water Purifier - Generic Version

The **Sport Berkey**® Portable Water Purifier is the ideal personal protection traveling companion — featuring the IONIC ADSORPTION MICRO FILTRATION SYSTEM. The theory behind this innovation is simple. The bottle's filter is designed to remove and/or dramatically reduce a vast array of health-threatening contaminants from questionable sources of water, including remote lakes and streams, stagnant ponds and water supplies in foreign countries where regulations may be sub standard, at best.

The Sport Berkey® Portable Water Purifier Utilizes IONIC ADSORPTION MICRO FILTRATION

This advanced technology was developed, refined, and proven through diligent, investigative research and testing performed by water purification specialists, researchers and engineers. The media within the filter element removes contaminants by a surface phenomenon known as "adsorption" which results from the molecular attraction of substances to the surface of the media. As the bottle is pressed, the source water is forced through the filter. The quality and volume of media used, determine the rate of adsorption. The flow rate or time of exposure through the filter has been calculated to yield the greatest volume removal of toxic chemicals caused by pollution from industry and agriculture. This exclusive filter also incorporates proprietary absorbing media that are impregnated into the micro-porous filter for the IONIC absorption of pollutants into the filter such as aluminum, cadmium, chromium, copper, lead, mercury, and other dangerous heavy metals.

The "Tortuous Path" structure of these pores gives it its unique characteristics. The **Sport Berkey**[®] Portable Water Purifier offers a convenient and portable filtration system using medical grade technology.

Note: If using a source of water that might contain extreme bacteriological or viral contamination, it is recommended that two drops of plain chlorine bleach or iodine be added to each refill before filtering. This will kill minute pathogens such as viruses. The disinfectant will then be filtered from the water entirely removing its odor, color and taste.

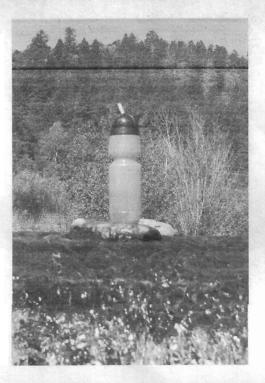
Care and Use

Fill the Sport Berkey®

Portable Water Purifier with water, screw on cap and tighten securely to eliminate leaks. Flush water through filter by pulling down lever, so that straw is exposed, and squeeze water through filter & out the straw. Repeat this flushing process twice before drinking. This removes excess process dust from the filter. After 2 flushes, rinse the bottle & cap. Your filter bottle is now ready for use. Enjoy!

Maintenance and Storage

The **Sport Berkey**® Portable Water Purifier has a shelf life of 50 years. When the filter system will not be used for an extended period, remove filter and flush the unit with a chlorinated solution of 1/4 tsp. per one half gallon of water. Allow parts to dry thoroughly with cap removed. Re-assemble and stow. Do not allow filter to freeze, do not place in microwave oven and do not run hot water through the filter. Note: All contaminants that this filter has the ability to remove or reduce may not necessarily be in the user's water supply.



The **Sport Berkey**® Portable Water Purifier eliminates or reduces:

- Harmful microscopic pathogens: E-coli >99.99999%, Cryptosporidium, Giardia and other pathogenic bacteria.
- <u>Toxic chemicals> 99.9%:</u> Trihalomethanes, VOCs, detergents, pesticides, etc.
- Radiologicals: > 99.9%: Radon 222
- <u>Heavy metals > 99.9%</u>: Aluminum, Cadmium, Chromium, Copper, Lead, and Mercury.
- <u>Unpleasant taste and odors</u>, <u>cloudiness</u>, <u>silt</u>, <u>sediment and chlorine > 99.9%</u>.

This water purification product has been tested in accordance with the EPA Protocol for Microbiological Purifiers and ANSI/NSF 53 adapted for sport bottles.

REFILL CAPACITY
Water From Any Source: 160
Municipal Water: 640



