

#### **Common Water Contaminants:**

**Pump Filters/Purifiers** 

Bacteria: E. coli; Salmonella; Cholera

Protozoans: Giardia; Cryptosporidia; Amoeba

Viruses: Hepatitis A; Norwalk Virus; Rotavirus; Poliovirus

# Water Treatment Options

Tips:

4/24/2021

- 1) Always bring a back-up water treatment option
- 2) Middle of a lake is the best place to draw water. Cysts tend to settle out in a large body of water
- 3) Always check local information on water conditions at your destination before your trip
- 4) If treating water by boiling, 1 minute at a full rolling boil is sufficient. [At higher elevations boil time should be increased. At 2,000 m (6.500 ft) water should be boiled for 3 minutes]

Manufacturer	Model	Туре	Flow Rate	Weight	Eliminates	Filter Life	Other Features	Price
Katadyn	Hiker Pro	Pleated glass fiber (0.2	1 L/min	11 oz	Bacteria	Up to 1,150 L	Field cleanable; Carbon core: reduces	\$84.95
		μm)			Protozoa		chemicals, improves taste	
Katadyn	Vario	Pleated glass fiber (0.2	2 L/min	15 oz	Bacteria	Up to 2,000 L	Field cleanable; Carbon core:	\$94.95
		μm) & Ceramic disc			Protozoa		reduces chemicals, improves taste	
MSR	MiniWorks	Ceramic (0.2 µm)	1 L/min	16 oz	Bacteria	Up to 2,000 L	Field cleanable; Carbon core:	\$89.95
					Protozoa		reduces chemicals, improves taste	
MSR	Guardian	Hollow Fiber (0.02 µm)	2.5 L/min	17.3 oz	Bacteria	Up to 10,000 L	Full viral protection with no	\$349.95
	Purifier				Protozoa		chemicals; Self-cleaning while you	
					Viruses		pump your water	

#### **Gravity Filters**

Manufacturer	Model	Туре	Flow Rate	Weight	Eliminates	Filter Life	Other Features	Price
MSR	Autoflow XL	Hollow fiber (0.2 µm)	1.75 L/min	12 oz	Bacteria Protozoa	Up to 1,500 L	Field cleanable; Bottle Adapter included; 10L Bag included	\$99.95
MSR	TrailBase	Hollow fiber (0.2 μm)	1 L/min	22 oz	Bacteria Protozoa	Up to 1,500 L	Field cleanable; 2L Clean & Dirty Bags included; Convertible to TrailShot Ultralight Filter	\$139.95
Platypus	GravityWorks (4L)	Hollow fiber (0.2 μm)	1.5 L/min	11.5 oz	Bacteria Protozoa	Up to 1,500 L	Field cleanable; Clean & Dirty Bags included	\$109.95
Platypus	GravityWorks (2L)	Hollow fiber (0.2 μm)	1.5 L/min	10.9 oz	Bacteria Protozoa	Up to 1,500 L	Field cleanable; Adapters included; Clean & Dirty Bags included	\$99.95
Sawyer	Squeeze System	Hollow Fiber (0.1 μm)	1.7 L/min	3.0 oz	Bacteria Protozoa	100,000 gal.	Backflushable using the included syringe, 2-64oz Bags included	\$49.95
MSR	Guardian Gravity Purifier	Hollow Fiber (0.02 μm)	2.5 L/min	17.3 oz	Bacteria Protozoa Viruses	Up to 3,000 L	Full viral protection with no chemicals; Self-cleaning while you	\$249.95
Katadyn	BeFree Gravity Filter 6.0L	Hollow Fiber (0.1 μm)	2 L/min	8.9 oz	Bacteria Protozoa	Up to 1,000 L	Field cleanable using a simple shake method	\$99.95
Katadyn	BeFree Gravity Filter 10.0L	Hollow Fiber (0.1 μm)	2 L/min	10.7 oz	Bacteria Protozoa	Up to 1,000 L	Field cleanable using a simple shake method	\$109.95

### **Ultralight Filters**

Manufacturer	Model	Туре	Flow Rate	Weight	Eliminates	Filter Life	Other Features	Price
MSR	Trailshot	Hollow Fiber (0.2 μm)	1 L/min	5.0 oz	Bacteria	Up to 2,000 L	Field cleanable using a simple shake	\$49.95
					Protozoa		method	
Katadyn	BeFree 1.0L	Hollow Fiber (0.1 μm)	2 L/min	2.3 oz	Bacteria	Up to 1,000 L	Field cleanable using a simple shake	\$44.95
					Protozoa		method; 1.0L Bag included	
Katadyn	BeFree 3.0L	Hollow Fiber (0.1 μm)	2 L/min	3.5 oz	Bacteria	Up to 1,000 L	Field cleanable using a simple shake	\$54.95
					Protozoa		method; 3.0L Bag included	

Sawyer	Squeeze	Hollow Fiber (0.1 μm)	1.7 L/min	3.0 oz	Bacteria	100,000 gal.	Backflushable using the included	\$39.95
					Protozoa		syringe, 16oz, 2-32oz Bags included	
Platypus	Quickdraw	Hollow Fiber (0.1 μm)	3 L/min	2.2 oz (3.3 w/included reservoir)	Bacteria Protozoa	Up to 1,000 L	Field cleanable using a simple shake method	\$39.95

## **UV** Purifiers

Manufacturer	Model	Туре	Treatment	Weight	Effective	Battery Life	Other Features	Price
			Time		Against			
SteriPen	Classic 3	Ultraviolet Purifier	1.5 min/L	5.0 oz	Bacteria	4 AA batteries; Lithium =	Lamp life = 8,000 cycles	\$89.95
					Protozoa	150L; Alkaline = 50L;		
					Viruses	NIMH (recharge) = 100 L		
SteriPen	Ultralight	Ultraviolet Purifier	1.5 min/L	2.6 oz	Bacteria	Rechargeable Lithium Ion;	Lamp life = 8,000 cycles	\$99.95
					Protozoa	20 treatments per charge		
					Viruses			
SteriPen	Adventurer	Ultraviolet Purifier	1.5 min/L	3.6 oz	Bacteria	2 CR123 batteries;	Lamp life = 8,000 cycles	\$109.95
					Protozoa	50 treatments		
					Viruses			

#### **Chemical Treatments**

Manufacturer	Model	Туре	Treatment Time	Weight	Effective Against	Volume Treated	Other Features	Price
Aquamira	Water Treatment Drops 1oz.	Chlorine Dioxide	20– 35 min	3.7 oz	Bacteria Protozoa Viruses	Up to 114 L 4 year shelf life	Does not impart taste to water; more effective than iodine in treating Cryptosporidium cysts	\$14.95
Katadyn	Micropur MP1 Water Purifier Tablets 20 or 30 pack	Chlorine Dioxide	15min-4hrs depending on water conditions and organisms present	1.5 oz	Bacteria Protozoa Viruses	20L or 30L	Meets EPA Microbiological Purifier Test Standards; does not impart taste to water; more effective than iodine in treating Cryptosporidium cysts	\$10.95/ 20 pack \$14.95/ 30 pack
Potable Aqua PA+	Water Purification Germicidal Tablets	Iodine	35 min	2.45 oz	Bacteria Protozoa (but not Cryptosporidia) Viruses	25 L	Not effective against Cryptosporidium cysts; Has PA+ tablets to neutralize lodine after taste	\$12.95
Potable Aqua	Water Purification Germicidal Tablets	Iodine	35 min	1.35 oz	Bacteria Protozoa (but not Cryptosporidia) Viruses	25 L	Not effective against Cryptosporidium cysts	\$8.95