

PURIFICATION METHODS AND TOOLS SUMMARY

METHOD	Pore Size	Effective Against	Capacity	Amazon Price	Comments
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HEAT

Boiling	n/a	Protozoa bacteria viruses			One minute roiling boil-cool before use Effective against most pathogens Pour between vessels to improve taste
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CHEMICALS

Household Bleach (without scent or additives)		Giardia			2 drops per quart or 8 drops (1/8 tsp) per gal (clear water) leave covered for 30 min, double bleach for cloudy water degrades with age, not effective against Cryptosporidium
Clearon Aqua Tabs (chlorine based)		Giardia most bacteria many viruses		\$10.54	Effective against Giardia, bacteria and viruses, not Cryptosporidium Stir for 10 min, wait 30 min.
Potable Aqua Water Treatment Tablets (50) (iodine based)	n/a	Giardia most bacteria many viruses	6.25 gal	\$5.99	Takes 30 minutes, not effective against Cryptosporidium Not for longterm use (two weeks), or by certain people Has shelf life (4 years max unopened, under ideal conditions)
Aqua Mira Chlorine Dioxide Drops, 1 oz	n/a	protozoa most bacteria many viruses	30 gal	\$13.00	Effective against Cryptosporidium, can use in cloudy water Has shelf life (4 years even if opened), no chemical taste Much stronger germicide than iodine, can use when storing water

FILTRATION

Aqua Mira Frontier Water Filter Straw	2 microns	protozoa	30 gal	\$10.56	can't clean, so it's desposable
LifeStraw Personal Water Filter	0.2 microns	protozoa most bacteria	265 gal	\$19.99	Test to ensure functionality
Sawyer SP 126 Mini Filter	0.1 microns	protozoa most bacteria	100,000 gal	\$20.70	Fast flow rate, can use with water bottles, hydration bladders
Waves for Water Community Filter	0.1 micron	protozoa most bacteria	1 million gal	\$50.00	Provides water for 100 people a day
Activated Charcoal		no pathogens			Filters some chemicals and organic contaminants

UV LIGHT

SteriPen Traveler UV Purifier	n/a	protozoa bacteria viruses	3000 1 L treatments	\$43.16	Relies on batteries, only effective in clear water. Larger than adventurer, doesn't include battery or case
SteriPen Adventurer Opti UV Purifier	n/a	protozoa bacteria viruses	8000 1 L treatments	\$65.00	Relies on batteries, only effective in clear water. Small, comes with case and two CR 123 batteries

DISTILLATION

	n/a	protozoa bacteria viruses			Requires solar energy or fuel and a vessel and capture container
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