# Water - Biosand Filter





https://wiki.lowtechlab.org/wiki/Water\_-\_Biosand\_Filter

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⚠ Difficulté Moyen

① Durée 1 jour(s)

① Coût 80 USD (\$)

Description

Biosand filter to filter out pathogens in water

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#### Introduction

BioSand Filters are field-tested, low-tech, household appliances that use sand, gravel and natural biological processes to filter out pathogens in water, making it safe to drink.

OHorizons, a non-profit international coalition of innovators, has engineered an award-winning breakthrough in the production of concrete BioSand Filters, a Wood Mold, that can be made with 100% locally-sourced materials, tools, and labor, which reduces the financial and technical barriers to BioSand Filter production. The Construction Manual for this Mold is open-source and free to download at http://ohorizons.org/resources/

Including labor each Wood Mold costs between \$70-100 and can make around 50 concrete filters in its lifespan. The total material costs for each BioSand Filter (concrete, sand, gravel, outlet tube, diffuser basin, lid, and a clean water storage container) are typically under \$25. The filter can clean 44 liters of water per day and serve a family of five in their home for over twenty years if properly maintained. BioSand Filter Treatment Efficiency: Bacteria Up to 98.5%, Viruses 70 to >99%, Protozoa >99.9%, Helminthes Up to 100%, Turbidity 95% <1 NTU

### Étape 1 - Wood Mold Construction Manual and Appendix

The Wood Mold Construction Manual and Appendix are open-source and free to download at http://ohorizons.org/resources/