

How to save water in the lab

Labs can use 5-10x more water than a standard office, some of the items of equipment we use in the laboratories are extremely water intensive and we need to look at ways we can reduce this water consumption

Autoclaves

Autoclaves can use up to 230 litres of water per cycle.
Ways to save water:

- Consolidate items and only run full loads
- Consider if what you are autoclaving actually needs to be sterile
- Right size your autoclave

Aspirators

Require 4l of water per minute to create a vacuum

- Replace with vacuum pumps

Condensers

Water condensers can consume 2L of water per minute and risk flooding the lab.

- Replace with waterless ait condensers

Water baths

Need regular water changes to prevent contamination

- Always keep covered to prevent heat loos and evaporation.
- Use heat blocks instead if possible
- Consider the use of lab Armor beads in replace of water

Water Condensers

Can use 2 litres of water per minute

- Replace with air condensers

Glasswashers

Can use between 170-340litres per load

- Only run when full

Leaking taps

A dripping tap can use 1,640 litres of water per year

- Report and leaks immediately

Water purity

Water purity is critical to scientific research, not all water is created equal, so it is important to know to correct type to use for your application

- *It can take 5 litres of tap water to make 1 litre of ultra-pure water, resulting in 4 litres of waste.*
- Do not use a level of purity greater than what you need.

Ice

- Only use the amount required and avoid overfilling buckets
- Use cooling blocks or Armor beads as a replacement if available