Scuba Equipment care – Rinsing and cleaning diving equipment

Maintenance, or “the process of keeping something in a good condition” isn’t just needed to keep the warranty valid, but can prolong the life of your scuba gear, and even keep you alive.

Who are the enemies?

The two biggest enemies of our scuba gear are **salt water** and **sun**.

Salt is dissolved in sea water and from the moment water starts evaporating, salt crystals form, and this could lead to jammed zippers, leaking or sticking valves, free-flowing regulators and buttons stuck in “open” position.



Who are our friends?

The maintenance technician, and fresh water! **Rinsing** is the magic word. Rinse everything with fresh water, after every dive. Incidentally, diving in pool or fresh water doesn’t release you from cleaning and washing your kit. Chlorine (pool water), dirt and bacteria (fresh water) need to be removed as well.

General rinsing principles

Try to keep the time between the dive and the rinsing as short as possible, to prevent salt crystals to form. Use lukewarm water rather than cold water, allowing crystals that may have formed to dissolve better.

In some dive centres you don’t have access to a water hose to rinse your equipment, but you can place it in tubs with “fresh” water, and give it some time to make sure salt is washed off. But where does all that salt go? Right into the tub! Most dive centres change the water often, but when a large number of divers use the tubs at the same time, it is less effective than a water hose or shower. To reduce this issue, some centres provide a separate tub for regulators, computers and photo gear, as these items are more sensitive.

Don’t soak or rinse for just a few seconds: you need some time to remove salt or dirt from the equipment.

There is nothing we can do to avoid salt crystals forming, but we can prevent them from building up. Exposure to the sun (drying your kit after a dive) will allow crystals to form more quickly, and direct contact with sunlight decreases the lifetime of your kit in any case. Salt water, fresh water, pool water, even the water you clean with can also cause Calcium deposits.

Dive suits and fins require less care, but water gets everywhere, so keep in mind that every piece of equipment with grooves, overlapping parts such as hose protectors, valves, buttons, couplings and moving parts is prone to salt crystals and calcium deposits, with risks of possible malfunction, leaks or a decreased lifetime.

Then there’s the BCD, especially the internal bladder. Water can/will get inside, and humidity, bacteria and warmth are a perfect mix for fungus to grow. Additionally, salt crystals on the inside can damage the bladder itself, so rinse the internal part too.

Take some time to rinse dive computers, and keep metal contacts clean to avoid corrosion.

Regulators require special care. There are several parts where salt deposition is possible, so rinse them thoroughly, avoiding to let water into the first stage. Soak or rinse them with their protection caps fitted, and don’t press the purge button when immersed and not pressurised. It is recommended to turn all moving parts – such as air flow controllers – and to lower hose protectors during the cleaning process, to make sure all salt is removed.

Last but not least: dive equipment does not like alcohol, oil, gasoline or chemical solvents, as they might degrade materials. Avoid contact with these chemicals!



Disinfection and cleansing agents

Washing dive equipment in a machine washer is not recommended. Neither is the use of strong washing agents. Mild cleansing agents or special products such as anti-odour solutions or wetsuit shampoo will remove dirt, kill bacteria and deodorise neoprene correctly. Always follow the manufacturer's instructions before use.

Disinfecting agents – when not already part of the cleansing agent – are recommended, especially for BCDs and all equipment coming into contact with your face and mouth: regulators, snorkels masks. Most of the water we dive in- be it ocean, lakes, freshwater springs and even swimming pools – contains bacteria. Keep it in mind, in case of repeated mask clears or mask removal/replacement. Defogging your mask with saliva also increases the bacteria population.

Use a special or mild cleansing/disinfecting agent for the BCD internal bladder. Get water and cleansing solution into the BCD through the inflator hose. Once cleaned inside, rinse with fresh water, inflate and drain any remaining water from the inflator hose.

For a more in-depth consideration about dive equipment and microbes, also read our article *Germophobia*.

What about zips?

Dive suits, boots and even our dive bags have zips which, if not properly maintained, don't slide smoothly anymore over time. The reason can be salt and calcium deposits, sand or dirt, and will ultimately lead to a broken zip. Cleaning with fresh water is the first thing to do. Use a toothbrush to remove any sand or dirt. Some commercial products (with incorporated brush) are available for cleaning and lubricating these zips.

With dry suits the zips are a fragile and expensive component and special care is required. It is therefore

recommended to use Zip wax or Zip oil to keep the zip lubricated. When the zip gets dry you will notice a resistance, and too much force to open or close a zip is a clear sign that maintenance was not done well.



Often forgotten

All items that are usually carried in pockets (BCD or dry suit), cylinders and everything inside a pouch or rolled up (such as retractors or DSMBs) tend to be forgotten. Rolled up items need to be unrolled when being washed, and the inside of the SMBs and release valves need to be rinsed as well. Some extra care is needed for the boot assembly of the cylinder, as salt water will remain behind between the boot and the cylinder, leading to corrosion.

Once we rinsed and cleaned our gear, we need to **dry and store it**. This will be discussed in our next article.