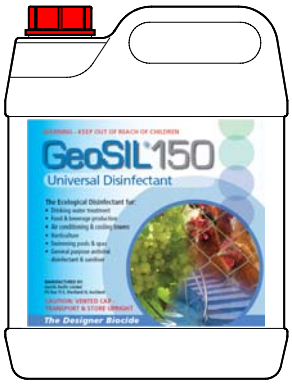
RAINWATER TANK TREATMENT

Q & A

GeoSIL®150 Water Tank Treatment

How safe is GeoSIL®150 in drinking water ?



VERY SAFE. GeoSIL®150 is certified in New Zealand as meeting the AgriQuality Fully Organic Standards.
It is tasteless and odourless and all ingredients of GeoSIL®150 are approved food additives. As it reacts with contaminants in the water, it breaks down into oxygen and water.

Is it safe to handle ?

GeoSIL®150 can be safely handled, transported, and stored while observing normal chemical handling precautions. It is not classified as a Dangerous Good (DG) but the precautions detailed on the label should be observed.

Is it easy to use ?

Yes. Simply measure out the required amount and add it to the water tank. Pre-mixing or activating is not required, and it does not give of any unpleasant odours or dangerous fumes.

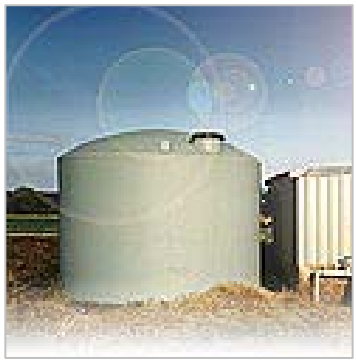
Is it guaranteed to kill all of the bugs in the water ?

GeoSIL®150 has the ability to kill all of the bugs in the water, but whether it achieves this depends on how much is applied, how well it is mixed and the time allowed to react. Generally speaking, you cannot reasonable over-treat the water, but you can under-treat it.

How do I know how much to use ?

An application chart is available that gives recommended doses for most normal conditions. If however, the water is badly contaminated, increased doses can be applied with little fear of creating a problem. Once a sufficient amount has been added, any additional will simply provide a tasteless, odourless residual in the water that will be available to either quickly treat any further incoming contaminants, or flow through the plumbing system of the house to further disinfect any contamination in the plumbing system, hot water cylinder etc. GeoSIL® is used extensively in NZ & overseas to eliminate Giardia in commercial building water supply systems.

How should it be applied ?



GeoSIL®150 can be manually applied to rainwater tanks through the access hatch, and mixed by either spraying over the surface, mixing with a paddle, or circulating the water by running a hose back into the tank for a period of time. The more thoroughly it is mixed, the quicker it will react.

Can I test the amount of GeoSIL in the water ?

Yes. GeoSIL Analytical Test Strips are available that will quickly and simply indicate the GeoSIL residual in the tank water.

When should I use it ?

Depending on usage, GeoSIL®150 has been shown to be effective in tanks for up to 28 days. It is recommended that a regular monthly dosing regime be followed for most domestic rainwater storage systems. At other times dosing can be carried out as often as required, but the following are some of the times you should consider treatment;

- If unpleasant tastes or odour develop in the water
- If deposits of bird or animal waste are found on the roof or in guttering.
- If dead animals or birds are found on the roof, in gutters, or in the tank.
- If the water tank has not been used for some period of time (Baches, trampers or musterers huts, boats etc.)
- If contaminated water has been allowed into the system.
- Anytime visitors or members of the household display medical problems.
- **Anytime you think it needs it**

Can I use full strength GeoSIL ?

Yes. In larger installations, full strength (100%) GeoSIL® can be used to treat the tank (s) and this will generally be more economical. However, it is a DG, and stricter safety requirements are needed. In commercial operations, staff training in the approved handling procedures will be required. You will be able to adjust the dose amounts (1/6 th the usual GeoSIL®150 dose), but in all other respects the product will perform the same.

Can it be used with bore water ?

Bore water supplies with bacterial contamination can be treated using GeoSIL®, but if dissolved metals such as manganese or iron are present, these will be oxidised out of solution, and must be allowed to either settle out in the tank, or be removed with the aid of inline filters such as multi-media, sand or cartridge filters. It is important that sufficient GeoSIL® is added to meet the demands of both the oxidation and the disinfection processes. Your GeoSIL® dealer can advise you on this matter.

Can it be used with a UV steriliser ?

Yes. Unlike GeoSIL®, UV does not provide a residual in the water, nor can it be measured in the water. GeoSIL® can provide a backup to the UV that will perform both of these important additional functions. The effectiveness of UV can also be compromised if the water becomes cloudy, but the GeoSIL will remain effective in even the most discoloured water supplies.

Will it be effective against bad tastes or odours in the water ?

Generally Yes, but this depends on what is in the water that is causing the tastes or odours, and if the source of the contamination is continuing. In most cases, odours in the water result from bacterial contamination, and as these are destroyed, the taste and odour will disappear. Unpleasant odours though often indicate a high level of contamination, so higher than usual doses of GeoSIL®150 may be necessary.

GeoSIL150 is based on Hydrogen Peroxide. How is it different ?

GeoSIL® is a patented multicomponent disinfectant developed in Switzerland and made in New Zealand to a very high quality standard. The oxidising agent, hydrogen peroxide, is bonded with stabilising agents to form a complex solution. A long-lasting effect is ensured by the addition of silver which acts as a catalyst in trace amounts, and causing the bactericidal effect comes into action quicker and more intensively than if either substance was used on its own. The anti-viral ability of GeoSIL® is faster acting and 20 times more powerful than hydrogen peroxide.
Unlike hydrogen peroxide, GeoSIL® has very good stability, and a long storage time can be assured. Because of its long-term effectiveness and excellent ability to prevent recontamination, it is ideally suited to the treatment of drinking water. Hydrogen Peroxide will react with contaminants in the water much like GeoSIL®, but it will then rapidly break down after application, and not be available to provide the on-going protection to the water that GeoSIL® or GeoSIL®150 can.