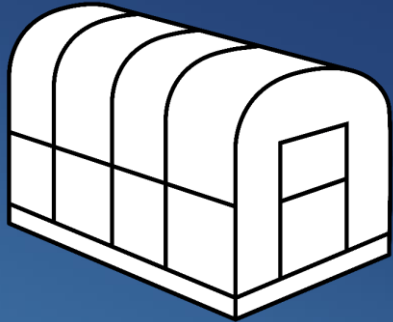




SANOSIL
DISINFECTANTS FOR LIFE 



Application of Sanosil Super 25 in plant cultivation





Modern plant cultivation methods and sophisticated irrigation systems promise high yields.

They are, however, relatively susceptible to plant pests, such as bacteria and various fungi, which may rapidly spread as biofilms in irrigation systems and/or greenhouses.

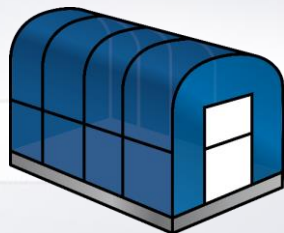
As a result, special attention must be paid to hygiene, because just like in all other areas, prevention is always better than cure.



Possible microbiological problem sources



Root rot caused by bacteria and fungi in the water and/or a contaminated substrate.



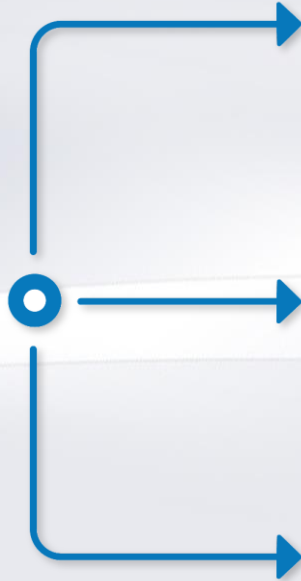
Spread of plant diseases caused by airborne germs (especially mould).



Blockages and clogging of the irrigation system caused by biofilms, bryozoans and or algae.



Why is Sanosil Super 25 the solution?



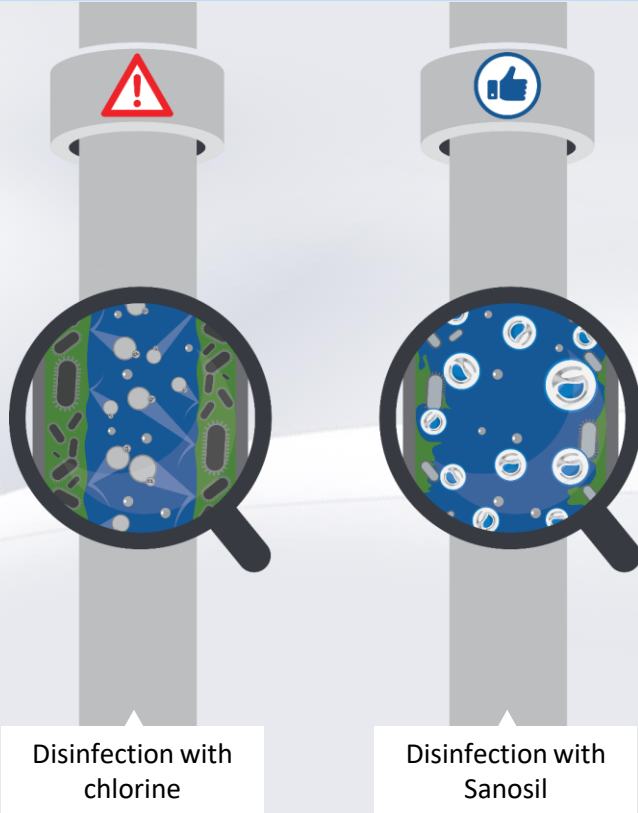
Suitable for disinfection of water and nutrient solutions:
Cleans water and irrigation system of germs, removes biofilms and keeps everything sanitised.



Suitable for air / aerosol disinfection:
Removes germs from the air and disinfects large surfaces quickly. Ideal for greenhouses.



Suitable for spray / surface disinfection:
Perfect for smaller, targeted disinfection tasks.



In case of extensive biofilm growth, disinfection with chlorine is practically useless, since the biofilms are not effectively removed.

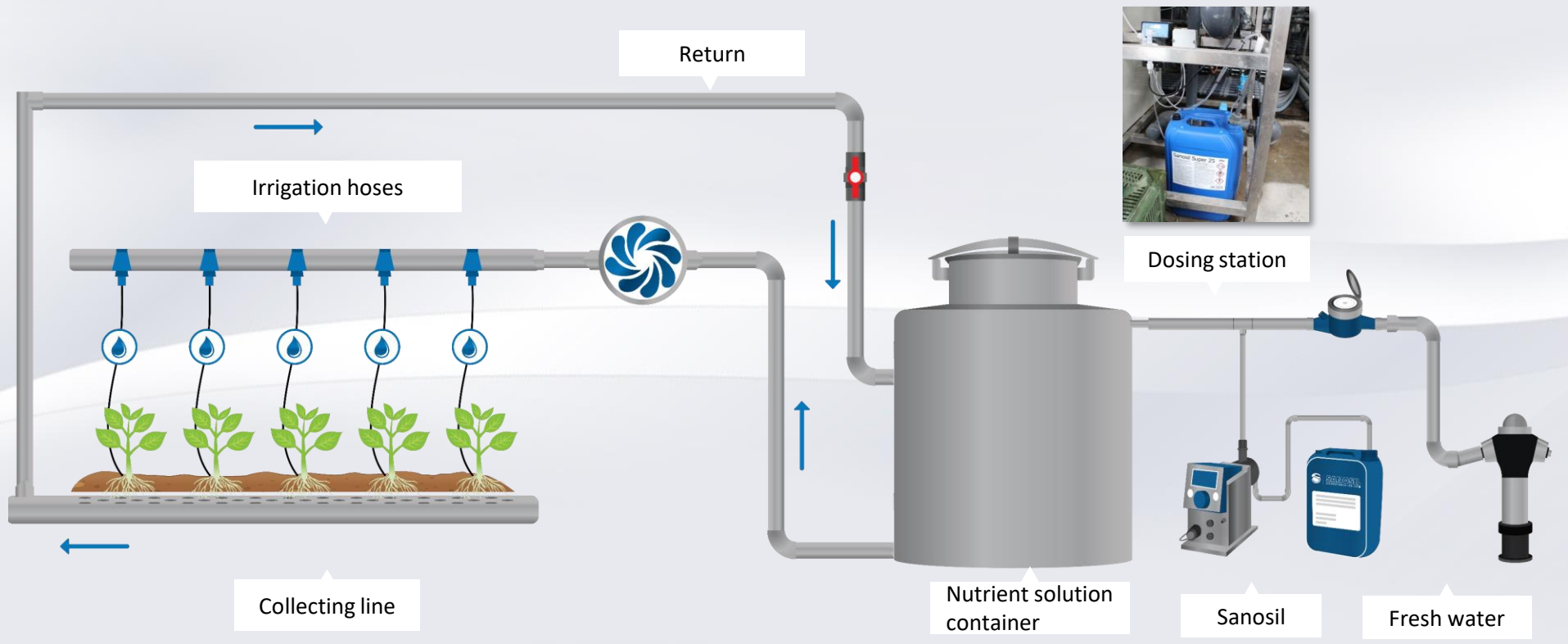
In addition, the bacteria are often in a "VBNC" state. (**V**iable **B**ut **N**ot **C**ulturable). This skews performance controls and offers a false sense of security.

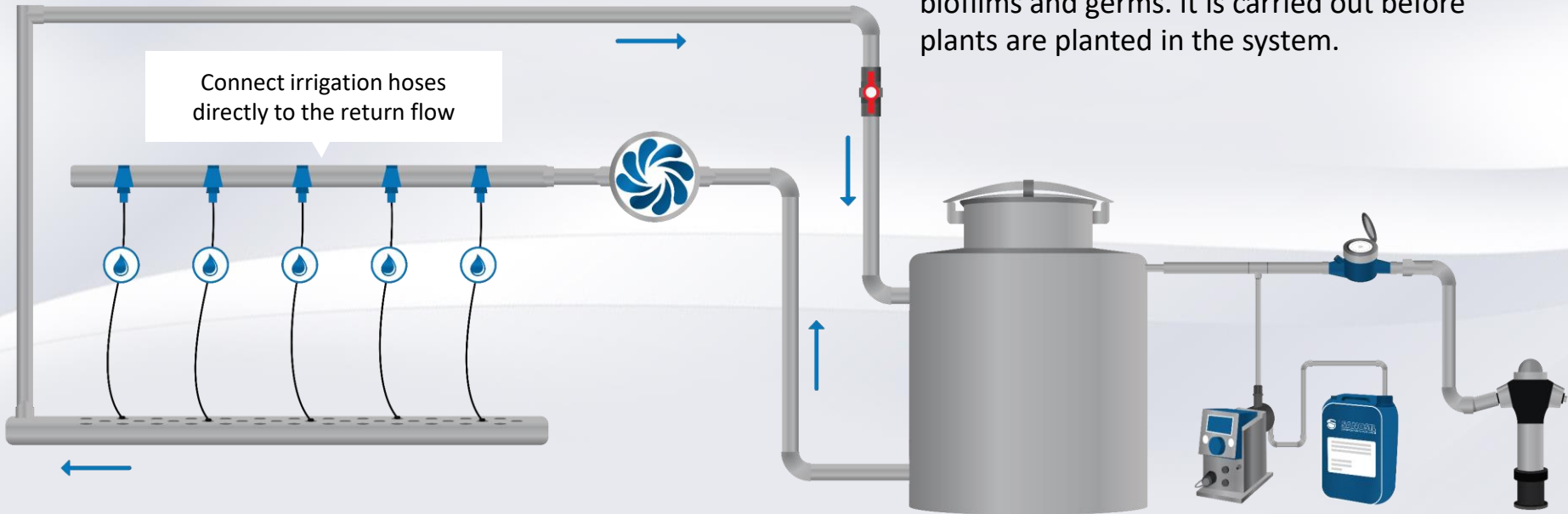
In contrast, Sanosil can effectively eliminate both biofilms and VBNC germs.





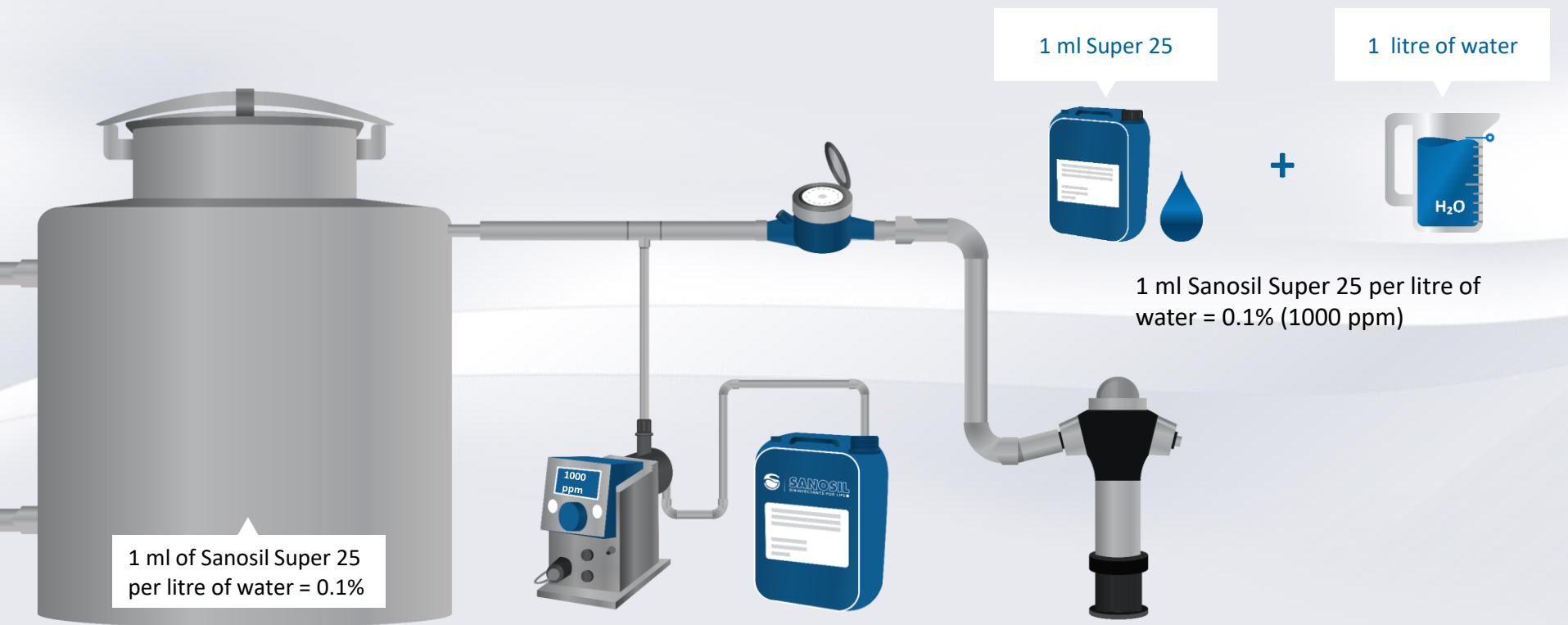
Diagram: Top feeder irrigation system with return flow







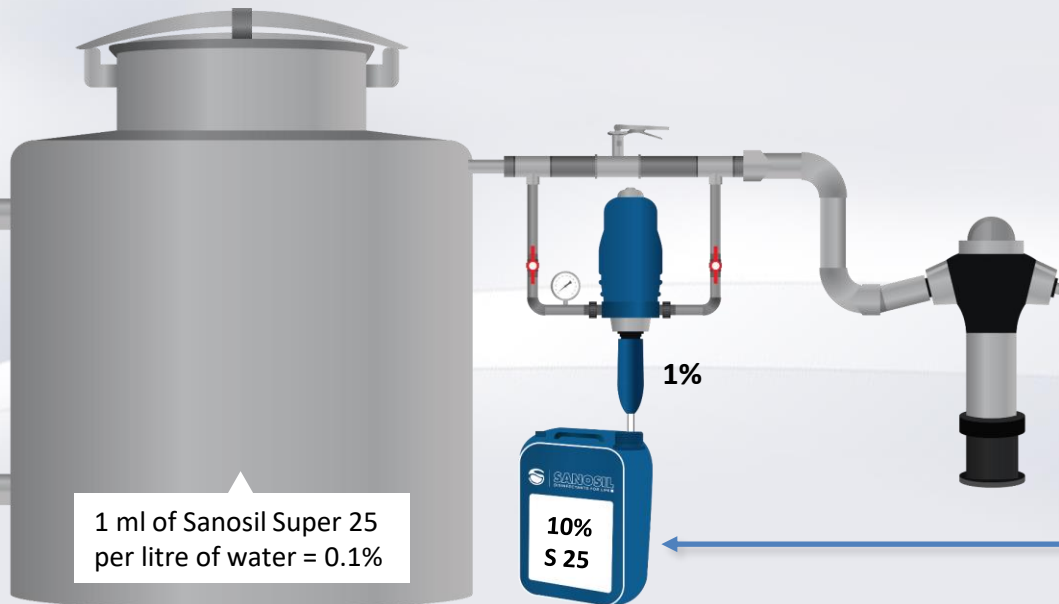
Shock disinfection: A - with dosing pump





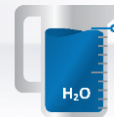
Shock disinfection : B – with Dosatron

For proportional dosing units with a dosing range of 0.2–2%:
Mix a stock-solution containing 10% Sanosil



1 litre of Super 25

9 litres of water

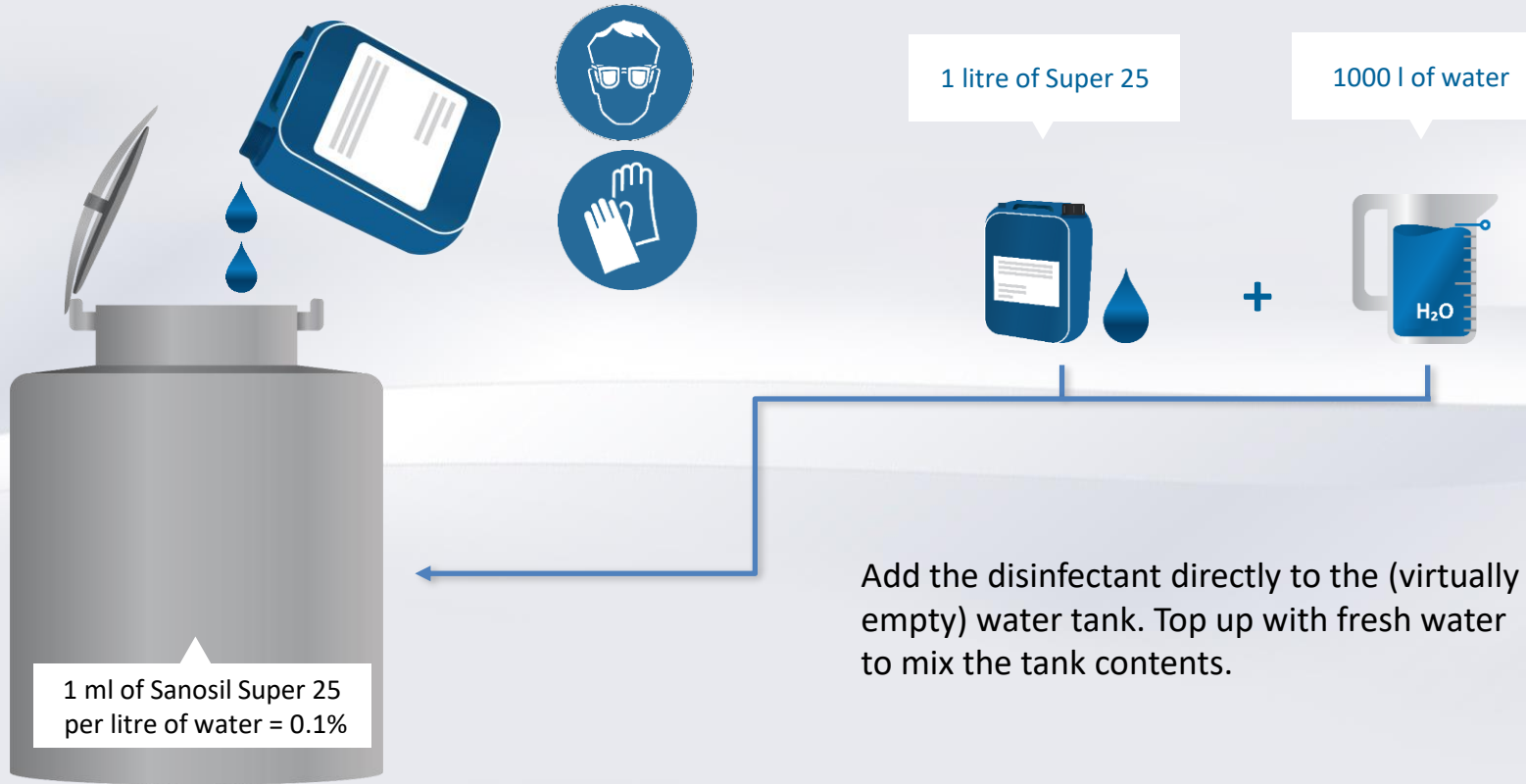


Mix a stock-solution containing 10% Sanosil Super 25 and set the Dosatron unit to 1%
(Pre-solution: shelf life max. 3 days)



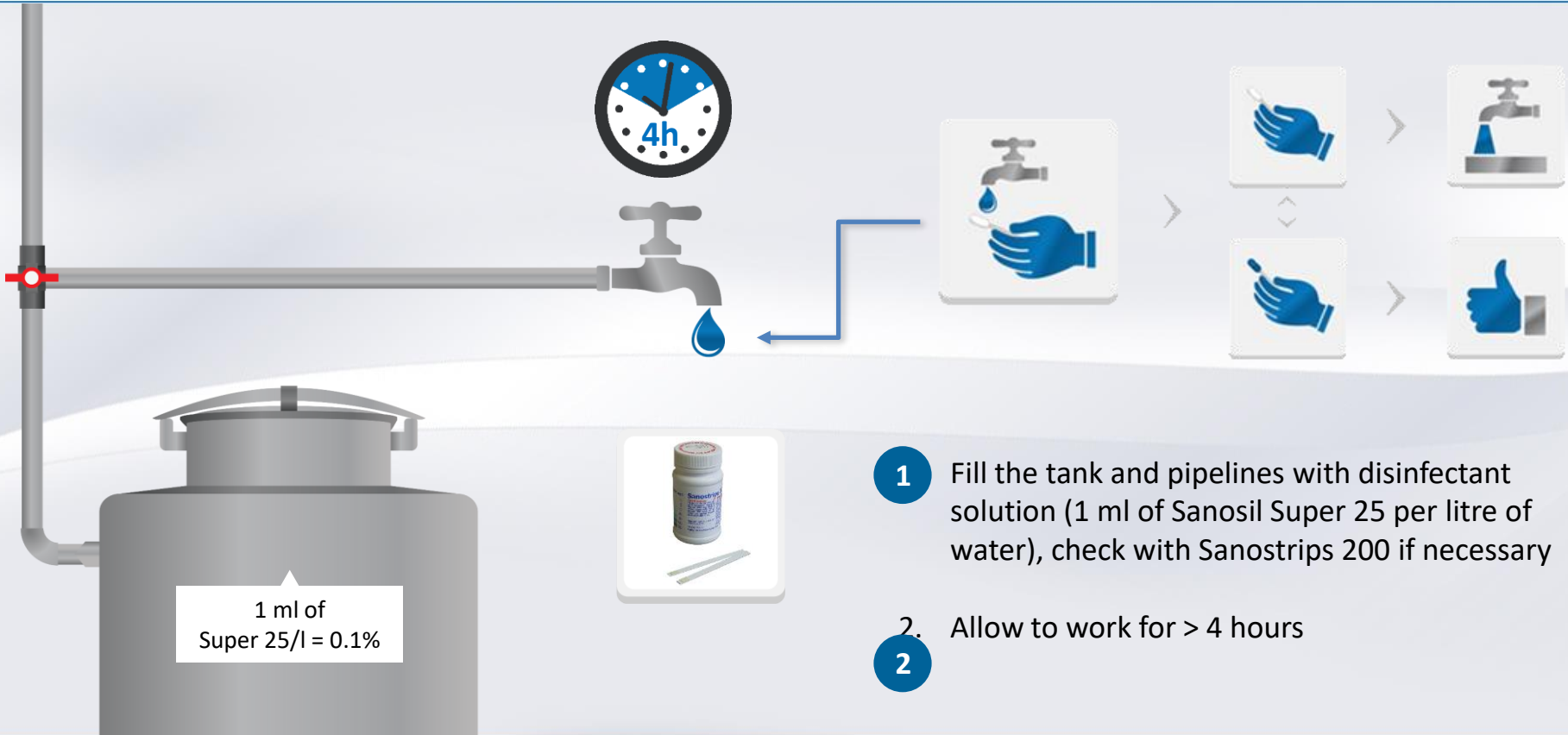


Shock disinfection: C – direct method





Shock disinfection: Fill the pipelines



1

Fill the tank and pipelines with disinfectant solution (1 ml of Sanosil Super 25 per litre of water), check with Sanostrips 200 if necessary

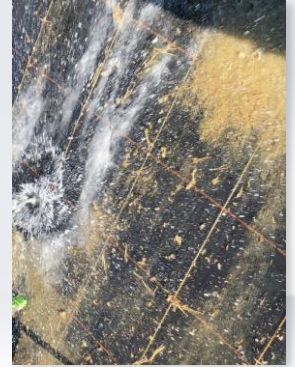
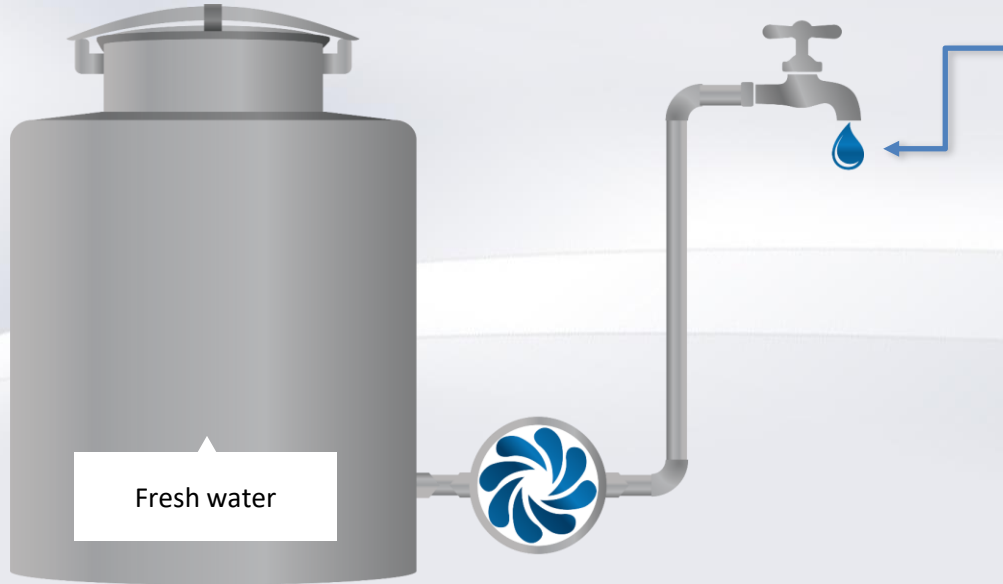
2

Allow to work for > 4 hours





Shock disinfection: Flush the pipelines



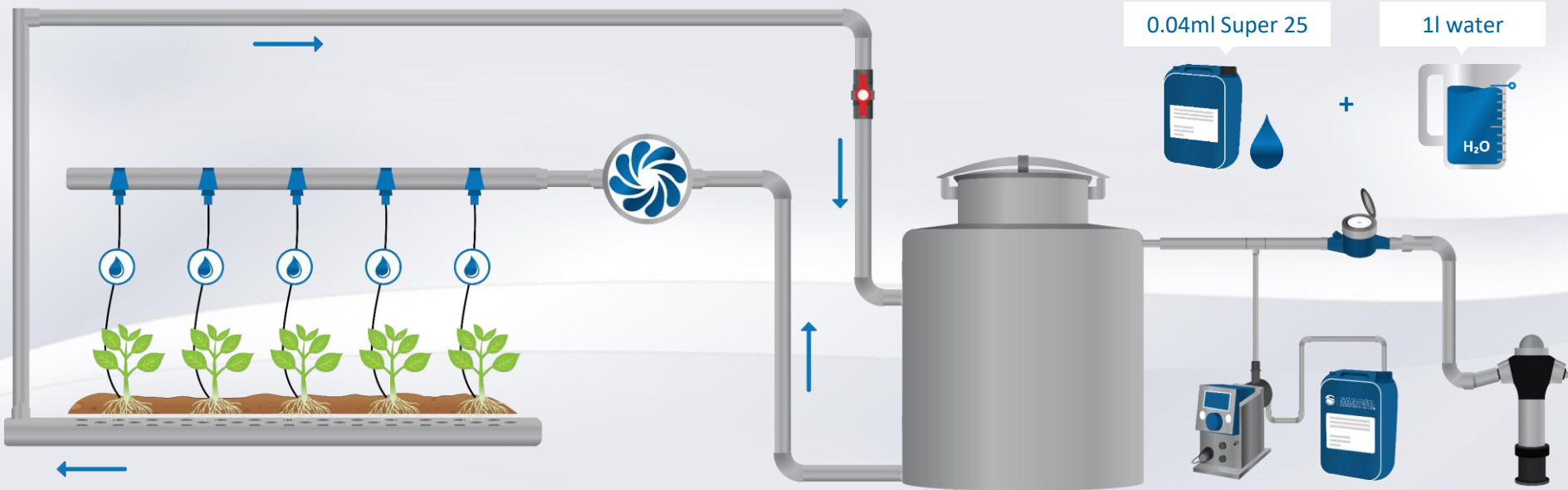
Drain tank contents, fill with fresh water, rinse lines thoroughly.

The tank and lines are now safe and hygienic.





Continuous treatment: A – with dosing pump

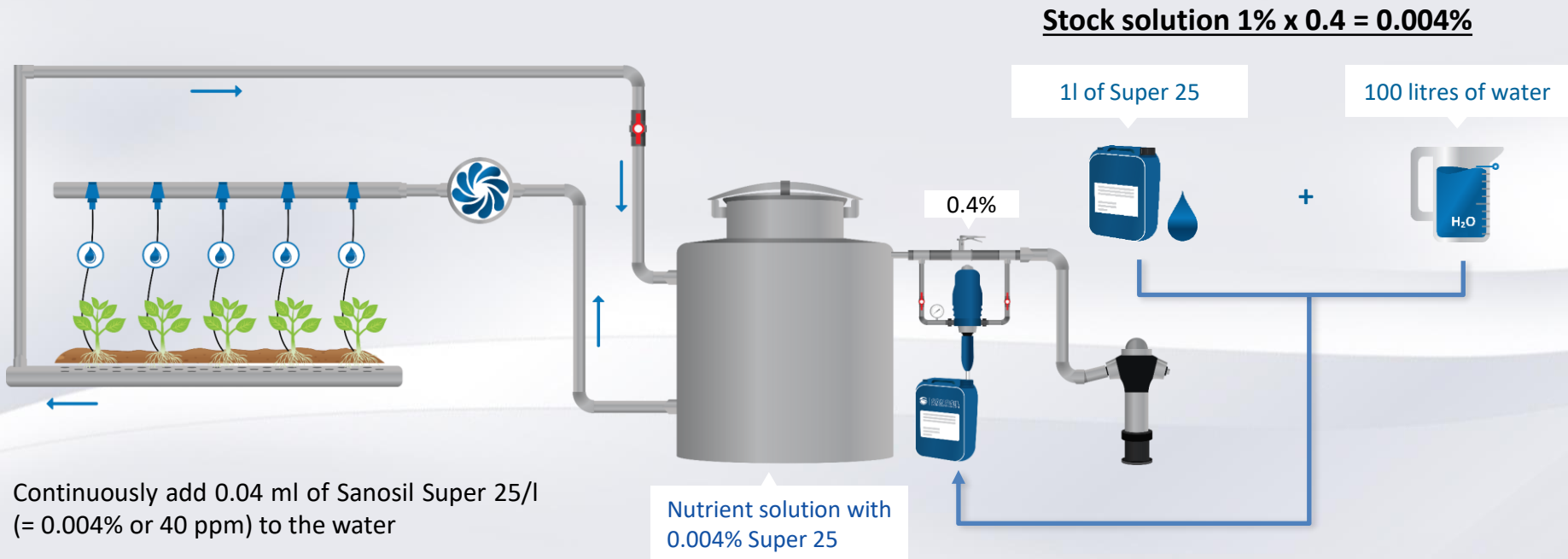


Continuously add 0.04 ml of Sanosil Super 25 / l
(= 0.004% or 40 ppm) to the water

Nutrient solution with
0.004% Super 25



Continuous treatment: B – with Dosatron



For proportional dosing units with a dosing range of 0.2–2%:
Mix a 1% pre-solution of Super 25 and set the unit to 0.4%.
(Use the stock solution within 3 days)



Aerosol disinfection with hot fogging machine



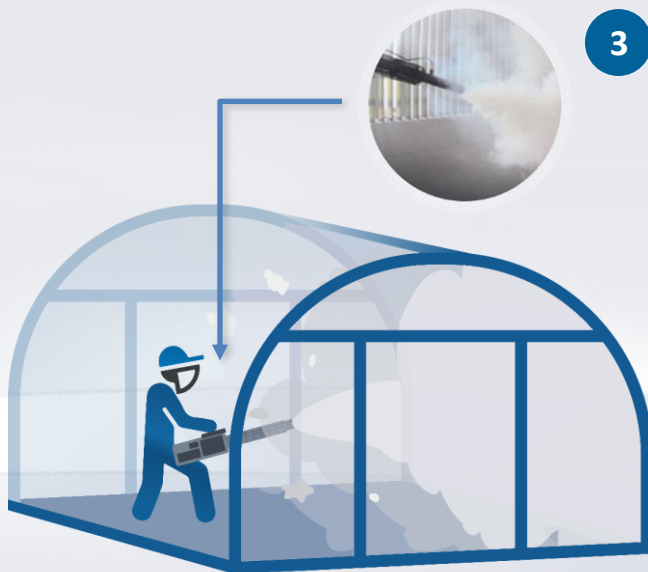
1

Wash walls, floors and if necessary, ceiling with a high-pressure cleaner



2

Allow to dry (the more thorough the cleaning, the more effective the disinfection)



3

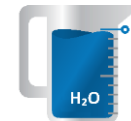
Close doors, windows and hatches. Mix fogging fluid, fill into a suitable hot fogging machine (e.g. Swingfog), spray rooms. Allow to take effect for at least 3 hours. Caution: wear protective mask for eyes and respiratory tract.

Mix fogging fluid:

150 ml of Super 25



850 ml of water



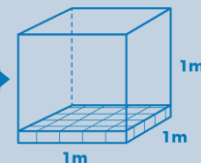
70 ml of PEG*



= 50-100 m³

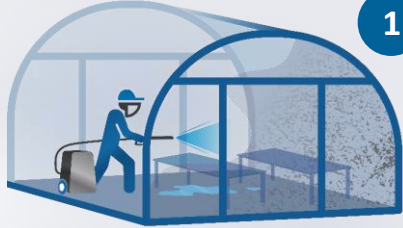
* Polyethylene glycol (fogging agent)

1m³





Spray disinfection with cold fogging machine



1

Wash walls, floors and, if necessary, ceiling with a high-pressure cleaner



2

Allow to dry (the more thorough the cleaning, the more effective the disinfection)



3

Set the nozzle of the cold fogging machine to "wet fog" and spray the surfaces directly.
Recommendation: 30 – 50 ml of liquid/m²

Mix a 3% solution *

30 ml of Super 25

970 ml of water



+



= 20–30 m²

Maximum shelf life of the solution: 3 days

1m²



1m





Treat pots, substrate and tables, etc.
before planting: directly apply 3% solution
using a sprayer.
Recommendation: 30 – 50 ml of liquid/m²

Mix a 3% solution *

30 ml of Super 25



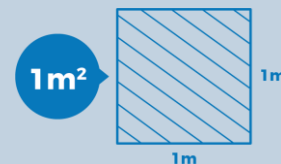
+

970 ml of water



= 20–30 m²

Maximum shelf life of the solution: 3 days





Treating plant diseases such as mildew

Unofficial application recommendation:

To combat **mildew** and other plant diseases:
spray plant with max. 3% Sanosil Super 25. For 3
days, 1x/d each

Recommendation: 30 – 50 ml of liquid/m²



Mix a 3% solution *

30 ml of Super 25

970 ml of water



+



= 20–30 m²

Maximum shelf life of the solution: 3 days

1m²





Prevention of biofilm formation in the pipes:

Add **continuously** 0.02 ml Sanosil Super 25 per litre (= 0.002% or 20 ppm) to the water. Ideal for systems without recirculation.

(For proportional dosing units with a dosing range of 0.2–2%:
Mix a 1% pre-solution of Super 25 and set the unit to 0.2%.
Use the stock solution within 3 days)



0.02ml of Super 25



1 litre of water

+

