



Sanosil disinfectant

# Usage after water damage

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# Hygiene problems after water damage:

Water ingress into buildings may occur due to floods, burst water pipes or blocked sewage pipes. In some cases, e.g. with blocked or clogged sewage pipes or floods, backups may occur in the sewer system. As a result, dirty water mixed in with the sewage enters the building. The resulting sludge, contaminated with faecal matter and other germs, penetrates every crack and settles there. It is extremely unpleasant when wastewater penetrates into subfloor or screed constructions.

In addition to direct damage caused by the water ingress, such as swelling of wood/plywood materials, destruction of equipment and possible unpleasant odours, the germs that have been spread pose an increased risk of infection. Moreover, there is an acute risk of mould forming unless the affected areas are dried properly and immediately.





Water damage with faecal water, toilet, intermediate floor flooded



Water damage with mould development, cellar room after flooding



Water damage with mould development in intermediate floor (wood)

# Hygiene-relevant wet germs:



#### Bacteria:

E.g. E-coli, Enterobacter, Salmonella and Klebsiella, etc.

**Transmitted by:** Smear infection, inhalation of contaminated aerosols during drying/ wiping

Consequences: Gastroenteritis, conjunctivitis



## Viruses:

E.g. norovirus, rotavirus or adenovirus

**Transmitted by:** Smear infection, inhalation of contaminated aerosols during drying/wiping

Consequences: Gastroenteritis



#### Moulds:

e.g. Aspergillus, Penicillium

**Transmitted by:** Suspended mould spores, mould toxins

**Consequences:** Allergic reaction to mould spores and mould toxins, organ infestation



## Yeasts and fungi:

e.g. Candida, Tinea

Transmitted by: Contact/smear infection

**Consequences:** Skin or mucous membrane infections (fungal skin diseases)





# **Sanosil S010**

Disinfectants for surfaces



... ideal for powerful disinfection of severely contaminated surfaces

- Highly effective against bacteria, viruses, yeasts, fungi and spores, VAH-listed
- Easy and safe application (ready to use)
- Open Does not leave any adhesive residues on the surface
- Opes not cause unpleasant odours
- ✓ No alcohol, chlorine/chlorine compounds or QAV
- No dyes or fragrances
- With catalytically enhanced hydrogen peroxide
- Shelf life of over 2 years
- High-quality product made in Switzerland







# Sanosil S010: product description

Sanosil S010 is a sporicidal surface disinfectant with a high active ingredient content and a long -lasting depot effect. It is based on the proven Sanosil hydrogen peroxide/silver formulation and does not release any flammable or unpleasant smelling vapours. Sanosil S010 is ideal for applications with high microbiological loads and increased biocidal effectiveness requirements.

Hydrogen peroxide is used as the active ingredient. It is also stabilised and its disinfecting effect is catalytically enhanced several times over by adding a minimal amount of silver ions.

This process can increase the disinfection effect by up to 800%.

After application, hydrogen peroxide also completely decomposes into water and oxygen. The small amounts of silver remaining on the surface after the peroxide has broken down inhibit germ multiplication.



# Sanosil S010: Ideal for water damage disinfection

There are several reasons that make Sanosil S010 the ideal product for disinfection after water damage. In addition to its impressive effectiveness against all relevant germs, the depot effect ensures long-lasting action and provides enough time to carry out drying measures.

The hydrogen peroxide content also ensures that mould toxins and odour molecules are broken down by oxidation (cold combustion). This is why it has (up to a certain point) a distinct deodorising effect on musty and wastewater odours.



# Brief overview of S010

#### **PRODUCT TYPE**

Ready to use

#### **SUITABLE FOR**

- Wipe disinfection procedure
- Targeted spraying with device

#### **EFFECTIVE AGAINST**

Bacteria, yeasts, enveloped/nonenveloped viruses, fungi, endospores

#### **SHELF LIFE**

2 years

#### CONTAINS

5g/100g of hydrogen peroxide, 0.005g/100g of silver

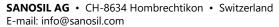


# How it works

- The oxygen (<sup>1</sup>O<sub>2</sub>/<sup>-</sup>O<sub>2</sub>) released by the hydrogen peroxide attacks the cell walls of the microorganisms. The process of oxidation(cold combustion) denatures and destroys them.
- The effect is supported by silver ions, which enhance the effect of the peroxide in a catalytic process. They also block the germs' metabolism (where applicable) and ability to multiply.









# Application of S010: For limited water damage

**Important:** Always wear protective equipment (eyes and skin protection, P3 dust mask) during renovation and drying work as well as when handling Sanosil S010. Avoid skin and eye contact with Sanosil S010, dirty water and mould components.





# Step 1

Expose the water-damaged area as much as possible and make it accessible for proper disinfection.

If necessary, remove and dispose of soaked and destroyed materials, such as swollen wood, insulation materials and cardboard, etc.

# Step 2

If necessary, completely pump out/vacuum the water and remove mud and dirt from surfaces as far as possible.

Caution: Ordinary water vacuum cleaners without a filter system create aerosols that may contain large amounts of germs. Wear protective mask and eye protection.





# Step 3

Spray contaminated areas with Sanosil S010.

Dosage: approximately 50 ml per square metre. (Slight foaming is normal.) The disinfectant should be left to take effect for at least 60 minutes.

Increase the disinfectant application rate on materials that have absorbed high levels of moisture in order to prevent dilution, which

would reduce the effectiveness of the disinfectant.

# Step 4

Remove dead mould using water and detergent. Remove and dispose of any remaining, mould-infested, soggy or rotten materials, such as wood parts, insulation materials and screed insulation, etc.

After cleaning, disinfect the area a second time using Sanosil S010.





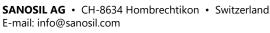
## Step 5

Initiate drying measures until the building structure is completely dry.

Then restore the destroyed and/or removed materials by means of structural measures.











# Surface disinfection with Sanosil S010

with sprayer – for extended disinfection work of large areas after floods

**Attention:** Large-scale application with professional spraying equipment always creates a certain amount of aerosols that may be hazardous to health. A P3 full-face respirator must always be worn during extended spraying work to prevent irritation of the respiratory tract and eyes. (Respiratory protection with gas filter (against hydrogen peroxide) Filter type: ABEK-P3)

# Step 1

Pumping/vacuuming of visible fluid. In case of heavy soiling with mud (e.g. after floods), first rinse it off using a water hose, if necessary, and vacuum up the rinsing water.

Fill Sanosil S010 into the storage tank of a sprayer (e.g. Sanosil Stream/Airless Sprayer, etc.). Wear suitable protective equipment (full-face respirator with ABEKP3 filter and gloves) for disinfection.



## Step 2

Select a fine atomisation method and spray the surfaces to be disinfected so that a slightly moist surface is created all over them.

Guide value: 30 – 50ml/m<sup>2</sup> Avoid puddles and runs.

Prevent any aerosols – which are inevitably formed when spraying disinfectants – from reaching any parts of the room containing unprotected persons.



# Step 3

Let the product soak in. For safety reasons, no one should enter the room without protective equipment for approximately 2 hours after the disinfectant has been sprayed. (MAC value for hydrogen peroxide: 1 ppm.)

After disinfection, drying measures may be initiated until the room is completely dry. If they continue for a prolonged period and odours start to develop, repeat disinfection if possible.







# Foam application with Sanosil S015 & Sanosil SFS

for disinfection/mould control in areas that are impossible to reach.

In places that are impossible to reach by spray disinfection, such as screed insulation, cavities, etc., we recommend using a disinfectant foam that is pressed into the corresponding cavities. This allows the foam to reach places that are difficult to access.

Sanosil S015 disinfectant concentrate is ideal for producing a biocidal active foam, which is mixed with Sanosil SFS and foamed using a suitable foaming device and pressed into cavities.







Cutaway model of a disinfectant foam application / pressing the foam into an underfloor structure after water damage



Biocidal foam made of SFS and Sanosil S015 in floating screed after water damage with subsequent mould infestation.

# Active foam made of S015 & Sanosil SFS: How it works

The solution of Sanosil SFS and Sanosil S015, foamed using a suitable foaming device, is sprayed onto the infested surfaces or pressed into cavities. The biocidal agents eliminate mould components, spores and bacteria. In addition, mould toxins and proteins that trigger allergies as well as MVOCs (which are responsible for musty smells) are eliminated/broken down by oxidation.

The dead biomass is encapsulated and fixed to the surfaces by the resin film that forms as the foam begins to dry. This effectively prevents it swirling up due to subsequent air currents and impact sounds from footsteps, etc.



## **Brief overview**

#### Suitable for:

Disinfection and fixation of mould in areas that are impossible to reach

#### Product type:

Concentrated

#### Mix with Sanosil S015

1 part by volume SFS and 2 parts by volume Sanosil S015 disinfectant

# Biocidal effect of the active foam at 20 degrees Celsius

Fungi/moulds/yeasts: 15 min Bacteria: 15 min Viruses: 30 min Bacterial endospores: 60 min

#### Consumption:

100 -150 ml foaming solution/m<sup>2</sup> = 30–50 ml SFS/m<sup>2</sup>

#### SFS ingredients:

Anionic surfactants, modified acrylic resins, fragrance, preservative

#### (Active ingredients S015:)

Stabilised hydrogen peroxide (effect enhanced with silver ions)



Mould infestation with spore release



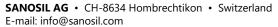
Biocidal active foam encapsulates and inactivates moulds



Dead mould components are encapsulated and fixed in place









# Foam application with Sanosil S015 & Sanosil SFS

for disinfection/mould control in areas that are impossible to reach.

**Important:** Always wear protective equipment (eyes and skin protection, P3 dust mask) during mould remediation work and when handling Sanosil S015. Avoid skin and eye contact with S015 or mould components.



## Step 1

Identify cavity with water damage and sources of germs and remedy the source of water ingress (e.g. leaking water pipe). Completely pump out or vacuum the dirty water.

(Standing water reduces / prevents the optimum use of biocidal active foam.)



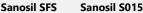
## Step 2

Mix 1 part Sanosil SFS with 2-3 parts Sanosil S015 and pour the solution into a foaming device.

For the best results, a professional foaming device with compressed air connection or an additional compressor with 6 bar/150l of air output/min is required. Our recommendation: Birchmeier Indu-Matic 20 M. This device produces a stable, fine creamy foam.









## Step 3

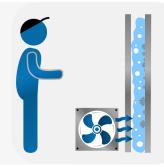
67ml SFS combined with 133ml of Sanosil S015 = 200ml of foam concentrate, which can be foamed up to 25–50 times the volume (5,000–10,000 ml). Cavities can thus be completely filled with disinfectant foam through holes (which may need to be drilled first).

If necessary, a flexible PVC hose can be attached to the lance nozzle (using a suitable clamp), which can be moved in the cavity and simplifies foam distribution.

### Step 4

After the foam has been applied, wait for the foam to break down and for the film to form after drying. The application time depends on the situation, but should be several hours, or preferably overnight.

Afterwards, the remaining moisture can be removed by setting up drying equipment or blowing in warm drying air.



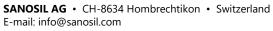


## Step 5

Any openings created in the foamed cavities for insertion of the foam should not be sealed again until it has been ensured that all residual moisture has dried out and the cause of the mould/germ growth has been completely eliminated.











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