



## Description

The ST-83 disinfection device can be used for different areas of application:

Disinfection of rooms - apartments - hotels - guest rooms - vehicles (taxi - public transport - vehicle preparation - patient transport - driving schools) caravans - mobile homes - sanitary facilities, production facilities pest control in stables and other rooms, for air humidification - dust binding etc.

## Attention!

Please note compliance with the currently applicable precautionary measures!

Please observe all instructions and precautions according to the operating instructions. It may only be operated by trained specialist personnel. The guarantee of the device is linked to compliance with these operating instructions. If the user violates the regulations described, the warranty is generally void.

## Security



Hazard! If these instructions are not complied with, there is a risk of life and limb and property damage!



Read this User Manual thoroughly before using the unit!

Keep the User Manual in a safe place for later reference or the subsequent owner!

This User Manual was established using utmost care. However, we do not accept any liability for possible mistakes in this User Manual and their consequences.

## Formation of aerosol!



An aerosol can arise from disinfectants! In order to avoid inhalation, wear a suitable respiratory protection! Ensure sufficient ventilation!

## Intended use

### Can be nebulized:

Water for air humidification and dust control - disinfectant \* mixed with water as a working solution \* (hydrogen peroxide 3%, peracetic acid 1%) pesticides - liquids containing acids and solvents only with special FKM version.

Using other or mixing different agents can lead to unforeseen chemical reactions and damage the device.

Warranty claims cannot be made in such a case. No agents may be used which contain flammable components in explosive doses or which can form fire-hazardous mixtures when atomized. No other chemically aggressive or toxic substances such as solvents or paints may be used.

Despite the high quality standards, no general chemical resistance can be guaranteed for mixtures of substances. No guarantees are given for substances that have not been released in writing beforehand. Mixing the application solution should be done in an external container. If this is done in the device container, the water content must always be filled in first.

The drinking water that may be used must comply with all requirements of the current version of the Drinking Water Ordinance.

Please remember to check that in showers and other aerosol-forming units that use drinking water, the drinking water must be checked for legionella in accordance with the legal regulations (e.g. once a year)?

There are special designs for various acids and solvents.

The agents can have a very different nature, they can be water-soluble or insoluble powders, they can be liquid or oily. The agents are mixed with a small amount of water and fog additives to form a fog broth. The medium broth can be viscous, but must not contain any solid components over 0.3 mm.

The information provided by the medium manufacturers must be observed and the manufacturer should be consulted if anything is unclear.

In the case of acidic disinfectants in particular, consultation with the manufacturer is necessary due to the low dilution.

It is always a good idea to carry out a test mist before using it on a large scale.



## Responsibilities in companies or public institutions

The operations manager (supervisor) is responsible for compliance with occupational safety and the proper use of the cold fog device. All users and employees must be adequately trained in all matters relating to misting and documented in writing.

### Use in rooms:

The following points must be observed for proper function. The room to be fogged must be sealed so that the mist cannot escape and cause damage. The room must have sufficient ventilation. Protect technical equipment that could be attacked by the fog, such as control technology, lighting or heating technology. From a certain room size, additional ventilation is required to evenly distribute the fog. The equipment of the rooms must be such that the fog jet can flow freely into the room for 3-5 m, otherwise undesirable highly concentrated deposits can occur. The device must be operated and stored frost-free.



## For your safety



### General safety instructions:

All employees and temporary workers must be instructed on a record of the safety regulations to be observed. The cold fog device may only be used when it is in perfect condition. If damage is found before or during operation, the operation of the system must be stopped immediately. All measures must be taken to prevent further damage to equipment and facilities or damage to plants and animals, the environment and people. The compressed air connection may only be connected or disconnected when the lines are free of pressure and flow.

All parts of the structure or vehicles etc. in the room to be treated, technical equipment, or other items must be checked for their compatibility with regard to the means to be used! Modern disinfectants often contain acids.

The general regulations for handling acids must be observed. The compatibility of the acids with the materials installed in the device must also be checked. The applicable health and safety guidelines and the Hazardous Substances Ordinance must be observed. The ambient temperature for the device must not be below 5 ° C. The ST-83 disinfection device may only be moved with a completely empty container. It is forbidden to stand in front of the fog machine in the operating state.

Entering the room while fogging and until the end of ventilation is only permitted with appropriate personal protective clothing. Just as the nebulized substances require. Particular importance is attached to the highest protection of the respiratory tract! - see. GBG 11 - face protection or glasses according to EN full mask according to EN standard protective suit for toxins - universal protective gloves guideline 13-3 / 2. If no fog is visible, it does not mean that there is no longer any danger. Environmentally hazardous substances must be safely stored until they are used and disposed of in an environmentally friendly manner in accordance with the applicable regulations. The foggy room must be effectively protected against entry by unauthorized persons.

### Risks of misuse of the cold fog process:

Safety at work - Inadequate professional training of employees can lead to improper use and damage to people, the environment, cultures or materials. Nebulized substances penetrate the organism faster than in other forms if they are inhaled through the lungs without adequate personal protective equipment.

Neglecting personal protective measures (gas mask, protective suit, gloves), for example, when entering the room in the foggy atmosphere can lead to health damage even if no more fog is visible! Use of substances: If substances that are not approved for the process are used or there is no feedback from the manufacturer for proper use, undesirable results can result. Flammable substances (liquids and dusts) must not be atomized because there is a risk of explosion.

Improper use of agents belonging to the group of dangerous substances can lead to damage. Agents that contain acids, bases or solvents can damage the device. Procedural non-compliance with the BDA's work steps can lead to unforeseen fog and thus damage. Facilities that are in the room and are not adequately protected can be attacked. Air is supplied to the rooms during misting, which must escape somewhere. Escape must be possible and it must be taken into account in all health and safety considerations.

Openings that are not taken into account in the room to be misted can lead to undesired wetting and thus damage to devices, living things or the environment in other rooms or in the open. If any objects are wetted too densely with agents, highly concentrated deposits with consequential damage can result.

### Technical equipment

Commercially available compressed air systems or compressors can be used to supply the fog device with compressed air. The compressor must be technically matched to the ST-83 disinfection device. Existing compressors can also be used. However, these are often not suitable for continuous operation. That is why it is essential to coordinate the operation. Breaks may have to be observed. Observe the duty cycle (ED) on the rating plate of the compressor. The ST-83 disinfection device consists of the following components, see exploded view.

The liquid is sucked in automatically. This safety factor ensures that no fluid can escape in the event of compressed air failure. The ST-83 has defined orifices, which enables a constant medium throughput. By exchanging the dosing nozzles, the mean throughput can be changed in a targeted manner! The mean throughput affects the fineness of the fog.

### Compressor:

The compressor should provide a flow rate of 120 - 180 L / min.

The working pressure should be at least 3 bar.

If not available, we recommend installing a pressure reducer (item 150008010) between the compressor outlet and the ST-83.

With this the operating pressure - working pressure on the ST-83 can be set exactly.

Make sure that the cross-section of the hose from the compressor to the ST-83 is correct.

The longer the hose, the larger its cross section should be.

20 meters hose length ID 8 mm / 100 meters hose length ID 10 mm



### Operation



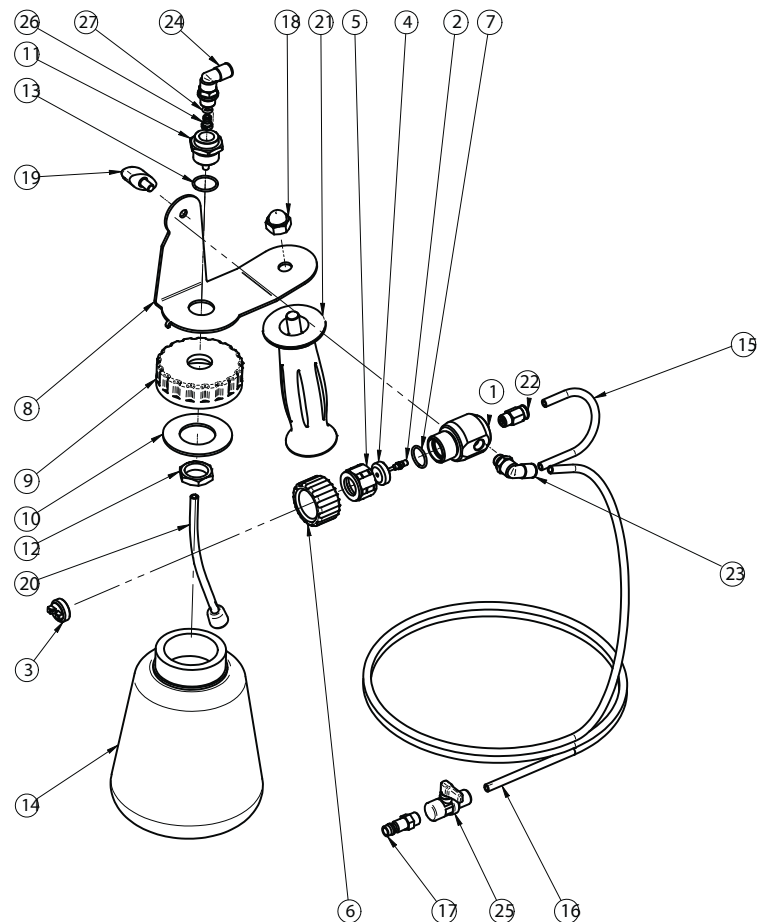
#### Installation

1. Fill the middle container POS.14 by unscrewing the screw connection POS.9.
2. Take the ST-83 in your hand, keep the ball valve POS.25 closed.
3. Switch on the compressor (it switches off if no air is drawn off if the compressor has a corresponding shutdown).
4. Open ball valve POS.25
5. Always fog into the empty space, not on or over animals / plants / technical equipment. At a distance of less than 1.50 m, moisture can condense on the foggy surface. Please note: - Always use only the purest liquids that do not contain flakes, grains or lumps

#### 6. Cleaning and maintenance

The ST-83 should be cleaned with water after each use. The nozzle is rinsed with water by a short mist. In the event of blockages, a jet of compressed air can be directed at the nozzle.

Check the dosing nozzle POS.26 for contamination.



### Special equipment



#### Window bracket Article 200083400

for retrofitting for use on / in vehicles.

#### Canister adapter ST-83 complete / article 20008320



This can be used in conjunction with 5 - 10 - 25 - 30 liter canisters.

A 500 mm long ID 4 suction hose is included here. This is connected to the suction filter and the nozzle head. The suction hose for the handheld device is simply removed. This enables flexible use.