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via

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We are looking forward to hearing from you!

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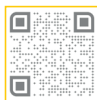
On the following social media platforms you will find a lot of exciting and interesting information about us and our products. In addition, varied topics and news on the subject of inhalation as well as an interesting exchange with our community and the #teamnebutec await you there. Our experienced and competent community managers are always available to answer your questions via Instagram and Facebook.



Facebook



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### Download center

All important documents, whether manuals, repair forms or advertising flyers, can be found for download in various languages in our download center on the website.

Don't forget to download the latest instructions for use from time to time to stay up to date when using your SaHoMa®-II inhalation set for horses.



Download center



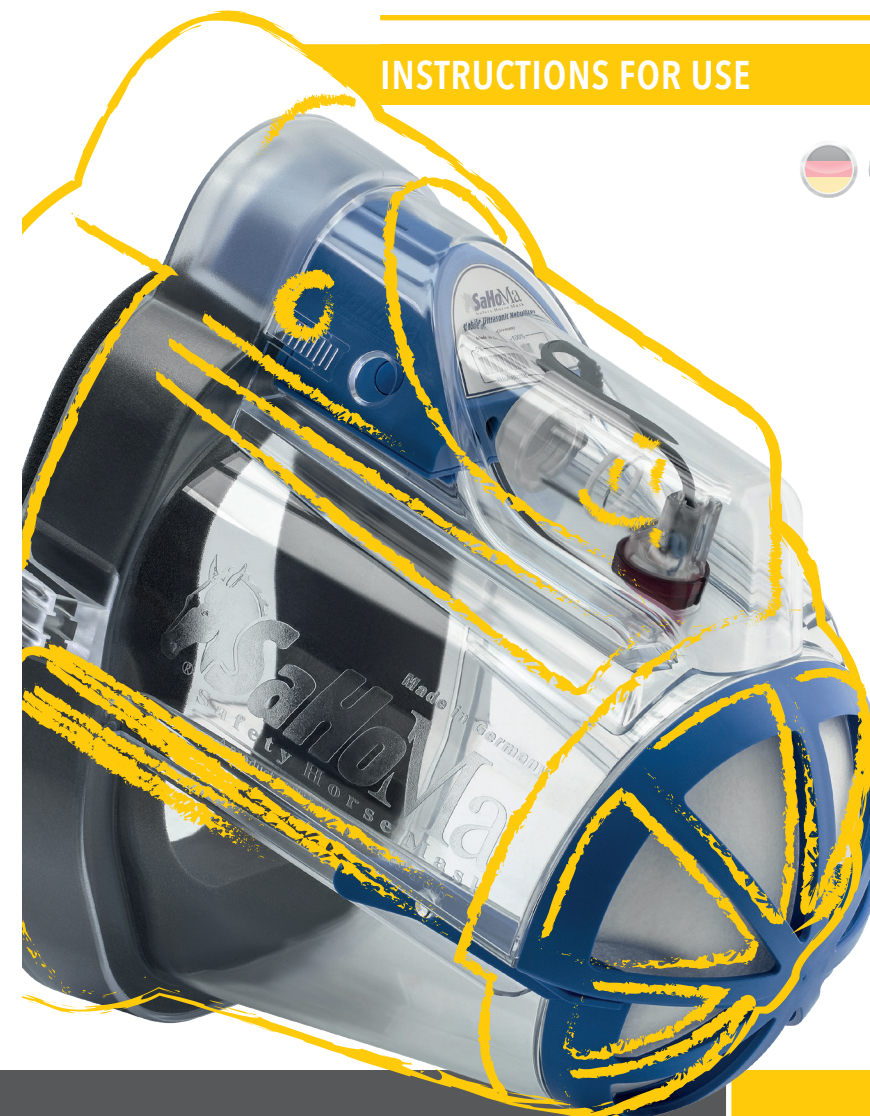
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## Inhalation set for the treatment of respiratory diseases in horses

### INSTRUCTIONS FOR USE



## Manufacturer's information

### Manufacturer:

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### Product description:

SaHoMa®-II inhalation set for horses  
Type: HM-2000-1  
Made in Germany

### Intended Use:

The SaHoMa®-II inhalation set for horses is used to apply different, suitable inhalation solutions directly into the respiratory system of the horse. The mobile SaHoMa®-II inhalation set for horses has no cables, chambers and tubes and introduces the aerosol with particles of optimal size almost silently directly in front of the horse's nostrils.

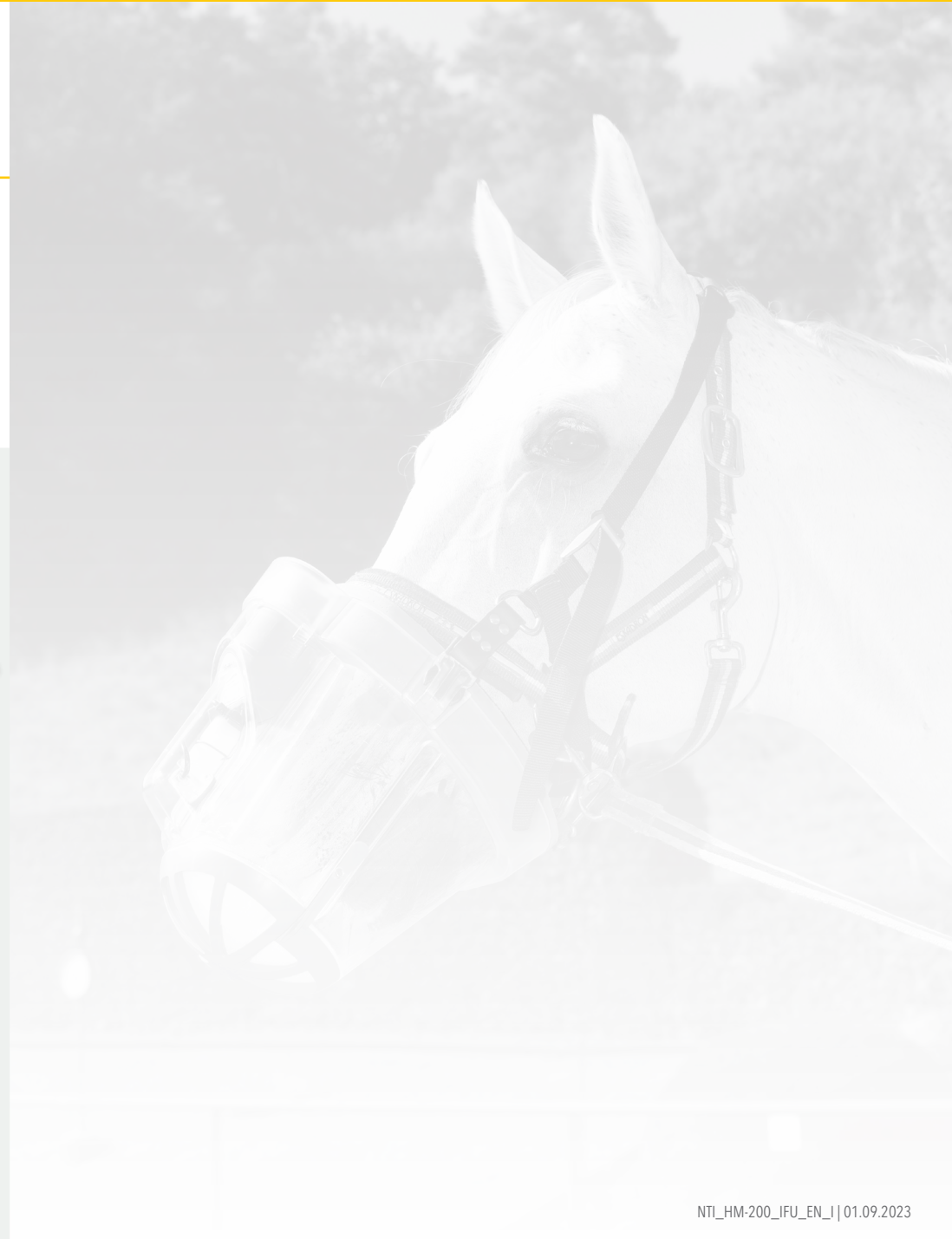
In the front and back inside cover of these instructions for use, you will find the description of the individual components of the SaHoMa®-II inhalation set for horses. You can unfold this important information while reading the instructions for use and thus have it in view at all times.



## Description of the components of the SaHoMa®-II inhalation sets for horses

### The set includes

1 SaHoMa®-II housing (HM-211-1)	1 pc.	7 SaHoMa®-II carrying box (HM-218)	1 pc.
2 SaHoMa®-II protection cover (HM-211-2)	1 pc.	8 SaHoMa®-II control unit (HM-200)	1 pc.
3 SaHoMa®-II filter basket (HM-212)	1 pc.	9 SaHoMa®-II power cord (HM-204)	1 pc.
4 SaHoMa®-II filter membranes (HM-214)	6 pcs.	10 SaHoMa®-II mesh nebulization unit (HM-236)	2 pcs.
5 SaHoMa®-II sealing ring for large horses (HM-215)	2 pcs.	11 Lid fix for mesh nebulization units (202 000 11)	1 pc.
6 SaHoMa®-II halter strap (HM-227)	1 pc.	12 Care and basics set (202 000 01)	1 pc.



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Notes:

## Components of the SaHoMa®-II control unit and mesh nebulization unit

### Connection sockets and buttons of the SaHoMa®-II control unit

- 1 Connection sockets for the SaHoMa®-II mesh nebulization unit
- 2 Connection socket for the SaHoMa®-II power cord
- 3 Button
- 4 Display



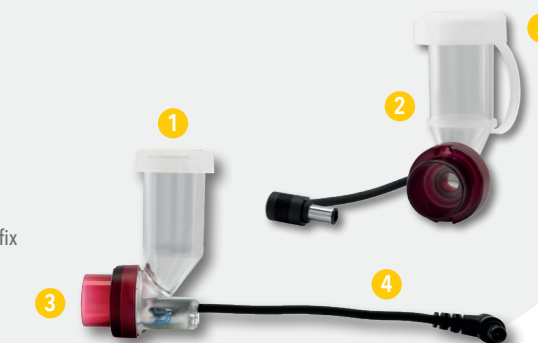
### Display of the SaHoMa®-II control unit

- 1 Multifunctional light
- 2 Light bars



### SaHoMa®-II mesh nebulization unit

- 1 Lid
- 2 Medication chamber
- 3 Connector
- 4 Cable for connecting the SaHoMa®-II control unit
- 5 Mesh nebulization unit with lid fix





Any handling of the device requires the exact knowledge and observance of these operating instructions. Reading the also available quick reference guide does not replace the exact knowledge and observance of these operating instructions. Liability for the safe functioning of the device is transferred to the operator if the device is tampered with or handled in a way that is not in accordance with its intended use.

When reading the instructions for use of the SaHoMa®-II equine inhalation set, you will come across a number of notes to which you should pay particular attention. These are highlighted by the following signs:



Note

#### Note

Information marked as „Note“ should be given special attention.



Caution

#### Caution

Information marked as „Caution“ prevents damage to the product.



Warning

#### Warning

Information marked with „Warning“ is for safety purposes and is intended to prevent hazards that could result in personal injury.



Attention

#### Attention

Information marked with „Attention“ indicates operating steps that may cause malfunction of the device.



Tip

#### Tip

Information marked as „Tip“ may be helpful in handling the device.



Product information

#### Product information

Information marked as „Product information“ shows you alternatives from the product range to the products explained in the instructions for use.



Service

#### Service

Information marked as „Service“ refers to our services for handling the device.













Caution

Chapters to which you should pay particular attention have been marked with a cross in the table of contents.



# TABLE OF CONTENTS

<b>1. Components of the SaHoMa®-II inhalation set for horses</b>	<b>4</b>
<b>2. Getting started with the SaHoMa®-II inhalation set for horses</b>	<b>5</b>
2.1. Preparing the horse for the inhalation	5
2.2. Putting on the SaHoMa®-II sealing ring	6
2.3. Attaching the SaHoMa®-II halter strap and putting on the SaHoMa®-II housing	7
2.4. Connecting the SaHoMa®-II control unit to the SaHoMa®-II housing	9
2.5. Fixing the SaHoMa®-II filter basket on the SaHoMa®-II housing	10
2.6. Using the SaHoMa®-II mesh nebulization unit with the lid fix for mesh nebulization units	11
 2.7. Filling the SaHoMa®-II mesh nebulization unit	13
2.8. Connecting the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II control unit	16
2.9. Sliding on the SaHoMa®-II protection cover	17
<b>3. Performing and ending the inhalation process</b>	<b>18</b>
 3.1. Programs of the SaHoMa®-II control unit	18
3.2. Switching on the SaHoMa®-II control unit in program 1	19
3.3. Switching on the SaHoMa®-II control unit in program 2	21
3.4. Ending the inhalation process	24
 3.5. Putting down the SaHoMa®-II inhalation set for horses	25
 3.6. Performing an inhalation process at cold temperatures	26

<b>4. Cleaning and storing the SaHoMa®-II inhalation set for horses</b>	<b>27</b>
4.1. Cleaning the SaHoMa®-II control unit and the SaHoMa®-II power cord	27
4.2. Cleaning the SaHoMa®-II mesh nebulization unit	28 
4.3. Cleaning of further SaHoMa®-II components	31
4.4. Storing the SaHoMa®-II inhalation set for horses	34 
<b>5. Determining the battery capacity and charging the SaHoMa®-II control</b>	<b>35</b>
5.1. Determining the battery capacity	35
5.2. Charging the SaHoMa®-II control unit with the SaHoMa®-II power cord	37
<b>6. Application instructions &amp; Self-help</b>	<b>40</b>
6.1. Application of different inhalation solutions	40 
6.2. Performing software updates	44
6.3. Self-help: Troubleshooting	45 
<b>7. Technical data</b>	<b>48</b>
7.1. Technical data of the SaHoMa®-II inhalation set for horses	48
7.2. Aerosol delivery rate and aerosol spectrum	49
7.3. Operating conditions	51
7.4. Transport and storing conditions	51
<b>8. Service &amp; Repair</b>	<b>52</b>
<b>9. Information on handling consumables; service life</b>	<b>53</b> 
<b>10. Manufacturer's guarantee</b>	<b>54</b> 
<b>11. Disposal &amp; scrapping of old devices</b>	<b>56</b>

## 1 | Components of the SaHoMa®-II inhalation set for horses

Before initial start-up, please make sure that all components of the SaHoMa®-II inhalation set for horses are present and familiarize yourself with the connections, the button and the display of the SaHoMa®-II control unit.

You will find the designations of the individual components in the inside cover of these operating instructions. This way, you can unfold this important information while reading the operating instructions and have it in view at all times.



### Warning

The SaHoMa®-II inhalation set for horses contains small parts that can be swallowed. Therefore, always keep it out of the reach of children or animals. If parts are accidentally swallowed, consult a doctor/veterinarian **immediately!**

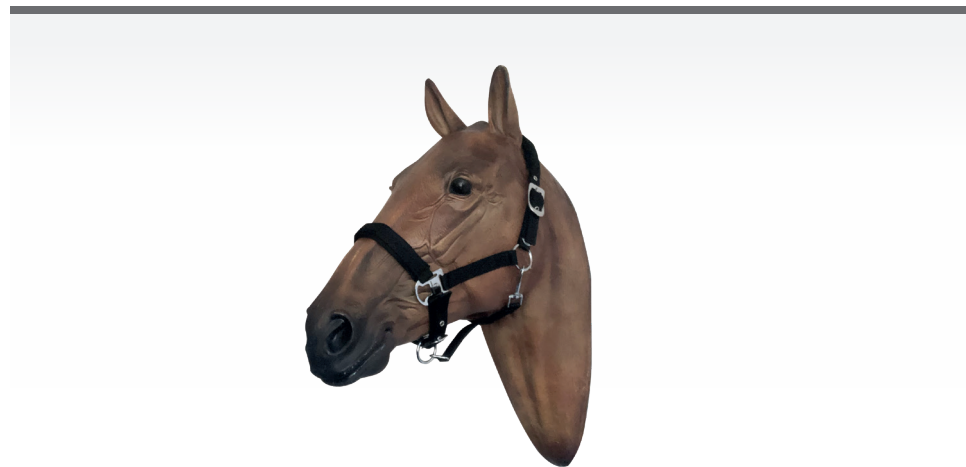
## 2 | Getting started with the SaHoMa®-II inhalation set for horses

Read the instructions for use carefully before initial start-up and be sure to keep the instructions for use in a safe place.

Then please follow the steps described below to start with the SaHoMa®-II inhalation set for horses.

### 2.1. Preparing the horse for the inhalation

Before putting on the SaHoMa®-II inhalation set for horses, put the desired halter on your horse and make sure that it is firmly seated.



### Tip

We recommend the use of a tight-fitting halter with multiple adjustment options to ensure an optimal seal of the SaHoMa®-II inhalation set for horses on the horse's head. Knotted halters and very loose-fitting halters are not suitable, as these would lead to a too loose fit of the SaHoMa®-II inhalation set for horses. When choosing a halter, also make sure that it has good neck padding for a more comfortable fit for your horse.

## 2.2. Putting on the SaHoMa®-II sealing ring

Carefully pull the appropriate SaHoMa®-II sealing ring over the horse's muzzle onto the bridge of the nose. This allows the horse to get used to the upcoming inhalation process. Please note that the SaHoMa®-II sealing ring must be placed in front of the previously applied halter.



### Caution

Please do not leave the SaHoMa®-II sealing ring in the sun or near a heater, as it may become porous due to heat and UV radiation.



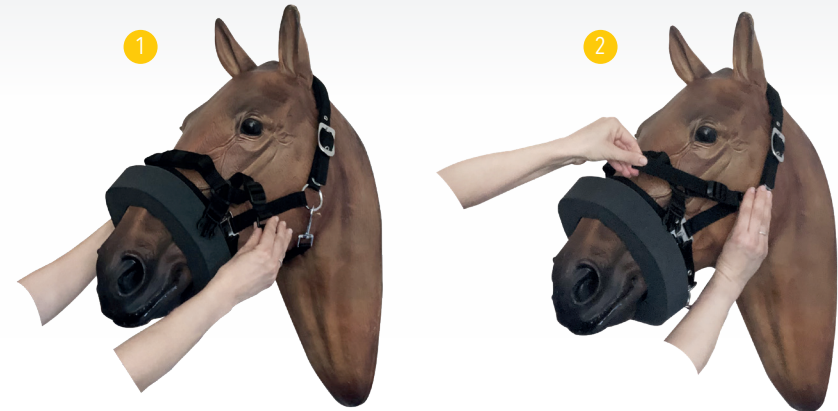
### Tip

Since the SaHoMa®-II sealing ring is made of foam, it can be cut to size if one of the three standard sizes does not fit your horse. Optionally, you can purchase a SaHoMa®-II sealing ring without a cut-out and cut it completely individually.

After use, put the SaHoMa®-II sealing ring in the outer compartment of the SaHoMa®-II carrying box for faster drying.

## 2.3. Attaching the SaHoMa®-II halter strap and putting on the SaHoMa®-II housing

First sort the SaHoMa®-II halter strap before attaching it according to the illustration below. Make sure that the transverse strap is the noseband that goes over the horse's nose. The quick release buckles face down and the carabiners face up.



- 1 Now hook the carabiners of the SaHoMa®-II halter strap on the left and right side of the previously put on halter into the eyelets on the throat strap.
- 2 The side adjustments allow you to tighten or widen the SaHoMa®-II halter strap for optimal fit. Pull on the side strap to shorten it for a tighter fit. Lifting the ladder buckle loosens the strap and the fit again.



- 3 Now attach the SaHoMa®-II housing to your horse. To do this, slide the SaHoMa®-II sealing ring in the rear bulge of the SaHoMa®-II housing. Since you have not attached the SaHoMa®-II filter basket with the SaHoMa®-II filter membrane yet, the horse can breathe in and out without any resistance.
- 4 Now click the quick-release fasteners on the left and right sides of the SaHoMa®-II halter strap into the receptacles provided on the SaHoMa®-II housing. You can now adjust the SaHoMa®-II halter strap again, as described in step 2, so that the SaHoMa®-II housing sits firmly on the horse's head.



Tip

You have the option of adjusting the SaHoMa®-II halter strap to the desired length before or after attaching it to the horse's head. When used for the first time, it is recommended to adjust directly on the horse's head. After initial adjustment, there is no need to adjust again the next time the halter is put on. Only minimal readjustment may be required.

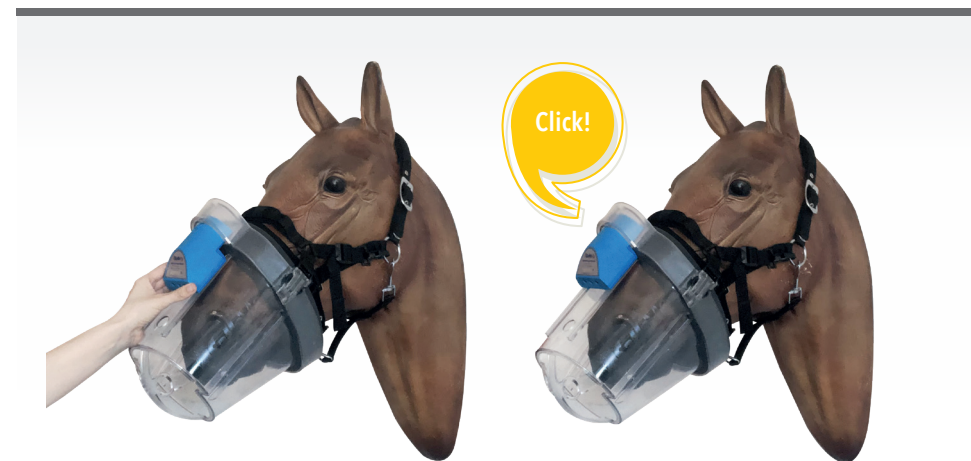


### Product information

Instead of the SaHoMa®-II halter strap, you can also use the SaHoMa®-II fastening strap (Art.-no.: HM-217), which is available separately. The SaHoMa®-II fastening strap runs along the horse's head behind the ears and leads to a better hold due to a tighter fit, which makes sense especially when inhaling while moving.

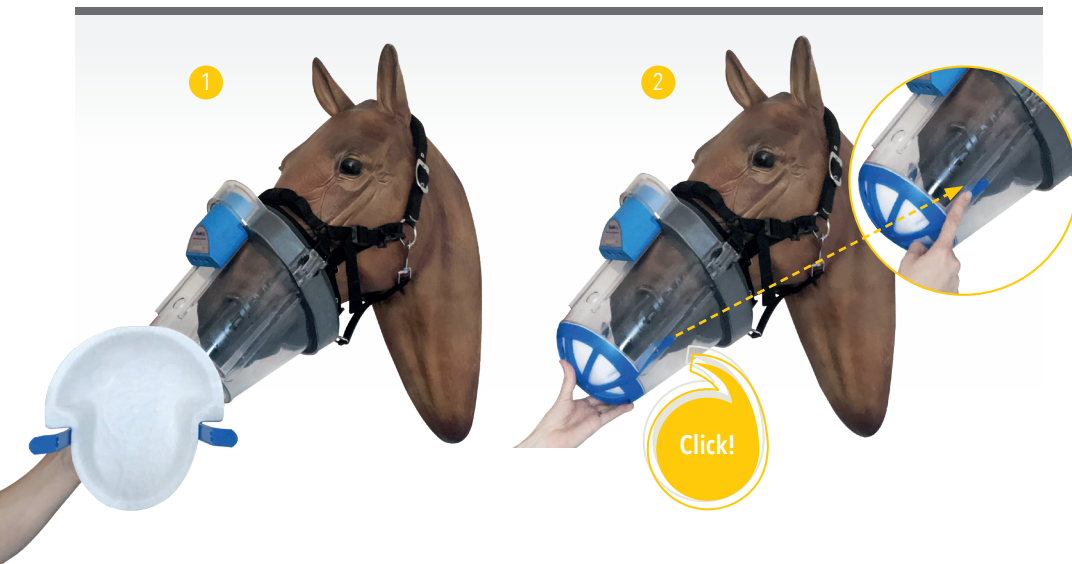
### 2.4. Connecting the SaHoMa®-II control unit to the SaHoMa®-II housing

Slide the SaHoMa®-II control unit along the slide rails of the SaHoMa®-II housing into the provided opening. The SaHoMa®-II control unit audibly snaps into the SaHoMa®-II housing and ensures a secure hold.



### 2.5. Fixing the SaHoMa®-II filter basket on the SaHoMa®-II housing

- 1 Now insert a SaHoMa®-II filter membrane into the SaHoMa®-II filter basket.
- 2 Then gently slide the SaHoMa®-II filter basket with the inserted SaHoMa®-II filter membrane forward over the lateral mounting pins of the SaHoMa®-II housing. Now press the two straps of the SaHoMa®-II filter basket over the mounting pins until they audibly snap into place.



### ! Attention

Replacing the SaHoMa®-II filter membrane with alternatives or completely removing it is not recommended. This would result in too much aerosol escaping, which may have a negative impact on the effectiveness of the inhalation therapy and thus the health of the horse.

### i Product information

As an alternative to the SaHoMa®-II filter membranes, SaHoMa®-II filter membranes with valve set (Art. no.: HM-213) can be purchased separately. They provide relief especially for those horses that have difficulty breathing due to respiratory disease, by making inspiration much easier.

### 2.6. Using the SaHoMa®-II mesh nebulization unit with the lid fix for mesh nebulization units

The lid fix for mesh nebulization units makes it possible to attach the loose lid to the SaHoMa®-II mesh nebulization unit and thus facilitates handling, e.g. during filling. In addition, it offers protection against the lid falling off and being swallowed by the horse.

### ! Warning

The use of the lid fix for mesh nebulization units is therefore strongly recommended by the manufacturer!

- 1 To attach the lid fix for mesh nebulization units, first take the SaHoMa®-II mesh nebulization unit and open the lid by turning it 80° counterclockwise and lift it upwards.
- 2 Now attach the ring of the lid fix for mesh nebulization units to the medication chamber of the SaHoMa®-II mesh nebulization unit. Therefore, stretch the ring of the lid fix and push it down over the medication chamber of the SaHoMa®-II mesh nebulization unit. Please make sure that the open side, which will later be put over the lid, is facing upwards.





- 3 Then place the lid on the SaHoMa®-II mesh nebulization unit and close it with an 80° clockwise turn.
- 4 Now put the lid fix for mesh nebulization units over the lid of the SaHoMa®-II mesh nebulization unit. Due to the indentations on the inside of the lid fix, the lid automatically moves to the correct position in the lid fix the next time it is opened.

The lid fix for mesh nebulization units can remain permanently on the mesh nebulization unit during opening and closing and doesn't need to be removed.



### Tip

When changing the SaHoMa®-II mesh nebulization unit, be sure to remove the lid fix for mesh nebulization units. You can, for example, clean it in warm water with a mild detergent or in the cutlery basket in the dishwasher and then use it again.



### Product information

To label different SaHoMa®-II mesh nebulization units, e. g. for different horses or for use with different inhalation solutions, we recommend the colored lid fix set, which contains a total of five lid fixes in different colors. You can purchase this separately (Art. no.: 202 000 12).

## 2.7. Filling the SaHoMa®-II mesh nebulization unit



### Caution

Please read this chapter carefully and follow the steps for each nebulization process. Disregarding these instructions may otherwise result in a shortened service life or damage to the SaHoMa®-II mesh nebulization unit!



### Warning

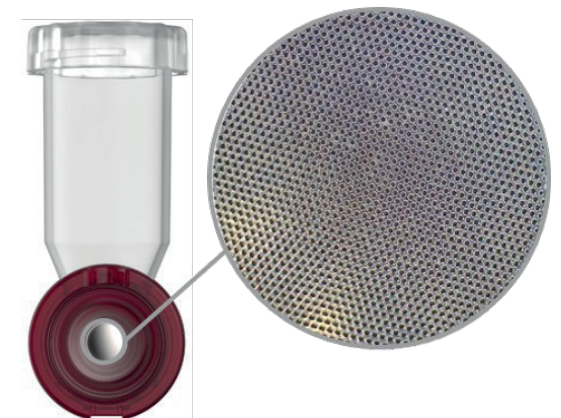
We recommend using a separate SaHoMa®-II mesh nebulization unit per horse and inhalation solution to avoid unwanted interactions, cross-contamination or infections.



### Product information

With the SaHoMa®-II mesh nebulization unit, you are holding a highly innovative product in your hands that should be handled with as much care and attention as possible - your horse will thank you for it.

The SaHoMa®-II mesh nebulization unit works with the innovative mesh technology. A perforated disc is used in conjunction with a piezo ceramic. Due to the resulting pumping function, the medication is pressed through the small holes and made in their size as an aerosol. The holes in the very filigree mesh disc are about twenty times thinner than a human hair, so that they are barely visible to the naked eye.



Use the medication and mixing cup supplied in the care and basics set to mix the inhalation solution to be nebulized with the specified amount of isotonic saline solution (NaCl 0.9 %). To do this, fill the inhalation solutions (e.g. a medication and the corresponding amount of isotonic saline solution 0.9 %) into the mixing cup and shake it well so that the inhalation solutions combine with each other. You can only skip this step, if you use isotonic saline solution (0.9 %) only.

Then open the lid of the SaHoMa®-II mesh nebulization unit, which is fixed with the lid fix for mesh nebulization units, by turning it 80° counterclockwise and lift the lid upwards.



Now shake the prepared inhalation solution again and fill it directly into the SaHoMa®-II mesh nebulization unit or draw it up completely in a syringe and fill it in from there.



Tip

To fill in the inhalation solution, use a syringe without a cannula to avoid foaming during filling.

Please note that the maximum filling quantity of the SaHoMa®-II mesh nebulization unit is 17 ml.

Now place the lid on the SaHoMa®-II mesh nebulization unit and close it with an 80° clockwise turn.



The filling of the SaHoMa®-II mesh nebulization unit should be the last step before starting the inhalation. Leave the SaHoMa®-II mesh nebulization unit filled as short as possible. Otherwise, the individual inhalation solutions may separate again or push through the fine holes of the membrane, resulting in problems during the nebulization process.



Caution

Only use inhalation solutions that are approved for inhalation. In case of doubt, please read the technical information of the medication or ask your veterinarian. For more information on different inhalation solutions, see **chapter 6.1 „Use of different inhalation solutions“**. Non-observance of these instructions can lead to a shortened lifespan of the SaHoMa®-II mesh nebulization unit!

### 2.8. Connecting the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II control unit

After filling, connect the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II housing by placing it carefully and with a slight rotation in the recess provided. Then guide the connection cable of the SaHoMa®-II mesh nebulization unit into one of the two connection sockets of the SaHoMa®-II control unit.



#### Caution

To avoid damage to the SaHoMa®-II housing and the SaHoMa®-II mesh nebulization unit, we recommend that you do not press the SaHoMa®-II mesh nebulization unit into the recess or use the medication chamber as a lever!

### 2.9. Sliding on the SaHoMa®-II protection cover

Finally, slide the SaHoMa®-II protection cover along the slide rails of the SaHoMa®-II housing, over the SaHoMa®-II mesh nebulization unit and the SaHoMa®-II control unit until it audibly snaps into place.

The SaHoMa®-II inhalation set for horses is now ready for the inhalation.



#### Caution

The use of the SaHoMa®-II protection cover is necessary in any case for warranty claims.

## 3 | Performing and ending the inhalation process

### 3.1. Programs of the SaHoMa®-II control unit

The SaHoMa®-II control unit is equipped with two programs:

#### Program 1: Automatic switch-off

Program 1 is a program that automatically switches off the SaHoMa®-II control unit as soon as there is no more inhalation solution in the medication chamber of the SaHoMa®-II mesh nebulization unit.

#### Program 2: Time program

Program 2 should be used for medications with increased viscosity or those that tend to foam, as these medications cause a premature switch-off of the SaHoMa®-II mesh nebulization unit in Program 1.

Program 2 is a time program in which you can set the desired nebulization time. The SaHoMa®-II control unit switches off after the set time has elapsed. An automatic switch-off, when the medication is used up, does **not** occur in program 2.

In **chapter 3.2 „Switching on the SaHoMa®-II control unit in program 1“** and **chapter 3.3 „ Switching on the SaHoMa®-II control unit in program 2 “** the use of both programs is explained in detail.

### 3.2. Switching on the SaHoMa®-II control unit in program 1

Start the SaHoMa®-II control unit by pressing the button for approx. 2 seconds through the side opening in the SaHoMa®-II protection cover.



#### Attention

If the button is pressed for too long, the SaHoMa®-II control unit starts in program 2 (time program) with the lowest time setting of 5 minutes and switches off automatically after this time has elapsed. If your SaHoMa®-II control unit switches off unintentionally during the nebulization process, check whether you have set the desired program.

Immediately after starting, the light bar runs from left to right, the multifunctional light lights up green permanently and the nebulization starts in program 1.





The nebulization process runs continuously and as long as there is inhalation solution in the medication chamber of the SaHoMa®-II mesh nebulization unit.

If the inhalation solution has been completely nebulized, the aerosol production stops. The SaHoMa®-II control unit indicates the end of the inhalation process by two light bars that run synchronously from the center to the right and left.



After some time the SaHoMa®-II control unit switches off automatically. The SaHoMa®-II control unit can also be switched off manually by shortly pressing the button.



### Attention

A SaHoMa®-II mesh nebulization unit must always be connected. Otherwise, the SaHoMa®-II control unit will display an error image. For more information on error images, please refer to **chapter 6.3 „Self-help: Troubleshooting“**.



### Caution

To activate the automatic switch-off, the SaHoMa®-II control unit needs to run for at least **two minutes**.

### 3.3. Switching on the SaHoMa®-II control unit in program 2

Start the SaHoMa®-II control unit by pressing and holding the button through the side opening in the SaHoMa®-II protection cover.



Hold the button of the SaHoMa®-II control unit until the nebulization process starts and then a red light bar appears in the first field of the display.



You can now set the desired time in five-minute intervals, with one bar corresponding to a nebulization time of approx. five minutes.

For a nebulization time of 10 minutes, keep the button pressed until a second bar appears.



In this way, you can set a maximum nebulization time of approx. 25 minutes, which corresponds to five light bars. If you keep the button pressed, the display starts again from the beginning in the first field and at a time of five minutes.

When the desired time setting is reached, release the button. The SaHoMa®-II mesh nebulization unit now produces aerosol as long as you have set it via the SaHoMa®-II control unit. The light bar runs from left to right and the multifunctional light lights up green constantly.



When the set time has elapsed, the aerosol production stops. The SaHoMa®-II control unit indicates the end of the inhalation process by two light bars running synchronously from the center to the right and left.



After some time the SaHoMa®-II control unit switches off automatically. The SaHoMa®-II control unit can also be switched off manually by shortly pressing the button.



### Caution

In program 2, there is **no** automatic switch-off when the inhalation solution is completely used up! Therefore, please make sure that you have filled in an adequate amount of inhalation solution for the selected period of time or stop the inhalation process manually after the inhalation solution has been completely nebulized. **Running empty can cause damage to the SaHoMa®-II mesh nebulization unit.**



### Note

The SaHoMa®-II control unit resets itself after being switched off. The desired time must therefore be set again for the next inhalation process.

### 3.4. Ending the inhalation process

The inhalation process can be ended either by the integrated, automatic switch-off function or by manually switching off the SaHoMa®-II control unit.

#### Automatic switch-off function in program 1

If the inhalation solution has been completely nebulized in program 1, the aerosol production stops (= automatic switch-off). The SaHoMa®-II control unit indicates the end of the inhalation process by two light bars running synchronously from the center to the right and left. After some time the SaHoMa®-II control unit switches off automatically.



#### Caution

To activate the automatic switch-off, the SaHoMa®-II control unit needs to run for **at least two minutes**. In program 2, there is **no** automatic switch-off when the inhalation solution is completely used up!

#### Manual ending of inhalation

You can also stop the inhalation process in Program 1 and Program 2 by manually switching off the SaHoMa®-II control unit. To do this, shortly press the button until the multifunction light of the SaHoMa®-II control unit goes out.

### 3.5. Putting down the SaHoMa®-II inhalation set for horses



After finishing the inhalation process, take off the SaHoMa®-II inhalation mask with accessories from your horse.

To do this, first loosen the SaHoMa®-II halter strap by removing the two carabiners from the halter. Then remove the SaHoMa®-II housing with the attached components from the horse's head.

Before you put down the SaHoMa®-II inhalation mask, it is necessary to remove the SaHoMa®-II control unit and the SaHoMa®-II mesh nebulization unit. So open the SaHoMa®-II protection cover and remove both components.



#### Caution

To avoid damage to the SaHoMa®-II housing and the SaHoMa®-II mesh nebulization unit, we recommend that you do not press the SaHoMa®-II mesh nebulization unit into the recess or use the medication chamber as a lever!

Now clean the individual components as described in **chapter 4 „Cleaning and storing the SaHoMa®-II inhalation set for horses“**.



#### Caution

**Never** place the SaHoMa®-II inhalation mask with the SaHoMa®-II control and mesh nebulization unit as shown below, as this may cause residues of the inhalation solution to enter the SaHoMa®-II control unit and possibly cause liquid damage.



### 3.6. Performing an inhalation process at cold temperatures

The batteries of almost all battery-operated devices, such as smartphones, reduce their power output in winter at low temperatures.

The SaHoMa®-II inhalation set for horses with its components is not protected against this either. In addition, especially medications can change their viscosity at cold temperatures and become more viscous. If temperatures are too cold, the above mentioned points can cause the nebulization process to deteriorate and therefore last longer than usual. For a smooth inhalation process in winter, please follow our tips on storage and use of the SaHoMa®-II inhalation set for horses:

#### STORAGE TIPS

- The more fully the battery is charged, the better the power output. Therefore in winter it is better to recharge the SaHoMa®-II control unit more often and preferably keep it above a capacity of 70%.
- Do not leave the SaHoMa®-II inhalation set for horses open in the stable in winter. Ideally store it in a separate, heated room.
- We particularly recommend storing the SaHoMa®-II control unit indoors at room temperature to avoid rapid discharge and to ensure constant performance.
- To avoid problems during nebulization, we also recommend storing the SaHoMa®-II mesh nebulization unit and the inhalation solution at room temperature.

#### TIPS FOR USAGE

- Keep the SaHoMa®-II control unit, the mesh nebulization unit and the inhalation solution as warm as possible on the way to the horse, e.g. using a hot-water bottle. You can also carry the inhalation solution in your pocket, for example.
- The inhalation process itself can be carried out as usual; no further protective steps are necessary.
- After the inhalation process, we recommend that you clean the components at room temperature, dry and store them there until the next use.

## 4 | Cleaning and storing the SaHoMa®-II inhalation set for horses

A thorough cleaning of the SaHoMa®-II inhalation set for horses is important in order to carry out hygienic inhalation processes and avoid the risk of infection.

For cleaning, disassemble the SaHoMa®-II inhalation set for horses into its individual components and proceed as described in the following chapters.



### Warning

The cleaning of the individual components of the SaHoMa®-II inhalation set for horses must not be carried out on the horse!

#### 4.1. Cleaning the SaHoMa®-II control unit and the SaHoMa®-II power cord

Wipe the SaHoMa®-II control unit and the SaHoMa®-II power cord required for charging with a very well wrung-out cloth (e. g. made of microfiber). Then dry both components completely with a dry cloth or allow them to air dry on an absorbent surface.



### Caution

The SaHoMa®-II control unit and the power cord are **not** waterproof! Neither the charging socket nor the connections for the SaHoMa®-II mesh nebulization unit as well as the power cord with plug may come into contact with water or other liquids! Therefore, please make sure that these sockets and the power cord are always dry and that no water settles there during cleaning!

#### Please observe to prevent damage to the product and for your own safety:

1. Do not immerse the device in water or other liquids.
2. Place the device so that it cannot fall into water.
3. Do not use the device if it has fallen into water.
4. Do not use the device while bathing.
5. Do not use the device near flammable materials.
6. Never operate this device when
  - a) the power cord or plug is damaged.
  - b) the device does not function properly.
  - c) the device has been dropped or damaged.



## 4.2. Cleaning the SaHoMa®-II mesh nebulization unit

The SaHoMa®-II mesh nebulization unit **should be cleaned after each inhalation process**. The SaHoMa®-II inhalation set for horses contains the care and basics set for this purpose. This should facilitate the cleaning of the SaHoMa®-II mesh nebulization units.

The following pages describe how to clean the SaHoMa®-II mesh nebulization unit

1. After each inhalation process
2. After using brine inhalation solutions and / or
3. With the concentrated detergent.

Use the sterile water for cleaning after each inhalation process and in case of salt incrustations caused by brine inhalation solutions. Cleaning with the concentrated detergent is only recommended when the performance of the SaHoMa®-II mesh nebulization unit noticeably decreases.

### 1. Cleaning the SaHoMa®-II mesh nebulization unit after each inhalation process

1. Fill approx. 2 ml of sterile water into the medication chamber of the SaHoMa®-II mesh nebulization unit.
2. Shake the SaHoMa®-II mesh nebulization unit and then empty it.
3. Fill again approx. 1 ml of sterile water into the medication chamber of the SaHoMa®-II mesh nebulization unit.
4. Connect the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II control unit and start it in program 1 by pressing the button. Now wait until the filled sterile water has been completely nebulized. Then switch off the SaHoMa®-II control unit.
5. Remove the SaHoMa®-II mesh nebulization unit from the SaHoMa®-II control unit and allow the opened SaHoMa®-II mesh nebulization unit to air dry on an absorbent surface. Make sure that no residual liquid can run back onto the mesh membrane.

## 2. Cleaning the SaHoMa®-II mesh nebulization unit after using brine inhalation solutions

Especially when brine inhalation solutions are used, the SaHoMa®-II mesh nebulization unit may be clogged by salt crystals.

Therefore, proceed as follows when cleaning:

1. Fill approx. 5 ml of sterile water into the medication chamber of the SaHoMa®-II mesh nebulization unit.
2. Set the SaHoMa®-II mesh nebulization unit aside for a few minutes and let the sterile water act on the mesh membrane. During this time it dissolves the salt particles.
3. Empty the SaHoMa®-II mesh nebulization unit completely and refill approx. 1 ml of sterile water.
4. Connect the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II control unit and start it in program 1 by pressing the button. Now wait until the filled sterile water has been completely nebulized. Then switch off the SaHoMa®-II control unit.
5. Remove the SaHoMa®-II mesh nebulization unit from the SaHoMa®-II control unit and allow the opened SaHoMa®-II mesh nebulization unit to air dry on an absorbent surface. Make sure that no residual liquid can run back onto the mesh membrane.

### 3. Cleaning the SaHoMa®-II mesh nebulization unit with the concentrated detergent

As soon as the performance of the SaHoMa®-II mesh nebulization unit noticeably decreases, cleaning with the cleaning concentrate is recommended. If the SaHoMa®-II mesh nebulization unit is used exclusively with isotonic saline solution (NaCl 0.9%), cleaning with the concentrated detergent is not necessary. If you notice a drop in performance in this case, this is due to regular wear and tear, which will result in the SaHoMa®-II mesh nebulization unit needing to be replaced in the near future.

Proceed as follows for cleaning with the concentrated detergent:

1. Fill 2-3 ml of the concentrated detergent into the medication chamber of the SaHoMa®-II mesh nebulization unit.
2. Connect the SaHoMa®-II mesh nebulization unit to the SaHoMa®-II control unit and start it in program 1 by pressing the button. Nebulize a portion of the filled concentrated detergent for approx. one minute. Then switch off the SaHoMa®-II control unit.
3. Now wait approx. 3 minutes so that the concentrated detergent can act on the membrane of the SaHoMa®-II mesh nebulization unit.
4. Then nebulize the remaining concentrated detergent completely as described in step 2.
5. Fill approx. 3 ml of sterile water into the medication chamber of the SaHoMa®-II mesh nebulization unit. Shake the SaHoMa®-II mesh nebulization unit and then empty it.
6. Fill again approx. 1 ml of sterile water into the medication chamber of the SaHoMa®-II mesh nebulization unit and nebulize it as described in step 2.
7. Remove the SaHoMa®-II mesh nebulization unit from the SaHoMa®-II control unit and allow the opened SaHoMa®-II mesh nebulization unit to air dry on an absorbent surface. Make sure that no residual liquid can run back onto the mesh membrane.



#### Attention

Please make sure that the cable with plug on the SaHoMa®-II mesh nebulization unit does not get wet (danger of short circuit)! Never pull directly on the cable as this can cause cable breaks and device failures!



#### Warning

Always ensure optimum ventilation when nebulizing the concentrated detergent! Although the concentrated detergent is not harmful, it should not be inhaled!



#### Caution

Only use the concentrated detergent offered by the manufacturer for cleaning. It is strongly recommended not to clean the front opening of the SaHoMa®-II mesh nebulization unit by using any object (paper towel, cotton swab, etc.) or finger. This can cause irreparable damage to the membrane of the SaHoMa®-II mesh nebulization unit, so it's no longer working.



#### Note

Instead of using sterile water, the SaHoMa®-II mesh nebulization units can also be cleaned with distilled water. While sterile water is purest water without microorganisms, such as germs and bacteria, or trace elements, distilled water has only been freed from trace elements and other impurities. Distilled water for medical purposes is also suitable for cleaning the SaHoMa®-II mesh nebulization unit.

### 4.3. Cleaning of further SaHoMa®-II components

This subchapter describes how to clean the SaHoMa®-II housing, the SaHoMa®-II protection cover, the SaHoMa®-II filter basket (summarized as „plastic parts“), the SaHoMa®-II halter strap, the SaHoMa®-II sealing rings, the SaHoMa®-II carrying box and the lid fix for nebulization units.

#### Cleaning the plastic parts

In case of light soiling, you can clean the plastic parts in lukewarm water and with a gentle detergent. Then dry the plastic parts completely or let them air dry on an absorbent surface.

If the plastic parts are very dirty, it is suggested to clean them in the dishwasher. To do this, place the plastic parts in the dishwasher baskets. Start the dishwasher without using a detergent in a program with temperatures up to a maximum of 60° C.

#### Product information

We recommend mikrozid® AF liquid from Schülke for the disinfection of plastic parts (Art. No.: 202 000 19), which can be bought separately. For other surface disinfectants, please observe the technical information and test it beforehand on an inconspicuous spot.

#### Cleaning the SaHoMa®-II halter strap

Light soiling on the SaHoMa®-II halter strap can be removed with warm water and a small hand brush.

You can also wash the SaHoMa®-II halter strap in the washing machine if it is very dirty. Place the SaHoMa®-II halter strap in a padded laundry net and use the delicate cycle with a temperature of 30° C. Use a mild detergent and avoid fabric softeners.

#### Cleaning the SaHoMa®-II sealing rings

The SaHoMa®-II sealing rings can be wiped off with a damp cloth. A change should be made if the SaHoMa®-II sealing rings are heavily soiled or porous.

#### Caution

Please do not leave the SaHoMa®-II sealing ring in the sun or near a heater, as it may become porous due to heat and UV radiation.

#### Cleaning the SaHoMa®-II carrying box

Remove all accessories for cleaning the SaHoMa®-II carrying box.

You can then clean it with lukewarm water and a mild detergent. Then dry the SaHoMa®-II carrying box completely or let it air dry.

#### Cleaning the lid fix for nebulization units

To clean the lid fix for mesh nebulization units, please remove it from the SaHoMa®-II mesh nebulization unit. You can then clean it, for example, in warm water with mild detergent or in the cutlery basket in the dishwasher and reuse it after drying.

#### Caution

As SaHoMa®-II filter membranes are consumables, they are not suitable for cleaning! Due to the nature of the material, cleaning with water may cause the material to clog due to limescale build-up, which may make it more difficult for the horse to breathe.

#### 4.4. Storing the SaHoMa®-II inhalation set for horses

After cleaning, the SaHoMa®-II inhalation set for horses has to be properly stowed in the corresponding SaHoMa®-II carrying box.

Especially during the first inhalation processes and to establish a routine, it makes sense to exactly follow the individual steps described in these instructions for use. In this case, stow the SaHoMa®-II inhalation set for horses after cleaning, disassembled into its individual parts in the SaHoMa®-II carrying box.

As soon as you are familiar with the use of the SaHoMa®-II Inhalation set for horses and also the horse has got used to the inhalation, you do not have to disassemble the SaHoMa®-II inhalation set completely any more, but can stow it already assembled for the next inhalation. Therefore, proceed as follows:

After cleaning all components, first insert a SaHoMa®-II filter membrane into the SaHoMa®-II filter basket and attach it to the SaHoMa®-II housing. You can also place the cleaned and dry SaHoMa®-II sealing ring in the designated place of the SaHoMa®-II housing. Now, before starting the next inhalation, all you have to do is slide on the SaHoMa®-II control unit, fill the SaHoMa®-II mesh nebulization unit, secure both with the SaHoMa®-II protection cover and attach the device with the SaHoMa®-II halter strap before finally starting the inhalation process.

It is recommended - also for reasons of space - to store in the SaHoMa®-II carrying box only those components that are regularly required for inhalation. Additional consumables should be stored elsewhere until they are needed. Because everyone has an individual need for components for regular inhalation, there is no universal formula for placing the components in the SaHoMa®-II carrying box.



### Caution

Be sure to disconnect the SaHoMa®-II control unit and the SaHoMa®-II mesh nebulization unit from the SaHoMa®-II housing after each inhalation process and clean both thoroughly.

We strongly advise protecting the SaHoMa®-II control unit in particular from any moisture ingress by storing any liquids separately from it, e. g. in a liquid-repellent bag, and stowing it like this in the SaHoMa®-II carrying box.

For protection, we also recommend that you only store completely dry components in the SaHoMa®-II carrying box to avoid (moisture) damage to the individual components.

## 5 | Determining the battery capacity and charging the SaHoMa®-II control

The SaHoMa®-II control unit is equipped with an integrated lithium polymer battery that needs to be recharged from time to time. To check the battery capacity, the SaHoMa®-II control unit is equipped with a charge indicator.

### 5.1. Determining the battery capacity

To determine the battery capacity, shortly press the button of the SaHoMa®-II control unit.





The light bars first rise to 100 % and then fall back to the actual battery capacity. One light bar corresponds to a battery capacity of 10 %.



This display appears for approx. 2 seconds and then disappears again. The display shown above shows 8 light bars, which corresponds to a battery capacity of 80%.



Note

When the battery capacity corresponds to 100%, no difference can be seen visually. The battery is then fully charged.

## 5.2. Charging the SaHoMa®-II control unit with the SaHoMa®-II power cord

If the SaHoMa®-II control unit shows a battery capacity of 30 % or lower, we recommend charging the SaHoMa®-II control unit, otherwise the remaining capacity may not be sufficient for a complete inhalation process. In addition, the battery capacity may also affect the quality of the inhalation process.

To charge the SaHoMa®-II control unit, connect it to the SaHoMa®-II power cord and then with the 230 VAC power supply (socket).



The charging process of the lithium polymer battery starts. As long as the lithium polymer battery of the SaHoMa®-II control unit is charged, the multifunctional light flashes green.



The charging time is a maximum of six hours, depending on the initial capacity.

When the lithium polymer battery of the SaHoMa®-II control unit is fully charged, the multifunctional light will stay permanently green.



Then disconnect the SaHoMa®-II power cord from the SaHoMa®-II control unit and the 230 VAC power supply. A fully charged SaHoMa®-II control unit can be used for approx. 2 operating hours.

### ! Caution

To avoid damage to the SaHoMa®-II control unit, only use the supplied original SaHoMa®-II power cord. Never use a damaged or defective SaHoMa®-II power cord! In this case please contact the manufacturer.

The SaHoMa®-II control unit may only be operated via the internal rechargeable lithium polymer battery, but not via the SaHoMa®-II power cord and the 230 VAC power supply (socket).

When the lithium polymer battery is fully charged, charging stops automatically to prevent the battery from „overcharging“. Nevertheless, the SaHoMa®-II control unit should never be left unattended or charged overnight. If the SaHoMa®-II control unit becomes hot or if there is a build-up of odor, it is essential to disconnect the SaHoMa®-II control unit from the power supply immediately and to contact the manufacturer to clarify any further steps.



### Tips

To avoid a deep discharge we recommend to recharge the SaHoMa®-II control unit meanwhile, if it is not used for a longer period of time.

Tips for long-life lithium polymer batteries:

- Hold the lithium polymer battery in an optimal charge state between 30 % and 70 %.
- Do not recharge at a charge level above 70 %.
- Fully recharge at a charge level below 30 %.
- A complete discharge before each recharge is not necessary.
- Do not use or charge the lithium polymer battery intensively in hot or cold conditions; avoid extreme temperatures.

## 6 | Application instructions & Self-help

### 6.1. Application of different inhalation solutions



#### Caution

Basically, inhalation therapy is always carried out in consultation with the attending veterinarian. He carries out the anamnesis, makes the diagnosis and initiates a therapy. All inhalation solutions are to be used only after release by a veterinary surgeon in such a way, as this recommends it! Please always follow his instructions!

There are now numerous inhalation solutions for a wide range of applications. Which inhalation solutions are used in case of illness or for prophylaxis, how they are composed and concentrated and how to use them, we have summarized for you in this chapter. Please note that this chapter refers exclusively to inhalation solutions used in Germany. Inhalation solutions used abroad may differ.

#### FREELY AVAILABLE INHALATION SOLUTIONS

##### ***Sodium chloride (NaCl) / isotonic saline solution***

Ingredients: Sodium chloride  
 Concentration: 0.9 %, isotonic concentration  
 Properties: moisturizing, nourishing and slightly expectorant  
 Side effects: none known

##### ***Brine and other salt solutions***

Ingredients: Sodium chloride and possibly other salts and minerals (e.g. Dead Sea brine, Emser salt, etc.)  
 Concentration: over 1 %, hypertonic concentration  
 Properties: strongly expectorant, anti-inflammatory and decongestant  
 Side effects: may be irritating and drying

##### ***Inhalation solutions with physical mode of action***

Ingredients: ectoin, tacholiquin, etc.  
 Mode of action: Reduction of viscosity and reduction of surface tension, e.g. for mucus solution, moistening and care.  
 Side effects: none known



#### Tip

Isotonic, „hypertonic“ or „hypotonic“ refer to different concentration ratios. While in isotonic solutions the mineral concentration is the same as in human cells, in hypertonic solutions the mineral concentration is higher and in hypotonic solutions it is lower than in cells. This causes isotonic inhalation solutions (such as NaCl 0.9%) to have a nurturing and moisturizing effect on the cells due to the even exchange of fluids, while hypertonic inhalation solutions (such as Dead Sea Brine 2.5%) remove moisture from the cells. Hypotonic solutions (such as distilled water) cause too much water to enter the cells and cause them to burst by swelling. Therefore, hypotonic solutions should never be used for inhalation!

This means that the same active ingredient can have a different mode of action due to a different concentration ratio. An example of this is sodium chloride. Sodium chloride is often mistakenly equated with isotonic saline solution. In fact, sodium chloride can be isotonic or hypertonic. Only a concentration of 0.9% is considered isotonic. Anything above this, i.e. already above 1 %, is referred to as a hypertonic mixing ratio. This means that sodium chloride can be used on the one hand (isotonic) for humidification, but on the other hand (hypertonic) to withdraw fluid from the respiratory tract.

#### PRESCRIPTION MEDICATIONS

##### ***Antiallergics***

Active ingredients: cromoglicic acid, etc.  
 Use: To reduce the symptoms of allergic diseases

##### ***Antibiotics***

Active ingredients: gentamicin, etc.  
 Use: For infectious diseases caused by bacteria, not for viral diseases

##### ***Anticholinergics (bronchodilators)***

Active ingredients: Ipratropium bromide, etc.  
 Use: For the treatment of diseases with spasmodic constriction of the larger bronchial tubes.

##### ***Glucocorticoids (bronchodilators)***

Active ingredients: budesonide, dexamethasone, salbutamol, etc.  
 Use: cortisone with anti-inflammatory, antispasmodic and decongestant effect on the small bronchi and bronchioles

##### ***Expectorants / secretolytics***

Active ingredients: acetylcysteine, ambroxol, etc.  
 Use: cough and mucus expectorant



## Warning

Please note that although medications with different trade names may contain the same active ingredient, the dosage or composition may be different. Accordingly, the effect of the preparation on the components of the SaHoMa®-II inhalation set for horses is different, which in turn could influence the wear or the nebulization duration.



## Attention

The use of **self-mixed medications** is always at the user's own risk, as both the mixing ratio and the ingredients are unknown and therefore proper functioning cannot be guaranteed.

The inhalation of **essential oils or other plant extracts** is generally not recommended with an electric nebulizer, as these are too aggressive for nebulization and can lead to enormous irritation of the mucous membranes, up to and including severe allergic reactions and bronchospasms. In addition, they promote greatly premature wear of the SaHoMa®-II mesh nebulization unit.

Tests with various inhalation solutions have shown that chemical reactions and thus **premature wear** occur with subsequent preparations, so that their use is not recommended:

- Essential oils
- Preparations with the active ingredient acetylcysteine
- Preparations with hypochlorous acid

Defects resulting from the use of these preparations do not justify any guarantee or warranty rights on your part.

As a rule, nebulization of inhalation solutions suitable for inhalation with an electric nebulizer does not present any problems. It should always be noted that the SaHoMa®-II mesh nebulization unit is a consumable item that is subject to mechanical wear. The degree of wear depends on several factors, such as the inhalation solution, the inhalation frequency and quantity, and the care of the consumable. In the interest of effective inhalation therapy, the SaHoMa®-II mesh nebulization unit must be replaced regularly, regardless of the inhalation solution used.

When using the above-mentioned inhalation solutions, please also adhere to the following recommendations with regard to the use and cleaning of the SaHoMa®-II mesh nebulization units:

- Use one SaHoMa®-II mesh nebulization unit per inhalation solution and horse to avoid interactions or cross-contamination. For this purpose, label the SaHoMa®-II mesh nebulization unit accordingly to ensure traceability.
- Always use NaCl 0.9 % - not (sterile / distilled) water or brine - for mixing or diluting inhalation solutions to avoid the risk of clogging the SaHoMa®-II mesh nebulization unit with coarser salt crystals.
- The inhalation solution used should be mixed 1:1 with NaCl 0.9 % (e.g. 2 ml inhalation solution and 2 ml NaCl 0.9 %), and at best even filled up to the maximum filling quantity of 17 ml (i.e. 2 ml inhalation solution with 15 ml NaCl 0.9 %).
- Mix the inhalation solution in the medication and mixing cup shortly before use and not directly in the SaHoMa®-II mesh nebulization unit. Shake the medication and mixing cup well afterwards so that the inhalation solution combines with the NaCl 0.9 %. If you do not start nebulization after this step, shake the inhalation solution again immediately before filling and starting to prevent the preparations from separating again.
- For nebulization, it is advisable to try it out in program 1 for the time being. If the SaHoMa®-II control unit switches off unintentionally in program 1 due to excessive bubble or foam formation, please start the SaHoMa®-II control unit in program 2 (time program). Set the time according to the inhalation volume used (guide value: approx. 1 ml per minute) and observe the inhalation process. If the SaHoMa®-II control unit does not switch off after nebulizing the inhalation solution, please switch it off manually at the end of the process. For further information, please refer to **chapter 3 „Performing and ending the inhalation process“**.

### Cleaning the SaHoMa®-II mesh nebulization unit

The SaHoMa®-II mesh nebulization unit used should be cleaned with sterile or distilled water after each inhalation process. When using brine inhalation solutions or medications, a different cleaning procedure is necessary. For the exact cleaning procedure, please refer to **chapter 4.2 „Cleaning the SaHoMa®-II mesh nebulization unit“**.



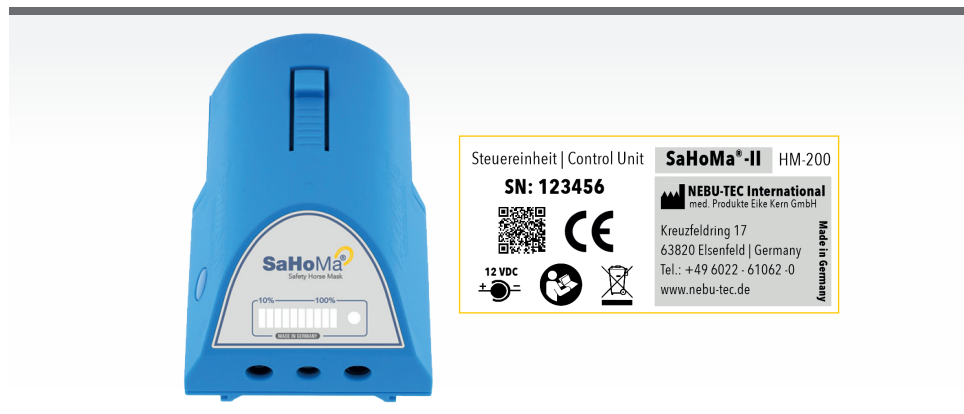
## 6.2. Performing software updates

As part of the continuous improvement process, the software of the SaHoMa®-II control unit is constantly being developed and improved. Existing customers whose SaHoMa®-II control unit is already functional with the SaHoMa®-II mesh nebulization units (changeover from February 2014) can have software updates installed on their SaHoMa®-II control unit and thus keep the SaHoMa®-II control unit up to date.

As part of repair orders, the software status is also checked as standard and, if necessary, available free software updates are automatically installed.

To find out whether your SaHoMa®-II control unit is eligible for a software update, please contact us by phone.

To find out the software version, we only need the serial number of your device. This can be found on the underside of your SaHoMa®-II control unit, also known colloquially as the „battery“. There is a silver label on which you can read the serial number as well as the manufacturer's details. Starting with „SN“, the serial number consists of 6 digits. Depending on the age of the device, the label could look like this:



If your SaHoMa®-II control unit should undergo a software update, it is necessary that you send it to us together with a repair form. As a rule, a software update including shipping takes approx. 5 working days in Germany.





Service

Our service staff will be happy to explain the specific procedure to you in advance. For this purpose, they are available during our opening hours, which you can find on our website, by phone at +49 (0) 6022 - 610 62 -0 or by e-mail to info@nebu-tec.de.

## 6.3. Self-help: Troubleshooting

If you experience problems while using the SaHoMa®-II inhalation set for horses, the following table can help you to find the causes and eliminate them.


Error	Possible Causes / Elimination
 <p>The display shows a light bar, which is on the <b>left</b> and the multifunctional light flashes <b>alternately red and green</b>.</p>	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• The SaHoMa®-II mesh nebulization unit has reached the end of its lifespan</li> <li>• No SaHoMa®-II mesh nebulization unit is connected</li> <li>• There is a cable break in the SaHoMa®-II mesh nebulization unit</li> <li>• The battery capacity is too low for inhalation</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Check the connection of the SaHoMa®-II mesh nebulization Unit and the SaHoMa®-II control unit (<b>chapter 2.8</b>)</li> <li>• Replacing the old SaHoMa®-II mesh nebulization unit with a new one (<b>chapter 9</b>)</li> <li>• Charging the SaHoMa®-II control unit (<b>chapter 5.2</b>)</li> </ul>
 <p>The display shows a light bar, which is on the <b>right</b> and the multifunctional light flashes <b>alternately red and green</b>.</p>	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• Increased power consumption of the SaHoMa®-II mesh nebulization unit</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Replacing the old SaHoMa®-II mesh nebulization unit with a new one (<b>chapter 9</b>)</li> </ul>



Caution

Further use can cause damage to the SaHoMa®-II control unit and mesh nebulization unit!

Error	Possible Causes / Elimination
The inhalation times are <b>noticeably longer</b> and there is <b>no or only a small aerosol</b> output.	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• Dirty or clogged membrane of the SaHoMa®-II mesh nebulization unit</li> <li>• Mechanically damaged membrane of the SaHoMa®-II mesh nebulization unit (e. g. in case of improper handling)</li> <li>• The end of the lifespan of the SaHoMa®-II mesh nebulization unit has been reached or exceeded</li> <li>• The room or ambient temperature is below 10° C</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Cleaning the SaHoMa®-II mesh nebulization unit (<b>chapter 4.2</b>)</li> <li>• Replacement of the SaHoMa®-II mesh nebulization unit (<b>chapter 9</b>)</li> <li>• Please wait approx. 30 minutes until the system has adjusted to room temperature and only fill and nebulize inhalation solutions that are at room temperature.</li> <li>• Connect a SaHoMa®-II mesh nebulization unit filled with isotonic saline solution (NaCl 0.9 %), allow the device to nebulize for 10 seconds and then switch it off again manually and switch it on again in the desired program</li> </ul>
The SaHoMa®-II control unit <b>switches off unintentionally</b> during the inhalation process despite a remaining residual quantity.	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• Air bubbles on the membrane of the SaHoMa®-II mesh nebulization unit</li> <li>• Use of a foaming medication suggesting a filling in form of foam residues</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Light tapping of the SaHoMa®-II mesh nebulization unit to loosen the air bubbles; if necessary restart the SaHoMa®-II control unit</li> <li>• Proper dilution of foaming medications according to the list of medications; nebulization in program 2 under constant observation with manually switching off the SaHoMa®-II control unit.</li> <li>• Connect a SaHoMa®-II mesh nebulization unit filled with isotonic saline solution (NaCl 0.9 %), allow the device to nebulize for 10 seconds and then switch it off again manually and switch it on again in the desired program</li> </ul>

Error	Possible Causes / Elimination
<b>Charging</b> the SaHoMa®-II control unit is <b>not possible</b> .	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• Defective SaHoMa®-II power cord or defective plug of the SaHoMa®-II power cord</li> <li>• No voltage at the socket used</li> <li>• Defective charging socket</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Use of another socket</li> <li>• Check the plug connection at the SaHoMa®-II control unit</li> <li>• Otherwise send in for inspection/repair</li> </ul>
The SaHoMa®-II control unit <b>cannot be switched off</b> and <b>does not respond to pressing the button during operation</b> .	<p><b>Possible Causes:</b></p> <ul style="list-style-type: none"> <li>• The button on the SaHoMa®-II control unit has been pressed repeatedly within a short period of time</li> <li>• The SaHoMa®-II control unit no longer responds to a button press due to an unusually high workload</li> </ul> <p><b>Elimination:</b></p> <ul style="list-style-type: none"> <li>• Put the SaHoMa®-II control unit aside for approx. 10 minutes until it automatically switches itself off and performs a reset</li> </ul> <div style="border: 1px solid orange; padding: 5px; margin-top: 10px;"> <p> <b>Warning</b></p> <p>During this time, the SaHoMa®-II control unit must not be connected for charging!</p> </div>



### Service

In all other cases or in case of uncertainty, please contact our service staff who will be happy to help you: +49 (0) 6022 - 610 62 -0.

Please note that in the case of a repair, you will have to complete the repair form and send it to us with all the necessary components. Instructions for return can be found in the repair form.

## 7 | Technical data

### 7.1. Technical data of the SaHoMa®-II inhalation set for horses

#### Technical data of the SaHoMa®-II control unit

Dimensions (L x W x H):	112 x 82 x 66 mm
Weight:	208 g
Power supply types:	Battery operation
Type of battery:	Lithium polymer battery / 11,1 V DC / 1200 mAh
Power cord:	100 - 240 V AC; 50/60 Hz / 12 V; 1,5 A

#### Technical data of the SaHoMa®-II mesh nebulization unit

Dimensions (L x W x H):	51 x 33 x 77 mm
Weight:	31 g
Maximum filling quantity:	17 ml

For further information about performance and particle size please refer to **chapter 7.2 „Aerosol delivery rate and aerosol spectrum“**.

#### Technical data of the SaHoMa®-II inhalation set for horses in working conditions

Dimensions (L x W x H):	260 x 250 x 322 mm
Weight:	1,45 kg

### 7.2. Aerosol delivery rate and aerosol spectrum

#### Aerosol delivery rate

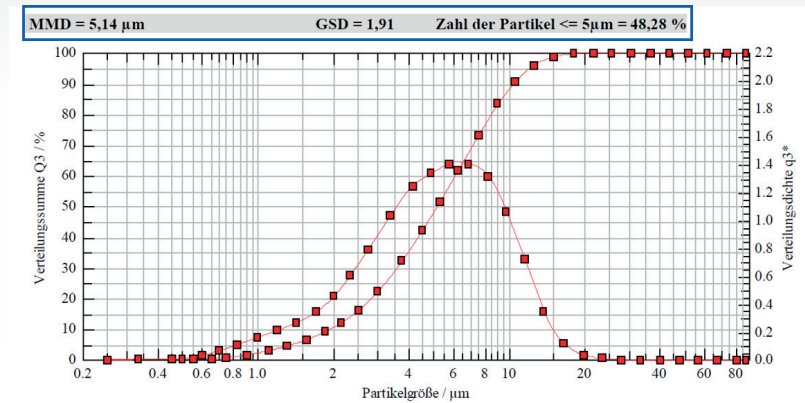
When using the SaHoMa®-II control unit in connection with the SaHoMa®-II mesh nebulization unit, the average **aerosol delivery rate** is 0.8 ml isotonic saline solution (NaCl) 0.9 % per minute. The aerosol delivery rate of a SaHoMa®-II mesh nebulization unit is within tolerance if it is 0.5 to 3 ml of isotonic saline solution (NaCl) 0.9 % per minute.

#### Aerosol spectrum

When using the SaHoMa®-II control unit in combination with the SaHoMa®-II mesh nebulization unit (test medium: isotonic saline solution (NaCl) 0.9 %), the **aerosol spectrum** was determined as follows:

**Determination of the aerosol spectrum using a laser diffractometer**  
(HELOS VARIO KF)

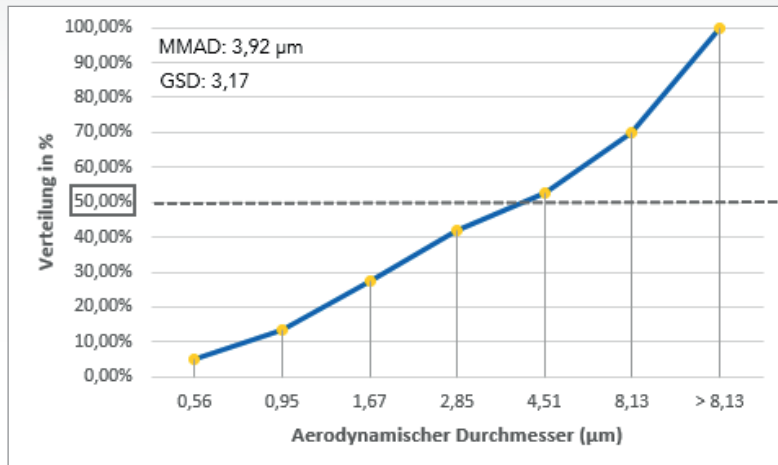
The average particle size is **5.14 µm MMD** with a GSD of 1.91. **48.28 % of the particles are ≤ 5 µm**.



### Determination of the aerosol spectrum using a cascade impactor (NGI)\*

The particle size is **3.92 µm MMAD** with a GSD of 3.17. **42.64 % of the particles are between 1.5 and 8 µm.**

\* The determination of the aerosol spectrum using a cascade impactor (NGI) was carried out by the Fraunhofer Institute for Toxicology and Experimental Medicine ITEM in Hanover (Germany).



#### Note

These are an exemplary measurements of a representative sample.

**MMD:** for Mass Mean Diameter [µm]

**MMAD:** for Mass Median Aerodynamic Diameter [µm]

**GSD:** Geometric Standard Deviation



#### Service

On our website you will find all kinds of information worth knowing about this and other topics related to inhalation. All information is written by veterinarians in a simple and understandable way and kept in short form to support you in the best possible way during the already nerve-racking time.

### 7.3. Operating conditions

In the following environmental conditions, the proper operation of the components as well as the specified nebulizer performance and aerosol spectrum are guaranteed:

Ambient temperature	+10° C to +30° C; 20° C optionally
Relative air humidity	25 % to 75 %
Air pressure	450 hPa to 1100 hPa

Please note that inhalation solutions intended for nebulization should also be at room temperature. If the ambient temperature is too low (< 10° C) or too high (> 30° C), the nebulizer performance and the aerosol spectrum of the SaHoMa®-II inhalation set for horses can no longer be guaranteed.

For tips on using the SaHoMa®-II inhalation set for hoses at cold temperatures, please read **chapter 3.6 "Performing an inhalation process at cold temperatures"**.

### 7.4. Transport and storing conditions

In the following environmental conditions, the transport and storage of the components can take place without causing damage to them or the components themselves representing a source of danger:

Ambient temperature	+ 10° C to +30° C; 20° C optionally
Relative air humidity	25 % to 75 %
Air pressure	450 hPa to 1100 hPa

The components must be stored and transported away from direct sunlight.

Do not store the components in damp rooms or transport them together with damp objects. In the event of extreme fluctuations in the ambient temperature, the functionality of the components may be impaired by condensation moisture.

## 8 | Service & Repair

Do you have a product that does not work properly or is damaged?

Your satisfaction is very important to us. For a fast processing of your repair we ask you to follow our instructions carefully.

If one of your ordered products does not function properly or is damaged externally, we ask you to first read **chapter 6.3 „Self-help: Troubleshooting“** to see whether you can correct the error by yourself.

If it is not possible to eliminate the error by yourself, we recommend to contact us by telephone as soon as possible. We will then try to find a solution together with you.



### Service

Our service staff will be happy to assist you during our opening hours, which you can find on our website, by phone at +49 (0) 6022 - 610 62 -0 or by e-mail at info@nebu-tec.de.

If a return of the item is unavoidable, please use our repair form for repairs, which you can find in your welcome folder, gladly request by e-mail or download in our download center on the website. Here you will also receive information on the further procedure.

For more information on consumables and warranty, refer to **chapter 9 „Information on handling consumables; service life“** and **chapter 10 „Manufacturer's guarantee“**.

## 9 | Information on handling consumables; service life

In this chapter, we refer you to the lifespan of the individual consumables when used as intended. Provided that the instructions for use have been observed, the intended use corresponds to one inhalation session per day with 17 ml isotonic saline solution 0.9 %.

### Service life of the SaHoMa®-II mesh nebulization unit

When used as intended, the typical service life of the SaHoMa®-II mesh nebulization unit is 30 days.

### Service life of the SaHoMa®-II filter membrane

When used as intended, the typical service life of the SaHoMa®-II filter membranes is one day. We recommend renewing the SaHoMa®-II filter membrane just like a handkerchief, depending on the degree of soiling and frequency of use. The SaHoMa®-II filter membranes are not designed for cleaning.

If the end of the lifespan of the respective consumable has been reached, a replacement of this component is recommended. The lifespan of the components may change, if they are used for purposes other than their intended purpose or if a medication is nebulized. For further information on inhalation solutions, please refer to **chapter 6.1 „Application of different inhalation solutions“**.



### Caution

Consumables are subject to normal wear. The progress of wear depends on various factors (such as inhalation frequency and quantity). However, normal wear due to age or usage does not constitute a defect and therefore does not constitute any warranty or guarantee rights. Please note that consumables can't be repaired!



## 10 | Manufacturer's guarantee

NEBU-TEC (manufacturer) grants end customers (means consumers) a temporary manufacturer's guarantee under the following conditions and to the extent described. The manufacturer's guarantee applies in addition to the legal warranty.

Our products are quality products manufactured in Germany. The used materials have been carefully selected and, like the production process, are under constant control. Therefore we guarantee that our products do not show any material or processing defects when used as intended.

In the exceptional event of a defect, we will repair, replace or refund the component at our discretion, giving priority to repair. Replacement or repair does not constitute a new guarantee. All exchanged components or old devices become property of NEBU-TEC.

Within the scope of this guarantee, only defects that can be proven to be due to a material or manufacturing defect will be remedied. Should a product defect prove not to be covered by this guarantee, the costs incurred shall be borne by the consumer himself. In addition, the consumer shall bear the costs arising from the examination of the product, including any costs for working hours.

The guarantee period starts from the date of purchase. When purchasing our products from one of our distributors, a receipt showing the date of purchase must be presented as proof of purchase.

A **24-month guarantee** applies from the date of purchase for the following products:

- Plastic parts, means SaHoMa®-II housing, protection cover, filter basket
- SaHoMa®-II control unit
- SaHoMa®-II power cord

A **six-month guarantee** applies from the date of purchase for the following products:

- Lithium polymer battery of the SaHoMa®-II control unit

**All other items (accessories and consumables) are not covered by the manufacturer's guarantee.**

### Caution

Consumables are subject to normal wear. However, normal wear due to age or usage does not constitute a defect and therefore does not constitute any warranty or guarantee rights. See also **chapter 9 „Information on handling consumables; service life“**.

The guarantee is also **not** granted if

- the product has not been properly used and maintained in accordance with the instructions for use.
- there is damage due to external influences such as water.
- there is damage due to intentional or deliberate damage, negligence or carelessness.
- the damage was caused by improper transport or by a fall.
- the serial number on the product has been changed, removed or made illegible, or the warranty seal has been broken.
- unauthorized persons have made repairs, adjustments or modifications to the product.

## 11 | Disposal & scrapping of old devices



### Caution

This chapter is based on the requirements of the ElektroG in Germany. In other countries, the applicable disposal regulations of the respective country must be observed.

#### Disposal of electronic devices

The SaHoMa®-II control unit and the SaHoMa®-II power cord unit fall within the scope of the law on the marketing, return and environmentally sound disposal of electrical and electronic equipment (Electrical and Electronic Equipment Act - ElektroG) and are classified in category 5 (small appliances).

The „crossed-out wheeled garbage can“ on the SaHoMa®-II control unit and the SaHoMa®-II power cord indicates that old devices must not be disposed of with household waste, such as the residual waste garbage can or the yellow garbage can, but must be collected separately from unsorted municipal waste.



Proper disposal serves to protect the environment and prevents possible harmful effects on humans and the environment that could result from improper handling of the devices at the end of their service life. For proper disposal, the old devices must therefore be handed in for treatment, raw material recovery and recycling at the established municipal collection points or recycling centers or to us as the manufacturer. As a consumer, you are obliged to do this.

In return, we are obligated as a manufacturer to take back waste electronic equipment. We take over the free, professional treatment, recycling and disposal for you according to the legal regulations.

#### Removal of batteries and lamps

If the products contain batteries, accumulators or lamps that can be removed from the old device without destroying it, these must be removed before disposal and disposed of separately as batteries or lamps. The SaHoMa®-II control unit contains a lithium polymer battery which is permanently installed and therefore cannot be removed from the old device.

#### Options for returning old devices for consumers

You can return or collect old devices free of charge within the framework of the possibilities for returning or collecting old devices set up and available by public waste disposal authorities, so that proper disposal of old devices is ensured. In addition, the return is also possible with distributors under certain conditions. If you purchase a new device of the same type, we will gladly dispose of the old device professionally for you (1:1 take-back). Independently of this, there is the possibility of returning the old device to us free of charge. The prerequisite for this is that the external dimensions do not exceed 25 centimeters and the return is limited to three old devices per type of device (0:1 take-back).

#### Data protection

We would like to point out that you are responsible for deleting personal data on the old devices to be disposed of.

#### WEEE registration number

Under the registration number DE 309 971 81 we are registered with stiftung elektro-altgeräte register, Nordostpark 72, 90411 Nürnberg, Germany, as a producer of electronic equipment.

#### Collection and recovery rates

According to the WEEE Directive, EU member states are obliged to collect data on waste electrical and electronic equipment and to transmit this data to the European Commission. You can find more information on this on the BMUV website.



### Note

- The old device that has been handed in cannot be returned to you after it has been handed in.
- There will be no refund of the purchase price or the residual value.
- The old device is recycled according to the requirements of ElektroG
- All other components can be disposed of with household waste in accordance with the Waste Catalogue Ordinance (AVV).

### Medication list

Please use this list of medications to record which medication your horse needs, how often and in what quantity. The entry of the date gives you a history of all medications used. You can use the last column for your own notes on the respective medication.

Date	Medication	Amount / Dose	Notes / Other

Date	Medication	Amount / Dose	Notes / Other



Notes:

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