







Inhalation sets for the treatment of respiratory diseases in dogs, cats and small pets





## **Instructions for Use**

### Manufacturer:

NEBU-TEC International med. Produkte Eike Kern GmbH Kreuzfeldring 17 D - 63820 Elsenfeld

+49 (0) 6022 - 610 62 -0		
+49 (0) 6022 - 610 62 -99		
info@nebu-tec.de		
www.nebu-tec.de		
shop.nebu-tec-shop.de		

### **Description:**

 $M\text{-}neb^{\circledast}$  vet mesh nebulizer HM-300 in combination with

- SaDoMa<sup>®</sup>-II inhalation mask (for large dogs)
- M-neb<sup>®</sup> vet inhalation mask or inhalation box (for small dogs, cats and small pets)

Made in Germany.

### **Safety Instructions:**

Any handling of the device requires precise knowledge and observance of these instructions for use. Reading the short instructions, which are also available, does not replace precise knowledge and observance of these instructions for use. Liability for the safe functioning of the device is transferred to the operator in the event of external intervention or handling that does not correspond to the intended use.

## Advice

Chapters, to which you should pay special attention have been marked for you in the table of contents with the following symbol:



### Intended Use:

The M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit is used in combination with the SaDoMa<sup>®</sup>-II inhalation mask, the M-neb<sup>®</sup> vet inhalation mask or the M-neb<sup>®</sup> vet inhalation box to apply various suitable inhalation solutions directly into the respiratory system of dogs, cats and small pets.

## Table of Contents

	1	Components of inhalation sets for dogs, cats and small pets		
	1.1.	M-neb® vet starter kit		
	1.2.	Add-on for large dogs		
	1.3.	Add-on for small dogs, cats and small pets5		
	2	Getting started with the M-neb vet starter kit6		
	2.1.	Using the M-neb <sup>®</sup> vet mesh nebulization unit with the lid fix for mesh nebulization units		
X	2.2.	Filling the M-neb $^{\scriptscriptstyle (\!\!\!\!\!\!\!\!\!\!^{\scriptscriptstyle (\!$		
	2.3.	Connecting the M-neb <sup>®</sup> vet mesh nebulization unit to the M-neb <sup>®</sup> vet control unit11		
	2.4.	Starting the inhalation12		
X	2.5.	Changing the operation modes13		
	2.6.	Ending the inhalation14		
	2.7.	Charging the M-neb <sup>®</sup> vet control unit15		
	2.8.	Diode displays of the M-neb <sup>®</sup> vet control unit18		
	3	Use of the M-neb vet starter kit with the SaDoMa-II inhalation mask for large dogs		
	4	Use of the M-neb vet starter kit with the M-neb vet inhalation mask or inhalation box for small dogs, cats and small pets		
	5	Cleaning the inhalation sets for dogs, cats and small pets		
	5.1.	Cleaning the M-neb $^{\scriptscriptstyle (\! \! R)}$ vet control unit and the USB connection cable25		
X	5.2.	Cleaning the M-neb <sup>®</sup> vet mesh nebulization unit26		
	5.3.	Cleaning the SaDoMa®-II inhalation mask30		
	5.4.	Cleaning the M-neb $^{\scriptscriptstyle (\! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$		
	5.5.	Cleaning the M-neb <sup>®</sup> vet inhalation box32		

6	Important information & self-help	
6.1.	Frequently Asked Questions (FAQ)	
6.2.	Troubleshooting	×
7	Technical data	
7.1.	Technical data of the M-neb <sup>®</sup> vet starter kit36	
7.2.	Aerosol delivery rate and aerosol spectrum37	
7.3.	Operating conditions	
7.4.	Transport and storing conditions	
8	Service & Repair	
9	Information on handling consumables; lifespan40	X
10	Manufacturer's Guarantee 41	x
11	Accessories and ordering information43	

## Components of inhalation sets for dogs, cats and small pets

Please make sure that all components of the respective set are present and familiarize yourself with the components, connections and buttons before the first use.

## 1.1. M-neb<sup>®</sup> vet starter kit

The M-neb® vet mesh nebulizer HM-300 starter kit serves as a basis and can be extended by

- the SaDoMa<sup>®</sup>-II inhalation mask for large dogs and / or
- the M-neb<sup>®</sup> vet inhalation mask or box for small dogs, cats and small pets.



The M-neb® vet mesh nebulizer HM-300 starter kit (204 000 01) consists of

1	M-neb <sup>®</sup> vet mesh nebulizer HM-300 control unit	1 рс.
2	M-neb <sup>®</sup> vet mesh nebulization unit HM-300	2 pcs.
3	Lid fix for mesh nebulization units	1 рс.
4	M-neb <sup>®</sup> vet USB connection cable HM-300	1 рс.
5	M-neb® vet power cord HM-300	1 рс.
6	Care and basics set	1 рс.



### Components of the M-neb® vet mesh nebulization unit HM-300

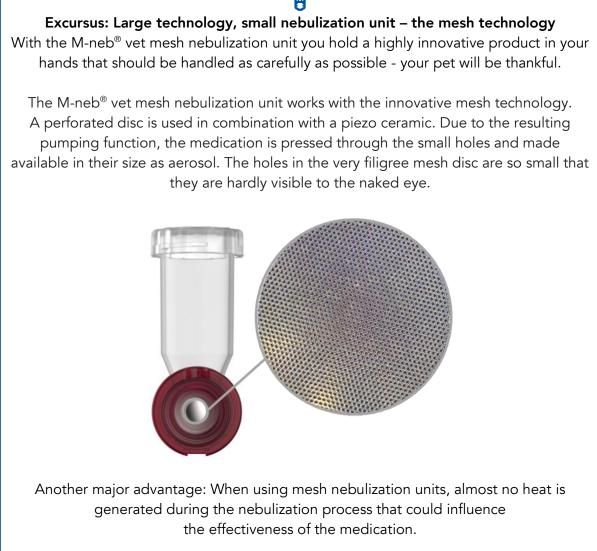
- Closing lid
- 8 Medication chamber
- 9 Connector
- Connector for USB connection cable



## Connections and indicators of the M-neb® vet mesh nebulizer HM-300 control unit

- Connector for the M-neb<sup>®</sup> vet USB connection cable
- 12 On/Off button
- Connector for the M-neb<sup>®</sup> vet power cord
- 14 Battery status indicator
- (5) Operation mode status indicator

## $\bigcirc$



## 1.2. Add-on for large dogs

For the inhalation therapy of large dogs, the M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit is used in combination with the SaDoMa<sup>®</sup>-II inhalation mask for dogs.



This set contains in addition to the M-neb® vet mesh nebulizer HM-300 starter kit:

1	SaDoMa <sup>®</sup> -II inhalation mask (housing)	1 рс.
2	SaDoMa <sup>®</sup> -II sealing ring with protective cover, $ angle$ 40 mm	1 pc.
3	SaDoMa <sup>®</sup> -II fastening strap	1 pc.

### 1.3. Add-on for small dogs, cats and small pets

For the inhalation therapy of small dogs, cats and small pets, the M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit is used in combination with the M-neb<sup>®</sup> vet inhalation mask or inhalation box.



This set contains in addition to the M-neb® vet mesh nebulizer HM-300 starter kit:

1M-neb® vet inhalation box1 pc.2M-neb® vet inhalation mask1 pc.



# **2** Getting started with the M-neb vet starter kit

Please follow the steps described below before the first and every further use of the M-neb $^{\mbox{\tiny B}}$  vet starter kit.

## 2.1. Using the M-neb<sup>®</sup> vet 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 M-neb<sup>®</sup> vet 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 pet.

## The use of the lid fix for mesh nebulization units is therefore <u>strongly</u> recommended by the manufacturer!

The lid fix for mesh nebulization units is an additional article which is included in every inhalation set. It can of course also be purchased separately.

To attach the lid fix for mesh nebulization units, first take the M-neb<sup>®</sup> vet mesh nebulization unit and open the lid by turning it 80° **counterclockwise** and lift it upwards.



Now attach the ring of the lid fix for mesh nebulization units to the medication chamber of the M-neb<sup>®</sup> vet mesh nebulization unit. Therefore, stretch the ring of the lid fix and push it down over the medication chamber of the M-neb<sup>®</sup> vet mesh nebulization unit.



Then place the lid on the M-neb $^{\mbox{\tiny @}}$  vet mesh nebulization unit and close it with an 80° <u>clockwise</u> turn.



Now put the lid fix for mesh nebulization units over the lid of the M-neb<sup>®</sup> vet 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.



### Advice

When changing the M-neb<sup>®</sup> vet 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 - for the sake of the environment.

## 2.2. Filling the M-neb<sup>®</sup> vet mesh nebulization unit

Use the medication and mixing cup supplied in the care and basics set to mix the inhalation solution with the specified amount of isotonic saline solution (0.9 %).

Therefore, fill the inhalation solutions into the mixing cup and shake well so that the inhalation solutions combine. You can **only** skip this step if only isotonic saline solution (0.9 %) is nebulized.

Then open the lid of the mesh nebulization unit by turning it 80° *counterclockwise* and lift it upwards.



Shake the prepared inhalation solution again and fill it in directly or draw it up completely in a syringe. When using a syringe, then fill the inhalation solution into the mesh nebulization unit.

Now place the lid on the mesh nebulization unit and close it with an 80° *clockwise* turn.



## $\underline{\mathbb{N}}$

## Caution!

Only nebulize inhalation solutions that are approved for inhalation with an (ultrasonic) nebulizer or have been tested and approved by us. In case of doubt, please read the technical information of the medication or ask your veterinarian. You will find a list of all the active ingredients we have tested in the download center on our website. It is updated from time to time and should therefore be downloaded regularly or requested from us. Non-observance of these instructions may shorten the lifespan of the mesh nebulization unit!

## Our suggestions

With the purchase of the M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit, you also receive a care and basics set. This should make it easier for you to fill and clean the mesh nebulization units. The medication and mixing cup should be used for mixing and shaking the inhalation solution. The enclosed isotonic saline solution 0.9 % enables you to start directly within the first few days, when you are still waiting for your special inhalation solution, for example.

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

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

The maximum filling quantity of the mesh nebulization unit is **15 ml**.

## 2.3. Connecting the M-neb<sup>®</sup> vet mesh nebulization unit to the M-neb<sup>®</sup> vet control unit

To connect the filled mesh nebulization unit to the control unit, you need the supplied USB connection cable.

1 Attach the female connector of the USB connection cable to the male USB connector of the mesh nebulization unit.

**2** Then insert the male USB port of the USB connection cable into the female connector of the control unit.



## ATTENTION!

The M-neb<sup>®</sup> vet USB connection cable may present a risk of strangulation. Always keep it out of the reach of children or pets!



## Notice for use

For use the M-neb® vet mesh nebulizer HM-300 starter kit with

- the SaDoMa<sup>®</sup>-II inhalation mask for large dogs, please read **<u>chapter 3</u>**.
- the M-neb<sup>®</sup> vet inhalation mask or inhalation box for small dogs, cats or small pets, please read <u>chapter 4</u>.

## 2.4. Starting the inhalation

To start the inhalation, press the on/off button of the control unit for more than one second. The control unit will turn on automatically. As an indication, you will hear a short acoustic signal and the battery status indicator will light up green permanently. The control unit is now ready for operation.



The basic setting of the control unit is the intermittent mode. In intermittent mode, the mesh nebulization unit produces aerosol for one second and then stops producing aerosol for one second (one second active / one second passive). The battery status indicator lights up green permanently. The operation mode status indicator lights up blue during the active phase and goes out for the duration of the passive phase.



When the filled inhalation solution has been completely nebulized, the control unit switches off automatically. You will hear a short acoustic signal, the battery status indicator goes out and the control unit is switched off.

## 2.5. Changing the operation modes

The control unit has two operation modes:

Intermittent mode	$\rightarrow$	One second active and passive in alternation
Continuous mode	$\rightarrow$	Continuous nebulization

The default setting of the control unit is intermittent mode. When the control unit is ready for operation, you can change the operation mode from intermittent to continuous mode.

To do this, briefly press the on/off button on the control unit again. Two successive short beeps will appear and the operation mode status indicator will light up permanently in blue. The control unit is now in continuous mode and is permanently producing aerosol.



If you like to switch back from continuous to intermittent mode, briefly press the on/off button on the control unit again. A short beep will appear and the intermittent mode will start.

## $\underline{\mathbb{A}}$

## Caution!

After using the continuous mode, a rest period of one hour must be observed to prevent excessive heating of the control unit.

## 2.6. Ending the inhalation

To stop or pause the inhalation prematurely and turn off the control unit, press the on/off button on the control unit for more than one second. A short beep will appear, the battery status indicator will turn off and also does the control unit.

Please note that the control unit can also be switched off by the integrated, automatic switchoff, regardless of the set operation mode. It switches off the control unit automatically as soon as the filled inhalation solution has been completely nebulized.

When the maximum running time is reached in the respective mode, the control unit will be switched off automatically. The maximum running times are as follows:

- Two hours in intermittent mode
- 30 minutes in continuous mode

## 2.7. Charging the M-neb® vet control unit

The capacity status of the control unit is indicated by the battery status indicator.

Capacity	Battery status indicator
> 30 %	green
< 30 %	alternating red / green
< 10 %	red

When the capacity reaches 10 %, the lithium-ion battery of the control unit needs to be charged.

To recharge, connect the control unit to the AC adapter and then to the 230 VAC power supply (socket). The charging process of the lithium-ion battery starts.



As long as the lithium-ion battery of the control unit is charging, the battery status indicator flashes green (1 second green / 1 second pause).



Depending on the initial state, the charging time is up to three hours for a charging capacity of 100 %.

When the lithium-ion battery of the control unit is fully charged, the battery status indicator flashes green rapidly (1/10 green / 1 second pause).



Disconnect the power cord from the control unit and the 230 VAC power supply (socket).

## 

To prevent damage to the control unit, use only the original power cord supplied with the control unit. Never use a damaged or defective power cord! In this case, please contact the manufacturer.



## Caution!

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

lcon	Diode	Meaning
	Battery status indicator	<ul> <li>The LED of the battery status indicator lights up</li> <li>green during operation when the capacity of the battery exceeds 30 %.</li> <li>green and red in alternation (1 sec. / 1 sec.), if the capacity of the battery is higher 10 % and less than 30 %.</li> <li>permanently red, when the capacity of the battery is less than 10 %.</li> <li>green at intervals (1 sec. / 1 sec.) when charging is in progress.</li> <li>green at intervals (1/10 sec. / 1 sec.) when charging is completed.</li> </ul>
	Operation mode status indicator	<ul> <li>The operation mode status indicator lights up</li> <li>blue once, when the control unit is in the active phase of the intermittent mode.</li> <li>permanently blue, when the control unit is in continuous mode.</li> </ul>

## 2.8. Diode displays of the M-neb® vet control unit

# B Use of the M-neb vet starter kit with the SaDoMa-II inhalation mask for large dogs

For large dogs with a distinctive profile, the M-neb<sup>®</sup> vet starter kit is used in conjunction with the SaDoMa<sup>®</sup>-II inhalation mask.

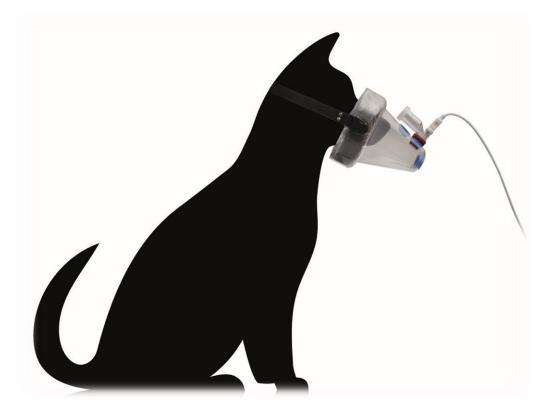
For the first use, connect the fastening strap to the SaDoMa<sup>®</sup>-II inhalation mask. To do this, fix one of the quick-release fasteners in the receptacles on the housing of the inhalation mask.

Make sure that the appropriate sealing ring is inserted into the inhalation mask. The use of a protective cover is recommended to protect the sealing ring during inhalation.



Now, slide the SaDoMa<sup>®</sup>-II inhalation mask over your dog's muzzle and fix the inhalation mask to the head using the fastening strap. Insert the second quick-release fastener into the free receptacle on the housing of the inhalation mask. You can adjust the strap to fit the dog's head using the adjustment feature.

If the inhalation mask sits securely on your dog's snout, you can place the filled mesh nebulization unit on the SaDoMa<sup>®</sup>-II inhalation mask.



To start the inhalation, please read chapter 2.3 "Starting the inhalation".

## Good to know

The Veterinary University of Vienna found that dogs require an average of 5.5 training sessions of approximately 30 minutes with small breaks to tolerate a quiet and relaxed inhalation session with the SaDoMa<sup>®</sup>-II inhalation mask.

During the training, the inhalation mask without sealing ring and fastening strap was put over the dogs' muzzle for a short time. After each successful attempt, the dog was rewarded. After the familiarization effect, the training with the fully assembled inhalation mask was repeated until the dog was able to inhale calmly and relaxed.

# Use of the M-neb vet starter kit with the M-neb vet inhalation mask or inhalation box for small dogs, cats and small pets

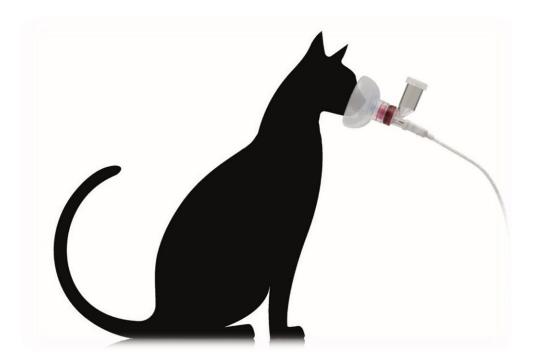
For small dogs, cats and small pets you can choose between using the inhalation mask or the inhalation box, depending on the behavior and character of the pet.

### Using the M-neb<sup>®</sup> vet inhalation mask

To use the inhalation mask, connect the previously filled mesh nebulization unit to the USB connection cable and then to the opening of the M-neb<sup>®</sup> vet inhalation mask.



Then sit down quietly and comfortably and hold your pet on your lap during inhalation. Move the M-neb<sup>®</sup> vet inhalation mask up to your pet's muzzle.



To start the inhalation, please read **<u>chapter 2.3</u>** "Starting the inhalation".

## Advice

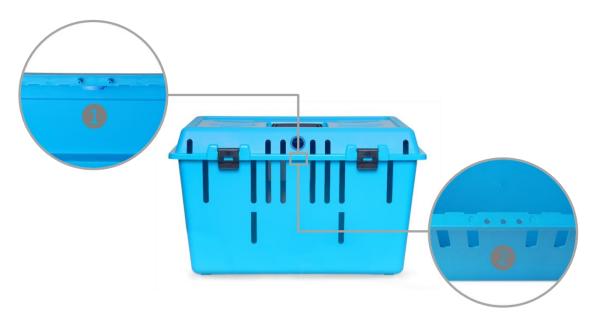
Make sure that the pet inhales the produced aerosol as completely as possible.

## 4 | Use of the M-neb vet starter kit with the M-neb vet inhalation mask or inhalation box for small dogs, cats and small pets

### Using the M-neb<sup>®</sup> vet inhalation box

To use the inhalation box, first open the lid of the M-neb<sup>®</sup> vet inhalation box. Then insert your pet and close the lid.

Make sure that you insert the knobs in the lid 1 into the holes provided in the edge 2 of the M-neb<sup>®</sup> vet inhalation box. This is the only way to close the inhalation box securely.



Now connect the previously filled mesh nebulization unit with the USB connection cable and the blue opening in the lid of the M-neb<sup>®</sup> vet inhalation box.



To start the inhalation, please read chapter 2.3 "Starting the inhalation".



## To prevent the produced aerosol from escaping the box, you can cover the M-neb<sup>®</sup> vet inhalation box additionally (e.g. with a large towel). In any case, please ensure that there is sufficient air supply for the duration of the inhalation session.

## Cleaning the inhalation sets for dogs, cats and small pets

Regular, thorough cleaning and care of the individual parts is important for a long lifespan of the components.

## 5.1. Cleaning the M-neb<sup>®</sup> vet control unit and the USB connection cable

Wipe the M-neb<sup>®</sup> vet control unit and the USB connection cable with a very well wrung cloth. Then dry both completely with a dry cloth or air dry both on an absorbent surface.

## $\wedge$

### ATTENTION!

The M-neb<sup>®</sup> vet control unit is <u>not</u> waterproof! Neither the connector for the power cord nor the one for the USB connection cable may come into contact with water or other liquids! Therefore, always make sure that these connectors are always dry and no water settles there during cleaning!

Please also make sure that the USB connectors of the connection cable do not get wet (danger of short circuit). Never pull the cable directly. This can cause cable breaks and device failures.



### Caution!

- 1. Do not immerse the appliance in water or other liquids.
- 2. Place the device 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 the device when
  - a) the power cord or connector is damaged.
  - b) it does not work properly.
  - c) it has been dropped or damaged.

## 5.2. Cleaning the M-neb® vet mesh nebulization unit

The M-neb<sup>®</sup> vet mesh nebulization unit should be cleaned after each inhalation. Therefore, the M-neb<sup>®</sup> vet starter kit contains a care and basics set. This should make it easier for you to clean the mesh nebulization units. Use the dose bottle with distilled water for cleaning after each inhalation process. In addition, cleaning with the contained concentrated detergent is recommended as soon as the performance of the mesh nebulization unit decreases noticeably.

### Cleaning the M-neb<sup>®</sup> vet mesh nebulization unit after each inhalation process

Open the lid of the M-neb® vet mesh nebulization unit.

Now fill it with approx. 2 ml of distilled water from the dose bottle. Shake the M-neb<sup>®</sup> vet mesh nebulization unit and pour out the distilled water. Fill the M-neb<sup>®</sup> vet mesh nebulization unit again with approx. 1 ml of distilled water. Now start the M-neb<sup>®</sup> vet control unit and switch directly to continuous mode. Wait until the solution has been completely nebulized and then switch off the M-neb<sup>®</sup> vet control unit.

Let the M-neb<sup>®</sup> vet mesh nebulization unit air dry on an absorbent surface. Make sure that no residual liquid can run back onto the membrane.

### ATTENTION!

Please make sure that the USB board of the mesh nebulization unit does not get wet (risk of short circuit)!

The M-neb<sup>®</sup> vet mesh nebulization unit contains small parts that can be swallowed. Therefore always keep them out of the reach of children or pets. If parts are accidentally swallowed, consult a physician immediately!



### Advice

We recommend using a separate M-neb<sup>®</sup> vet mesh nebulization unit per pet and medication to avoid undesirable interactions, cross-contamination or infection.

### Cleaning the M-neb<sup>®</sup> vet mesh nebulization unit when using brine inhalation solutions

Particularly when brine inhalation solutions are used, the M-neb<sup>®</sup> vet mesh nebulization unit may be clogged by salt crystals.



Therefore proceed as follows when cleaning:

- 1. Fill approx. 5 ml of distilled water into the medication chamber of the M-neb<sup>®</sup> vet mesh nebulization unit.
- 2. Set the mesh nebulization unit aside for a few minutes and allow the distilled water to act on the mesh membrane. During this time it dissolves the salt particles.
- 3. Now empty the mesh nebulization unit completely and refill it with approx. 1 ml of distilled water.
- 4. Start the M-neb<sup>®</sup> vet control unit, switch directly into continuous mode and let the distilled water nebulize completely. Then switch off the M-neb<sup>®</sup> vet control unit, if it does not switch off automatically.
- 5. Let the M-neb<sup>®</sup> vet mesh nebulization unit air dry on an absorbent surface. Make sure that no residual liquid can run back onto the membrane.



### Advice

Cleaning with concentrated detergent makes little sense with stubborn salt incrustations. Therefore these should always be removed as described above before using the concentrated detergent.

### Cleaning the M-neb<sup>®</sup> vet mesh nebulization unit with the concentrated detergent

Proceed as follows when cleaning with the concentrated detergent:

- 1. Fill approx. 2-3 ml of distilled water into the medication chamber of the M-neb<sup>®</sup> vet mesh nebulization unit.
- 2. Start the M-neb<sup>®</sup> vet control unit, switch directly into continuous mode and let the distilled water nebulize for one minute. Then switch off the M-neb<sup>®</sup> vet control unit.
- 3. Wait for approx. 3 minutes so that the concentrated detergent can be applied to the mesh membrane of the M-neb<sup>®</sup> vet mesh nebulization unit.
- 4. Let the remaining concentrated detergent nebulize completely in continuous mode.
- 5. Then fill the M-neb<sup>®</sup> vet mesh nebulization unit with approx. 3 ml of distilled water from the dose bottle. Shake the M-neb<sup>®</sup> vet mesh nebulization unit and then pour out the distilled water.
- 6. Finally, let again nebulize 1 ml of distilled water in continuous mode.
- 7. Let the M-neb<sup>®</sup> vet mesh nebulization unit air dry on an absorbent surface. Make sure that no residual liquid can run back onto the membrane.

## $\triangle$

## ATTENTION!

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

## $\wedge$

### Caution!

Only use the concentrated detergent offered by the manufacturer for cleaning purposes.

## ATTENTION!

It is strongly discouraged to clean the front opening of the M-neb<sup>®</sup> vet mesh nebulization unit with an object (paper towel, cotton swab, etc.) or finger. This may cause an irreparably damage of the mesh nebulization unit which is therefore no longer working.

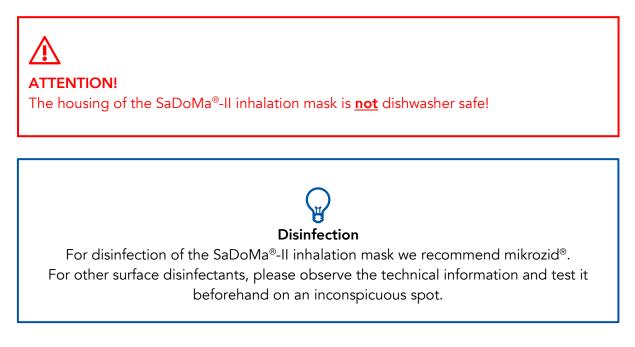


## 5.3. Cleaning the SaDoMa®-II inhalation mask

Remove all accessories for cleaning the SaDoMa®-II inhalation mask.



You can clean the housing of the SaDoMa<sup>®</sup>-II inhalation mask in lukewarm water and with a gentle detergent. Then completely dry the SaDoMa<sup>®</sup>-II inhalation mask or let it air dry on an absorbent surface.



Coarse dirt on the fastening strap can be removed with warm water and a brush.

For hygienic reasons, we recommend changing the protective cover around the sealing ring per pet and here after approx. five days, depending on the degree of contamination.

If the sealing ring is also dirty, you can wipe it off with a damp cloth.

## 5.4. Cleaning the M-neb<sup>®</sup> vet inhalation mask

Remove all accessories for cleaning the M-neb® vet inhalation mask.



You can clean the M-neb<sup>®</sup> vet inhalation mask in lukewarm water and with a gentle detergent. Then completely dry the M-neb<sup>®</sup> vet inhalation mask or let it air dry on an absorbent surface.

ATTENTION! The M-neb® vet inhalation mask is <u>not</u> dishwasher safe!



For disinfection of the M-neb<sup>®</sup> vet inhalation mask we recommend mikrozid<sup>®</sup>. For other surface disinfectants, please observe the technical information and test it beforehand on an inconspicuous spot.

### 5.5. Cleaning the M-neb<sup>®</sup> vet inhalation box

Remove all accessories for cleaning the M-neb® vet inhalation box.



You can clean the M-neb<sup>®</sup> vet inhalation box in lukewarm water with a gentle detergent or spray it with the garden hose. Then completely dry the M-neb<sup>®</sup> vet inhalation box or let it air dry on an absorbent surface.



### 6 Important information & self-help

### 6.1. Frequently Asked Questions (FAQ)

### What disease does my pet have?

For a diagnosis, please consult your trusted veterinarian. Only administer the inhalation solutions prescribed by your veterinarian. Please always follow the instructions of your veterinarian.

### Which inhalation solutions can be nebulized with the M-neb® vet starter kit?

We ask you to only nebulize inhalation solutions that are approved for inhalation with a (ultrasonic) nebulizer or have been tested and approved by us. In case of doubt, please read the technical information of the medication or ask your veterinarian. You will find a list of all the active ingredients we have tested in the download center on our website. The list is updated from time to time and should therefore be downloaded regularly or requested from us. If you have any questions about nebulizable medications, please do not hesitate to contact us.

### Can I use inhalation solutions I have prepared by myself?

We recommend the inhalation with inhalation solutions that have been produced explicitly for this purpose and ask you to use them only. The use of self-made inhalation solutions is at your own risk, as ingredients and mixing ratios are not known and may result in considerable damage to the mesh nebulization unit.

### Where can I find information about NEBU-TEC and the products and where can I buy the products and accessories?

Our service staff will be happy to assist you by phone at +49 (0) 6022 - 610 62 -0 or by e-mail to info@nebu-tec.de Please visit our website http://www.nebu-tec.de. All articles mentioned in these instructions for use can be ordered by phone at +49 (0) 6022 - 610 62 -0 or via our online shop http://shop.nebu-tec-shop.de.

### What should I do if I have a complaint or need a repair?

All information on service & repair can be found in <u>chapter 8 "Service & Repair"</u>. For repairs, please use our repair form, which you can request by e-mail or download from our download center on the website.

### 6.2. Troubleshooting

If you experience problems while using the M-neb® vet mesh nebulizer HM-300 control unit, the following table can help you to find the causes and eliminate them.

Error	Possible causes / solutions		
Extended inhalation times with less or no aerosol output	<ul> <li>Causes:</li> <li>Dirty or clogged membrane of the M-neb® vet mesh nebulization unit</li> <li>Mechanically damaged membrane of the M-neb® vet mesh nebulization unit (e.g. in case of improper handling)</li> <li>The end of the lifespan of the M-neb® vet mesh nebulization unit has been reached or exceeded</li> <li>The room or ambient temperature is below 10° C</li> <li>Solutions:</li> <li>Cleaning the M-neb® vet mesh nebulization unit (chapter 5.2)</li> <li>Replacing the M-neb® vet mesh nebulization unit (chapter 9)</li> <li>Please wait approx. 30 minutes until the system has adjusted to room temperature and only fill in and nebulize inhalation solutions with room temperature</li> </ul>		
Unintentional switch off of the M-neb® vet control unit during inhalation despite residual liquid	<ul> <li>Causes:</li> <li>Air bubble on the membrane of the M-neb<sup>®</sup> vet mesh nebulization unit</li> <li>Use of a foaming medication suggesting a filling in the presence of foam residues</li> <li>Solutions:</li> <li>Slight tapping of the M-neb<sup>®</sup> vet mesh nebulization unit to loosen the air bubble; restart M-neb<sup>®</sup> vet control unit if necessary</li> <li>Proper dilution of foaming medications in accordance with the medication list; nebulization under constant observation with a manual switch off of the M-neb<sup>®</sup> vet control unit</li> </ul>		

Error	Possible causes / solutions		
No charging of the M-neb® vet control unit possible	<ul> <li>Causes:</li> <li>Defective M-neb® vet power cord or defective connector of the M-neb® vet power cord</li> <li>No voltage at the used power supply (socket)</li> <li>Defective connector on the M-neb® vet control unit</li> </ul> Solutions: <ul> <li>Using another power supply (socket)</li> <li>Checking the connector on the M-neb® vet control unit</li> <li>Otherwise send in for inspection/repair</li> </ul>		



### Important advice

In all other cases or in case of uncertainty, please contact our service staff by phone: +49 (0) 6022 - 610 62 -0.

Please note that in the case of a repair, you have to complete the repair form and send it to us with all necessary components.

## Technical data

### 7.1. Technical data of the M-neb® vet starter kit

### Technical data of the M-neb® vet control unit

Dimensions (L x W x H)	85 x 54 x 18 mm
Weight	75 g
Types of power supply	Battery operation
Power cord	110 - 230 VDC / 0,5 A
Used battery	Lithium-Ion battery / 3,7 V / 1200 mAh
Electrical protection class	II Туре В

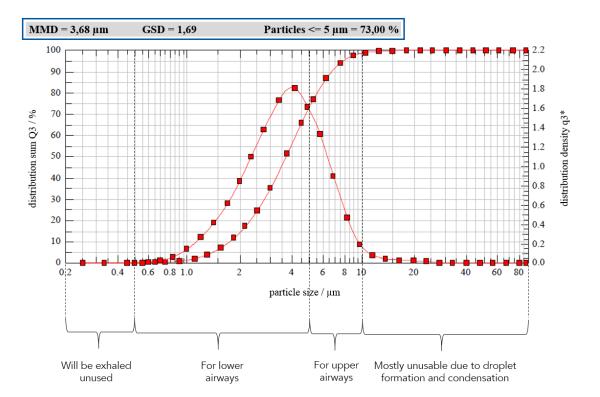
### Technical data of the M-neb® vet mesh nebulization unit

Dimensions (L x W x H)	55 x 30 x 75 mm
Weight	25 g
Maximum filling quantity	15 ml
Output	~ 0,4 ml / minute
Particle size	< 4 µm MMD
Particles ≤ 5 µm	~ 73 %

### 7.2. Aerosol delivery rate and aerosol spectrum

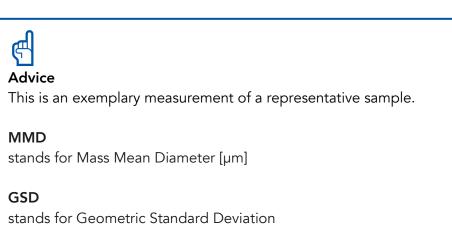
When using the M-neb<sup>®</sup> vet control unit in combination with the M-neb<sup>®</sup> vet mesh nebulization unit, the average **aerosol delivery rate** in continuous mode is 0.4 ml isotonic saline solution 0.9 % per minute.

When using the M-neb<sup>®</sup> vet control unit in conjunction with the M-neb<sup>®</sup> vet mesh nebulization unit, the **aerosol spectrum** is determined as follows:



The average particle size is 3.68  $\mu m$  MMD\* with a GSD of 1.69. 73 % of the particles are  $\leq 5 \ \mu m.$ 

\* Determination using the laser diffractometer HELOS VARIO KF; test medium isotonic saline solution 0.9 %.



### 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 +40° C; 20° C optimal
Relative air humidity	25 % to 75 %
Air pressure	450 hPa to 1100 hPa

Please note that inhalation solutions must also be at room temperature. If the ambient temperature is too low (<  $10^{\circ}$  C) or too high (>  $40^{\circ}$  C), the nebulizer performance and aerosol spectrum of the M-neb<sup>®</sup> vet mesh nebulizer HM-300 can no longer be guaranteed.

### 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 +50° C
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.

## Service & Repair

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

Your satisfaction is important to us. For a fast processing of your repair we ask you to observe some important instructions.

If one of your ordered products does not work properly or is damaged externally, we ask you to first read **<u>chapter 6.2 "Troubleshooting"</u>** to see if you can fix it by yourself.

If it is not possible to solve the problem, we recommend you to contact us as soon as possible by phone. We will then try to find a solution for the problem together with you by phone.



Advice

Our service staff will be happy to assist you during our opening hours (Mon - Thu from 8 am to 5 pm, Fr from 8 am to 1 pm) by phone at +49 (0) 6022 - 610 62 -0 or via email to info@nebu-tec.de.

If a return of the article is unavoidable, please use our repair form, which you can request by e-mail or download in our download center on the website. Here you will also find information on how to proceed.



You can't interrupt the inhalation therapy of your pet? Ask us for a replacement device during the repair time.

## Information on handling consumables; lifespan

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 15 ml isotonic saline solution 0.9 %**.



### Intended use

= one inhalation session per day with 15 ml isotonic saline solution 0.9 %

### M-neb® vet mesh nebulization unit

When used as intended, the typical lifespan of the M-neb® vet mesh nebulization unit is 30 days.

### SaDoMa<sup>®</sup>-II sealing ring

When used as intended, the typical lifespan of the SaDoMa®-II sealing ring is 90 days.

### SaDoMa®-II protective cover

When used as intended, the typical lifespan of the SaDoMa®-II protective cover is 5 days.

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. When using medications, please note the list of all active ingredients tested by us, which you can download from the download center on our website or request from us at any time.



### 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 time.

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:

- M-neb<sup>®</sup> vet control unit, power cord and USB connection cable
- SaDoMa<sup>®</sup>-II housing and fastening strap
- M-neb<sup>®</sup> vet inhalation mask and inhalation box

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

• Lithium-Ion battery of the M-neb® vet control unit

**Not covered** by this guarantee are:

- Consumables, which means
  - M-neb® vet mesh nebulization unit, lid fix for mesh nebulization units
  - Care and basics set and its components
  - $\circ \quad {\sf SaDoMa^{@}-II \ sealing \ rings, \ protective \ cover}$

### $\wedge$

### 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; lifespan"**.

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.
- unauthorized persons have made repairs, adjustments or modifications to the product.

# Accessories and ordering information

The **M-neb® vet mesh nebulizer HM-300 starter kit** (204 000 01 | **249,00 €** | 209,24 € net) contains the following items, which are also available separately:

ArtNo.	Qty.	Illustration	Description	Price gross net
204 002 00	1x	Vet Vet De Co	M-neb® vet mesh nebulizer control unit	<b>120,00 €</b> 100,84 €
204 002 02	1x		M-neb® vet power cord	<b>39,90 €</b> 33,53 €
204 002 08	2x		M-neb <sup>®</sup> vet mesh nebulization unit	<b>á 35,00 €</b> 29,41 €
202 000 11	1x		Lid fix for mesh nebulization units	<b>3,90 €</b> 3,28 €
204 002 09	1x		M-neb <sup>®</sup> vet USB connection cable	<b>15,90 €</b> 13,36 €
202 000 01	1x		<ul> <li>Care and basics set contains:</li> <li>Dose bottle with distilled water (250 ml)</li> <li>Concentrated detergent for mesh nebulization units (5 ml)</li> <li>Medication and mixing cup with scale (20 ml)</li> <li>Isotonic saline solution 0.9 % (4 x 5 ml)</li> </ul>	<b>13,60 €</b> 11,43 €

The **SaDoMa®-II inhalation set DM-200** (DM-2000 | **359,00** € | *301,68* € *net*) contains in addition to the M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit:

ArtNo.	Qty.	Illustration	Description	Price gross net
DM-200	1x	00	SaDoMa <sup>®</sup> -II inhalation mask incl. accessories contains: • SaDoMa <sup>®</sup> -II housing • SaDoMa <sup>®</sup> -II sealing ring with protective cover, ø 40 mm • SaDoMa <sup>®</sup> -II fastening strap	<b>115,00 €</b> 96,64 €

All items of the SaDoMa®-II inhalation set are also available separately:

ArtNo.	Qty.	Illustration	Description	Price gross net
DM-200-1	1x	00	SaDoMa <sup>®</sup> -II housing excl. accessories	<b>89,00 €</b> 74,79 €
DM-201	1 pu		SaDoMa <sup>®</sup> -II protective cover for sealing rings packaging unit (pu): 10 pieces	<b>4,90 €</b> 4,12 €
DM-202	1x		SaDoMa <sup>®</sup> -II fastening strap	<b>16,00 €</b> 13,45 €
DM-203	1x		SaDoMa <sup>®</sup> -II sealing ring with protective cover, ø 40 mm <sup>For regular dog snouts</sup>	<b>12,00 €</b> 10,08 €
DM-204	1x		SaDoMa <sup>®</sup> -II sealing ring with protective cover, Ø 50 mm Für smaller dog snouts	<b>12,00 €</b> 10,08 €

The **M-neb® vet inhalation set HM-300** (204 002 07 | **345,00**  $\in$  | 289,92  $\in$  net) contains in addition to the M-neb<sup>®</sup> vet mesh nebulizer HM-300 starter kit the following items, which are also available separately:

ArtNo.	Qty.	Illustration	Description	Price gross net
204 002 05	1x		M-neb <sup>®</sup> vet inhalations mask	<b>39,00 €</b> 32,77 €
204 002 06	1x		M-neb <sup>®</sup> vet inhalation box	<b>59,00 €</b> 49,58 €

### Additional accessories for inhalation, cleaning and care

ArtNo.	Qty.	Illustration	Description	Price gross net
202 000 01	1x		<ul> <li>Care and basics set contains:</li> <li>Dose bottle with distilled water (250 ml)</li> <li>Concentrated detergent for mesh nebulization units (5 ml)</li> <li>Medication and mixing cup with scale (20 ml)</li> <li>Isotonic saline solution 0,9 % (4 x 5 ml)</li> </ul>	<b>13,60 €</b> 11,43 €
202 000 02	1x		Medication and mixing cup with scale (20 ml)	<b>0,90 €</b> 0,76 €
202 000 05	1x		Dose bottle for 250 ml (unfilled)	<b>3,00 €</b> 2,52 €

ArtNo.	Qty.	Illustration	Description	Price gross net
202 000 06	1x		Concentrated detergent for mesh nebulization units (5 ml)	<b>4,90 €</b> 4,12 €
202 000 07	1x	Austral Professional Australian Professional	Concentrated detergent for mesh nebulization units (50 ml)	<b>29,90 €</b> 25,13 €
202 000 08	1x		NEBU-TEC Dead Sea Brine Available in two concentrations; 1 liter Concentration: 1 %	<b>11,50 €</b> 9,66 €
202 000 09	1x		Concentration: 2,5 %	<b>11,50 €</b> 9,66 €

All stated prices are inclusive (gross) or plus (net) VAT. Shipping costs are not included in both cases and may vary according to shipping method and destination.

All sets and accessories are available via our online shop at <u>shop.nebu-tec-shop.de</u> or viaphone at +49 (0) 6022-61 06 2 -0. If you have any questions, please do not hesitate to contact us.

### Notes

#### **Medication list**

Please use this list of medications to record which medication your pet 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



### NEBU-TEC International med. Produkte Eike Kern GmbH

Kreuzfeldring 17 D - 63820 Elsenfeld

Phone: +49 (0) 6022 - 610 62 -0 Fax: +49 (0) 6022 - 610 62 -99 info@nebu-tec.de

www.nebu-tec.de shop.nebu-tec-shop.de

