



## Portable Aerosol Compressor Nebuliser NEB 200 Microlife EN

- Piston compressor
- Power lead
- ON/OFF Switch
- Air filter compartment
- Nebuliser
  - a: Vaporiser head
- Air hose
- Mouthpiece
- Adult face mask
- Child face mask
- Replacing air filter
- Assembling nebuliser kit
- Nose piece
- Air filter


Dear Customer,


This nebuliser is an aerosol therapy system suitable for domestic use. This device is used for the nebulisation of liquids and liquid medication (aerosols) and for the treatment of the upper and lower respiratory tract.


If you have any questions, problems or want to order spare parts please contact your local Microlife-Customer Service. Your dealer or pharmacy will be able to give you the address of the Microlife dealer in your country. Alternatively, visit the internet at www.microlife.com where you will find a wealth of invaluable information on our products.


Stay healthy – Microlife AG!

### 1. Explanation of symbols


 Electronic devices must be disposed of in accordance with the locally applicable regulations, not with domestic waste.


 Read the instructions carefully before using this device.

 Type BF applied part

 Class II equipment

 Serial number

 Reference number

 Manufacturer

ON


OFF


**IP21** Protection against solid foreign objects and harmful effects due to the ingress of water

**CE0123** CE Marking of Conformity

### 2. Important Safety Instructions






- Follow instructions for use. This document provides important product operation and safety information regarding this device. Please read this document thoroughly before using the device and keep for future reference.
- This device may only be used for the purposes described in these instructions. The manufacturer cannot be held liable for damage caused by incorrect application.
- Retain instructions in a safe place for future reference.
- Do not operate the unit in presence of any anesthetic mixture inflammable with oxygen or nitrogen protoxide.
- This device is not suitable for anaesthesia and lung ventilation.
- This device should only be used with original accessories as shown in these instructions.
- Do not use this device if you think it is damaged or notice anything unusual.
- Never open this device.
- This device comprises sensitive components and must be treated with caution. Observe the storage and operating conditions described in the « Technical Specifications» section.
- Protect it from:
  - water and moisture
  - extreme temperatures
  - impact and dropping
  - contamination and dust
  - direct sunlight
  - heat and cold
- Comply with the safety regulations concerning the electrical devices and in particular:
  - Never touch the device with wet or moist hands.
  - Place the device on a stable and horizontal surface during its operation.
  - Do not pull the power cord or the device itself to unplug it from the power socket.
  - The power plug is a separate element from the grid power; keep the plug accessible when the device is in use.
- Before plugging in the device, make sure that the electrical rating, shown on the rating plate on the bottom of the unit, corresponds to the mains rating.
- In case the power plug provided with the device does not fit your wall socket, contact qualified personnel for a replacement plug with that of a suitable one. In general, the use of adapters, simple or multiple, and/or extension cables is not recommended. If their use is indispensable, it is necessary to use types complying with safety regulations, paying attention that they do not exceed the maximum power limits, indicated on adapters and extension cables.
- Do not leave the unit plugged in when not in use; unplug the device from the wall socket when it is not in operation.
- The installation must be carried out according to the instructions of the manufacturer. An improper installation can cause damage to persons, animals or objects, for which the manufacturer cannot be held responsible.
- Do not replace the power lead of this device. In case of a power lead damage, contact a technical service center authorized by the manufacturer for its replacement.
- The power supply cord should always be fully unwound in order to prevent dangerous overheating.
- Before performing any maintenance or cleaning operation, turn off the device and disconnect the plug from the main supply.
- Only use the medication prescribed for you by your doctor and follow your doctor's instructions with regard to dosage, duration and frequency of the therapy.
- Depending on the pathology, only use the treatment that is recommended by your doctor.
- Only use the nose piece if expressly indicated by your doctor, paying special attention NEVER to introduce the bifurcations into the nose, but only positioning them as close as possible.
- Check in the medicine instruction leaflet for possible contraindications for use with common aerosol therapy systems.
- Do not position the equipment so that it is difficult to operate the disconnection device.
- For greater hygienic safety, do not use the same accessories for more than one person.
- Never bend the nebuliser over 60°.
- Do not use this device close to strong electromagnetic fields such as mobile telephones or radio installations. Keep a minimum distance of 3.3 m from such devices when using this device.





 Ensure that children do not use this device unsupervised; some parts are small enough to be swallowed. Be aware of the risk of strangulation in case this device is supplied with cables or tubes.


 Use of this device is not intended as a substitute for a consultation with your doctor.

### 3. Preparation and Usage of this Device


Prior to using the device for the first time, we recommend cleaning it as described in the section « Cleaning and Disinfecting».

- Assemble the nebuliser kit . Ensure that all parts are complete.
- Fill the nebuliser with the inhalation solution as per your doctor's instructions. Ensure that you do not exceed the maximum level.
- Connect the nebuliser with the air hose  to the compressor  and plug the power lead  into the socket (230V 50 Hz AC).
- To start the treatment, set ON/OFF switch  into the «1» position.

- The mouthpiece gives you a better drug delivery to the lungs.
  - Choose between adult  or child face mask  and make sure that it encloses the mouth and nose area completely.
  - Use all accessories including the nose piece  as prescribed, by your doctor.
- During inhalation, sit upright and relaxed at a table and not in an armchair, in order to avoid compressing your respiratory airways and impairing the treatment effectiveness. **Do not lie down while inhaling.** Stop inhalation if you feel unwell.
  - After completing the inhalation period recommended by your doctor, switch the ON/OFF switch  to position «0» to turn off the device and unplug it from the socket.
  - Empty the remaining medication from the nebuliser and clean the device as described in the section « Cleaning and Disinfecting».


 **This device was designed for intermittent use of 30 min. On / 30 min. Off.** Switch off the device after 30 min. use and wait for another 30 min. before you resume treatment.

 The device requires no calibration.

 No modification to the device is permitted.

### 4. Cleaning and Disinfecting




Thoroughly clean all components to remove medication residuals and possible impurities after each treatment. Use a soft and dry cloth with non-abrasive cleaners to clean the compressor.


 Make sure that the internal parts of the device are not in contact with liquids and that the power plug is disconnected.


**Cleaning and disinfecting of the accessories**

Follow carefully the cleaning and disinfecting instructions of the accessories as they are very important to the performance of the device and success of the therapy.

**Before and after each treatment**

Disassemble the nebuliser  by turning the top counter-clockwise and remove the medicine conduction cone. Wash the components of the disassembled nebuliser, the mouthpiece  and the nose piece  by using tap water; dip in boiling water for 5 minutes. Reassemble the nebuliser components and connect it to the air hose connector, switch the device on and let it work for 10-15 minutes.

 Wash masks and air tube with warm water.



 Only use cold disinfecting liquids following the manufacturer's instructions.


 Do not boil nor autoclave the air tube and masks.

### 5. Maintenance, Care, and Service


Order all spare parts from your dealer or pharmacist, or contact Microlife-Service (see foreword).


**Replacement of the nebuliser**


Replace the nebuliser  after a long period of inactivity, in cases where it shows deformities, breakage, or when the vaporiser head -a is obstructed by dry medicine, dust, etc. We recommend to replace the nebuliser after a period between 6 months and 1 year depending on the usage.

 Only use original nebulisers!

**Replacement of the air filter**

In normal conditions of use, the air filter  must be replaced approximately after 500 working hours or after each year. We recommend to periodically check the air filter (10 - 12 treatments) and if the filter shows a grey or brown colour or is wet, replace it. Extract the filter and replace it with a new one.



 Do not try to clean the filter for reusing it.

 The air filter shall not be serviced or maintained while in use with a patient.




 Only use original filters! Do not use the device without filter!

### 6. Malfunctions and Actions to take

**The device cannot be switched on**

- Ensure the power lead  is correctly plugged into the socket.
- Ensure the ON/OFF switch  is in the position «1».
- Make sure that the device has been operating within operating limits indicated in this manual (30 min On / 30 min Off).

**The nebuliser functions poorly or not at all**

- Ensure the air hose  is correctly connected at both ends.
- Ensure the air hose is not squashed, bent, dirty or blocked. If necessary, replace with a new one.
- Ensure the nebuliser  is fully assembled and the colored vaporiser head -a is placed correctly and not obstructed.
- Ensure the required medication has been added.

### 7. Guarantee

This device is covered by a **5 year guarantee** from the date of purchase. The guarantee is valid only on presentation of the guarantee card completed by the dealer (see back) confirming date of purchase or the receipt.


- The guarantee covers only the compressor. The replaceable components like nebuliser, masks, mouthpiece, air hose, and filters are not included.
- Opening or altering the device invalidates the guarantee.
- The guarantee does not cover damage caused by improper handling, accidents or non-compliance with the operating instructions.

### 8. Technical Specifications

<b>Nebulisation rate:</b>	0.4 ml/min. (NaCl 0.9%)
<b>Particle size:</b>	63% < 5 µm 2.6 µm (MMAD)
<b>Max. free air flow:</b>	15 l/min.
<b>Operating air flow:</b>	5.31 l/min.
<b>Acoustic noise level:</b>	52 dBA
<b>Power source:</b>	230V 50 Hz AC
<b>Power lead length:</b>	1.6 m
<b>Nebuliser capacity:</b>	min. 2 ml; max. 8 ml
<b>Residual volume:</b>	0.8 ml
<b>Operating limits:</b>	30 min. On / 30 min. Off
<b>Operating conditions:</b>	10 - 40 °C / 50 - 104 °F 10 - 95 <span> </span> % relative maximum humidity 700 - 1060 hPa Atmospheric pressure
<b>Storage and shipping conditions:</b>	-20 - +60° C / -4 - +140 °F 10 - 95 <span> </span> % relative maximum humidity 700 - 1060 hPa Atmospheric pressure
<b>Weight:</b>	1306 g
<b>Dimensions:</b>	103 x 160 x 140 mm
<b>Included:</b>	Piston compressor, nebuliser, air hose, adult face mask, child face mask, mouthpiece, nose piece, 5 pcs. of air filter, 2 pcs. of elastic bands for masks, carrying bag, instruction manual, guarantee card
<b>IP Class:</b>	IP21
<b>Reference to standards:</b>	EN 13544-1; EN 60601-1; EN 60601-2; EN 60601-1-6; IEC 60601-1-11

**Expected service life:** 1000 hours

This device complies with the requirements of the Medical Device Directive 93/42/EEC. Class II device as regards protection against electric shocks. Nebuliser, mouthpiece and masks are type BF applied parts.

 The technical specifications may change without prior notice.

Date of production: first 8 digits of the serial number of the device. First 4 digits: year / 5th and 6th digit: month / 7th and 8th digit: day of production.