



ACTIVE RESPIRATORY GAS CONDITIONING

After a laryngectomy or tracheotomy, the natural airway changes. One changes from being a mouth/nose breather to become a neck breather. After surgery, breathing is performed through the throat opening, the tracheostoma. Basic functions such as filtering, heating and humidifying the respiratory air are thus lost. However, to prevent the mucous membranes from being unnecessarily irritated by cold, dry and polluted respiratory air, suitable aids must mimic these functions. When these functions are lost, severe irritation of the mucous membranes, increased secretion formation, coughing stimuli, and encrustation occur without aids. To minimise these consequences, it is essential, for example, to inhale regularly and ensure that living areas are kept at a constant air humidity of approx. 55 - 60%.

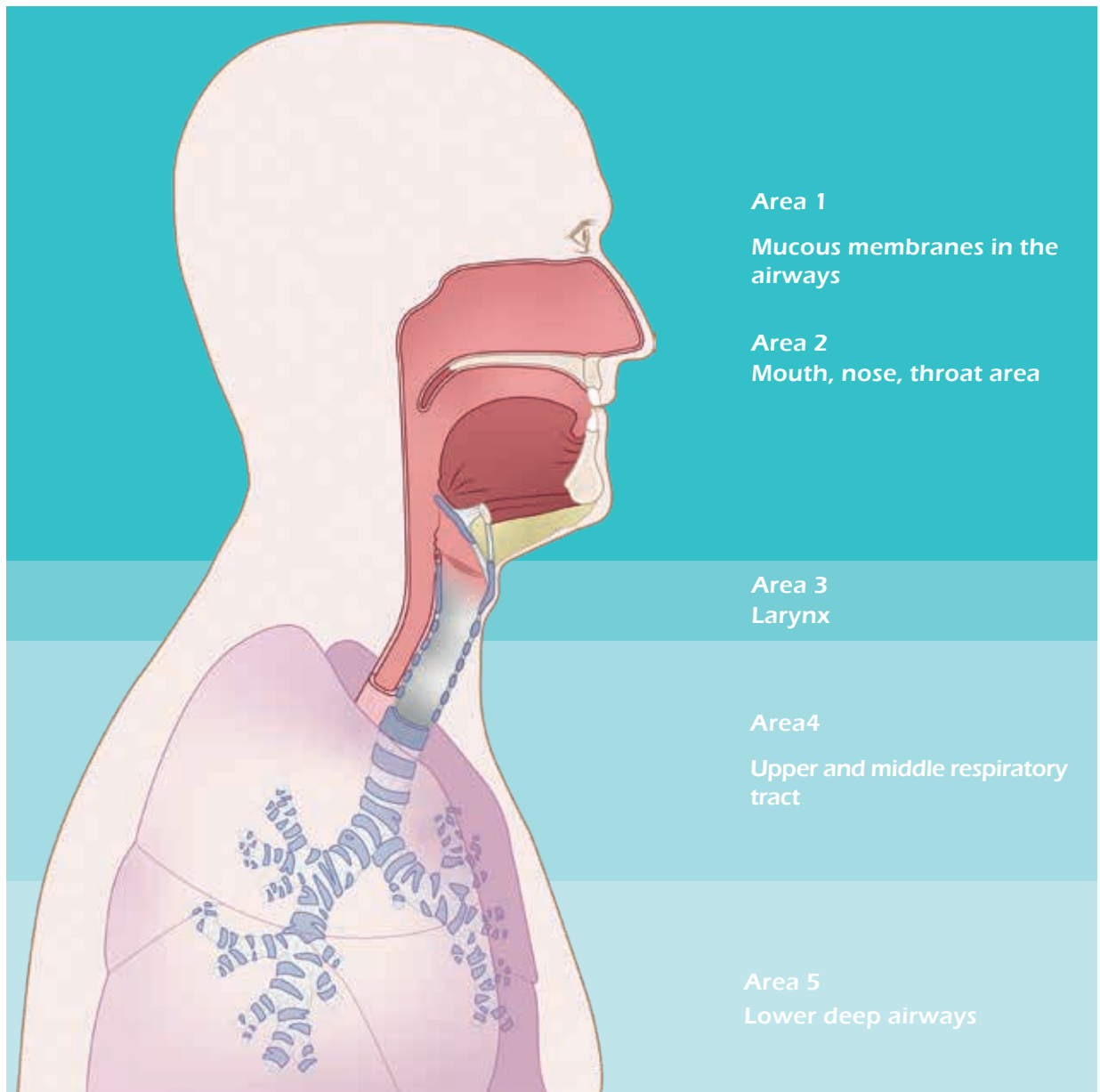
Inhalations of different compositions several times a day can achieve additional humidification and possibly warming of the airways. Medicinal additives in particular can change the consistency of secretions in the airways, prevent encrustation and support easier inhalation. The appropriate composition of inhalant, inhalation duration and intervals should be determined and prescribed by the attending physician on an individual patient basis. Special connection options (mask or 15 mm connector) ensure that inhalation can be performed directly via the tracheostoma and avoid a loss of inhalant into the environment. As different types of devices employ different techniques (compressor-driven, ultrasound-based), it is essential to observe the manufacturer's instructions for the respective devices before putting

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into operation. The objective of respiratory gas conditioning is to emulate the physiologically necessary conditions for the respiratory system. The respiratory air should lie in the range of 36 - 37 °C and 50 - 55 % relative humidity. Par-

ticularly in the winter months, the use of room humidifiers is a proven measure to create better conditions for one's own respiratory system. And by the way, this not only applies to tracheotomised patients, but also to healthy mouth/nose breathers.

AREAS AFFECTED IN INHALATION



NEBUSTEAM®

STEAM INHALER



TECHNICAL DATA

Input voltage	230 V AC, 50 Hz
Output current	0.8 A
Steam tank filling capacity	25 ml
Operating time	≥ 6 minutes
Steam temperature	38–43 °C, ± 1 °C
Dimensions (H x W x D)	212 x 199 x 105 mm (8.35" x 7.83" x 4.13")
Weight	820 g

NEBUSTEAM®

STEAM INHALER



Regular inhalation with warm steam achieves optimal humidification of the airways. This is a pleasant way to prevent irritation of the tracheostoma or to provide relief from breathing difficulties. In addition, inhalation supports effective secretion management.

The NEBUSTEAM® is a steam inhaler with a wide range of inhalation masks (one tracheostoma mask and three face masks in different sizes). It is possible to choose between three inhalation methods: inhalation without additives, with water-soluble inhalants or with essential oils. The handy design makes it convenient and easy to clean, as the NEBUSTEAM® is easy to disassemble into its individual components.

With the help of the variable steam regulator, different amounts of steam can be selected: the lower steam quantity is ideally used for inhalation via the nose, while the increased steam quantity is be used for inhalation via the mouth or the tracheostoma.



SCOPE OF DELIVERY			
1	NEBUSTEAM®	1	Medium-sized face mask
1	Power cable	1	Small face mask
1	Tracheostomy mask	1	Measuring beaker
1	Large face mask	1	Condensate tank
ORDER INFORMATION			REF
NEBUSTEAM®			50500

NEBUFIRST®

INHALER



TECHNICAL DATA	
Input voltage	230 V AC, 50 Hz
Output current	0.8 A
Maximum capacity for medication:	6 ml
Aerosol droplet size	0.5 to 10 µm
Droplet size according to MMAD	less than 4 µm
Dimensions (H x W x D)	196 x 170 x 107 mm (7.7" x 6.6" x 4.2")
Weight	1.5 kg

NEBUFIRST®

INHALER



Due to its extensive features, the robust NEBUFIRST® is your standard device for effective inhalation. The fine aerosol mist enables optimum humidification of the respiratory tract. The easy-to-clean, handy design of the device assures comfortable operation, as well as simple cleaning of the NEBUFIRST®.

The powerful unit of the NEBUFIRST® enables optimal inhalation and the robust quality makes the NEBUFIRST® your reliable standard inhaler for daily use.

The unit features an illuminated ON/OFF switch, which reliably signals when in operation. The

ergonomic handle, the central air connection as well as the simple to replace (without tools) air filter make the device comfortable and convenient to use. Furthermore, the nebulizer can also be used when tilted (45 degrees) and is protected from overflowing.

Further special accessories for tracheotomised/laryngectomised patients are available to achieve even better inhalation results.

SCOPE OF DELIVERY

1 NEBUFIRST®	1 Nosepiece
1 Power cable	1 Inhalation mask for adults/children
1 Nebulizer	5 Air filter
1 Air tube	1 Carrying bag
1 Mouthpiece	

ORDER INFORMATION

	REF
NEBUFIRST®	50000
NEBULIZER SET NEBUFIRST®	50000-13
ADAPTER NECK MASK FOR INHALATION DEVICE	50000-11
LARYVOX® MASK	75200

ADAPTER NECK FLANGE FOR LARYVOX® MASK



The ADAPTER NECK MASK FOR LARYVOX® MASK is a practical addition to the standard accessories of the NEBUFIRST®/NEBUPORT®. It allows connection of a neck mask for tracheostoma patients.

ORDER INFORMATION	PU	REF
ADAPTER NECK FLANGE FOR LARYVOX® MASK	1	50110

LARYVOX® MASK

The LARYVOX MASK® enables easy inhalation with a NEBUFIRST®/NEBUPORT® for neck breathers.



ORDER INFORMATION	PU	REF
LARYVOX® MASK	1	75200

LARYVOX® NEBULIZER



The LARYVOX® NEBULIZER is intended for patients who very quickly experience a feeling of dryness in the trachea or who suffer from severe encrustation.

The LARYVOX® NEBULIZER enables sterile water, saline or special inhalation mixtures to be nebulized. To do this, the liquid is filled into the tank of the LARYVOX® NEBULIZER. The composition of inhalation mixtures should be determined in consultation with the treating physician.

The pump-nebulizer creates a fine spray that can be used to moisten the mucous membranes of the tracheostoma.

You can comfortably carry the LARYVOX® NEBULIZER in your pocket and moisten your mucous membranes at any time while out and about.

ORDER INFORMATION	PU	REF
LARYVOX® NEBULIZER	1	58000

AIR HUMIDIFIER UM750



Physical well-being is influenced by numerous factors. The air humidity in living spaces is also relevant here. Especially in the heating season, the cold and usually dry outside air that enters into the living space through the windows is warmed up. This results in a massive reduction in relative air humidity, which creates an unfavourable climate for people.

Dry respiratory air impairs the absorption of oxygen and its transport to the bloodstream. Fatigue, tiredness and loss of concentration are symptoms of a reduced oxygen supply. A further result of too dry air is the impairment of the trachea's ability to clean itself. The mucous membranes dry out increasing the likelihood of infections

and respiratory diseases. Low air humidity also increases the rate at which the skin loses moisture. It becomes dry, rough and scaly, with a tendency to inflammatory erythema, (so-called asteatotic eczema).

The UM750 room humidifier consists of a low-maintenance housing and impresses with its elegant appearance in matt white. The water tank of the humidifier has a capacity of 2.8 l, so that it can be operated for a longer period of time without refilling with water. Due to the removable water tank, the room humidifier is very easy to clean.

TECHNICAL DATA

Input voltage	220–240 V, 50/60 Hz
Output current	300 W
Water tank capacity	2.8 l
Operating time	6–7 hours
Dimensions (H x W x D)	256 x 253 x 238
Weight	1.4 kg
Ambient temperature	–10 to +70 °C
Relative humidity	10–90 %

ORDER INFORMATION

AIR HUMIDIFIER UM750

REF

59002