

**Manufacturer:**

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**Note:**

Please read instructions carefully prior to using the Combitubus® sarrraH® kit.

**INSTRUCTIONS FOR USE (E)**

The purpose of this product is a quick and safe intubation as well as an immediate initiation of an effective cardiac massage in emergency cases, after cardiac arrest/circulatory standstill.

**Combitubus® sarrraH® Kit****REF 5-18937****NON-STERILE****Indication:**

The Combitubus® sarrraH® kit is designed for cardiopulmonary resuscitation in emergency situations. The kit is specifically adapted to the requirements of rescue services. Its contents were chosen in close co-operation with sea rescue services. In general, it allows an effective ventilation and cardiac massage under extreme environmental conditions. The components of the kit offer a maximum pump performance by cardiac massage if a thoracic suction plunger for alternating cardiac massage (ACD-CPR) is applied additionally.

**Description – contents and materials:**

The non-sterile preconfected and preassembled set consists of the following components:

- ∨ ResQPOD™, primary components, housing: polycarbonate – small parts: silicone, stainless steel
- ∨ Combitubus® roll up kit
  - dual lumen 37 Ch tube
  - elbow adapter
  - 140ml three-part syringe
  - 12ml three-part syringe
  - 10 Fr x 590mm gastric suction catheter
- ∨ disposable razor
- ∨ instructions for use

**Description – packaging materials:**

transparent pouch, cardboard carton

**Warning:**

Do not use if first check-up shows that single pouch is damaged or already opened, or if any product component appears to be faulty.

**Disposal:**

Dispose in accordance with local and internal directives.

**Instructions and warnings concerning general use:**

The products should be used by specially trained and skilled persons only. Training should include theoretical instructions as well as practical exercises on the intubation trainer. Skills should be retrained in appropriate intervals same as all practical measurements of resuscitation.

**Instructions and warnings concerning the preparation of the Combitubus®:**

**Important!** Use the product only on patients above 122cm body height.

Inspection of the dual lumen esophageal/tracheal tube:

- Make sure the elbow adapter (angled piece) is firmly seated onto the shorter white connector of the tube.
- For leak testing of the large pharyngeal cuff (blue control balloon) use the large syringe filled to 85ml and marked **1** with the blue valve marked **1**.
- For leak testing of the smaller esophageal cuffs (white control balloon) use the smaller syringe filled to 12ml and marked **2** with the white valve marked **2**.

Preparing intubation:

- Completely evacuate both balloons using the inflation syringes. Avoid by all means any additional suction as this may cause destruction of the balloon.
- Aspirate the large syringe #1 to 85ml and the small syringe #2 to 12ml and keep ready for use. **IMPORTANT!** *Please mind the marking!*
- The curvature of the Combitubus® between the two cuffs can manually be intensified.
- Water-soluble lubricants or fluids on the tube facilitate insertion.

Instructions and warnings concerning insertion of the Combitubus®:

**Important!** *Do not use the tube in case of defensive reactions of the patient.*

- Kneel or stand by the side of or above the patient. **Important!** *Remove any foreign bodies including dentures from the patient's mouth.*
- Insert index and middle finger of one hand along the tongue surface deeply into the mouth of the patient.
- Insert the Combitubus® with your free hand between your two fingers on the tongue into the patient's mouth so that the tube tip slides centrally into the depth between the root of the tongue and the pharyngeal back wall. **Important!** *Take care that potentially broken sharp tooth edges will not damage the cuffs while being passed by. Do not advance the tube by force. If necessary, correct its position or reinsert.*
- The intubation process is finished if the row of teeth is situated between the two ring marks.
- Inflate the large proximal cuff using the aspirated syringe #1 at the blue connector (marked 1) with 85ml of air. The cuff will fill up the pharynx thus securing the tube in a correct position.
- Inflate the distal cuff using the aspirated syringe #2 at the white connector (marked 2) with 12ml of air.

**Important!** *Make sure the large balloon (blue connector #1) gives a perfect sealing. If necessary, carefully inflate further in small doses!*

Instructions and warnings concerning placement control of the Combitubus®:

The tip of the tube is very likely to be positioned in the esophagus.

How to check the placement:

- Using a CO<sub>2</sub> indicator
- Placing a demand oxygen valve onto the longitudinal blue connector with subsequent cardiac massage by aid of the thoracic plunger. **Important!** *If body hair impedes a safe adherence of the suction plunger onto the skin, use the attached disposable razor for shaving. If the demand valve is seated properly, it will audibly open upon lifting the plunger while air penetrates into the lungs.*
- Short and strong pressure onto the breastbone: From which leg of the tube does air come out?
- Auscultating the lungs by stethoscope. **Important!** *This should only be done by experienced persons under suitable environmental conditions.*

In the very rare case that the tip of the Combitubus has been placed in the trachea, ventilation must be done via the shorter white leg of the tube.

**Important!** *If required, sampling gastric contents can be done using the attached suction catheter.*

Instructions and warnings concerning the ResQPOD™:

When the patient is ventilated manually (by means of a hand operated respiration bag) or mechanically, the ResQPOD™ valve is positioned between the Combitubus® and the ventilation bag. This avoids suctioning air during the passive reset of the chest after manual decompression or during active decompression using the thoracic plunger. This will lead to improved intrathoracic negative pressure hence intensifying venous reflux. Subsequently, a significantly improved pump effect of the cardiac massage is achieved.

Instructions and warnings concerning the set-up of the ResQPOD™:

- Connect the manual respiration bag or the ventilation tube to the air inlet port of the ResQPOD™.
- Connect the patient port of the ResQPOD™ to the ventilation leg of the CombiTubus.
- Start cardiac massage:
  - o After each compression, allow complete passive relaxation of the thorax or decompress actively using the thoracic plunger (ACD-CPR).
- Impurities can be shook out of the ResQPOD™. To do so, the ResQPOD™ has to be taken out of the respiration path for a short time. Do not rinse the ResQPOD™ with water.

- Immediately after restoring the spontaneous circulation, remove the ResQPOD™ from the ventilating circuit and continue ventilating the patient or assist respiration as seen fit.

**Note!** Another option is activating ventilation pulse generator lamps using the red switch at the ResQPOD. These will flash approx. ten times per minute conveying the operator orientation with regard to the ventilation sequences of intubated patients according to directional recommendation.

**Warning!** An excessive ventilation frequency will reduce the efficacy of cardiac massage and of the ResQPOD™. Ventilate the patient with 10 inspiration cycles per minute of 1.5 seconds duration maximum.

**Note!** Operation of the electronic ventilation pulse generator is totally independent of the mechanical functions of des ResQPOD™.

**Safety warning:**

Safety of the ResQPOD™ has not been evidenced on pregnant women and individuals aged under 18.

**Contraindications:**

1. Patients with intact gag reflex
2. Patients with known esophageal disease
3. Patients after swallowing caustic substances
4. Patients of body lengths less than 122cm
5. Patients responding to intubation by biting or swallowing reflexes
6. Patients with no indication of a cardiopulmonary resuscitation
7. Patients with pulse or spontaneous respiration

**Distributor:**

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