Frequently Asked Questions:

- How does the OxyMask open design work?
- How do you know OxyMask spans 24-90%?
- Do I need a high flow meter to use OxyMask?
- Can OxyMask be used with a humidifier?
- What are the benefits to the clinician?
- What are the benefits to the patient?
- Are OxyMasks free of natural rubber latex and phthalates?
- Are Non PVC OxyMasks’ available?
- Will the OxyMask™ ETCO2 deliver 24-90% oxygen?
- Can OxyMask be used with a humidifier?
- Does extension tubing alters FIO2 output from mask?

How does the OxyMask™ open design work?

At the heart of this technology, is an innovative Pin and Diffuser system designed to concentrate and redirect the flow of oxygen.

The mushroom-shaped Pin redirects the flow of oxygen, forming an organized pattern of vortices and a cloud of concentrated oxygen molecules. The triangular directional Diffuser refines the shape of the oxygen vortices and directs the flow towards the patient’s nose and mouth.

During the patient’s inhalation, oxygen flow is mixed with room air drawn in through the mask openings. Respiratory mechanics and breathing patterns determine how room air combines with the delivered oxygen. The concentration of oxygen received during the breath is a function of the oxygen flow compared to the patient’s inspiratory flow and tidal volume. This results in the prescribed concentration of oxygen being delivered to the patient.

During exhalation the Mask openings allow expired carbon dioxide to escape. As a result, the OxyMask™ is a highly efficient ‘open’ mask system that eliminates the need for a closed design, valves and reservoirs.

How do you know OxyMask spans 24-90%?

OxyMask’s revolutionary mask design is capable of delivering the entire range of oxygen therapy; (24 – 90% oxygen concentrations), in a safe and efficient manner. The
Oxygen concentration of OxyMask™ has been tested and documented in clinical studies. The study, Mathews and Gregg (2008), evaluate how the open design of the OxyArm™ and OxyMask™ affects oxygen delivery. Their study finds that the OxyMask does deliver 24–90% concentrations of oxygen. They even go as far to say that “OxyMask™ might indeed be the delivery device that solves that age-old problem of having to stock numerous kinds of oxygen masks.” You can read this study and more by visiting the ‘Clinical Evidence’ section of our website.


Do I need a high flow meter to use OxyMask™?

No, you do not need a high flow meter to use OxyMask™. The graph below illustrates that the OxyMask™ will reach its maximum performance at approximately 15 liters. If additional flows are required, a normal flow meter on flush will deliver up to 60 lpm. You may choose to use a high flow meter to document the exact liter flow delivered but that is often not required if you are using a pulse oxymeter.

What are the benefits to the clinician?

Benefits to the clinician include:

1. **Cost savings**
   - Product standardization and sku reduction
   - Uses less oxygen than traditional oxygen interfaces

2. **Promotes early patient discharge and may lower re-admittance**
   - Patients are discharged from hospital earlier as they may not need to transition to a nasal cannula.
   - The use of OxyMask™ may prevent readmissions when they are unable to wear a nasal cannula and need a higher level of oxygenation
   - The OxyMask™ works well on oxygen concentrators

3. **Time savings**
   - Clinician’s time can be utilized for better focused care as oxygen flow can now be quickly titrated to meet the patient’s needs without changing delivery devices

4. **Medical Waste and Environmental Impact Reduction**
   - Reduces the amount of PVC and DEPH that leaches into the environment
   - Will reduce emissions if disposed of by a medical waste incinerator
   - With sku reduction, comes less waste

What are the benefits to the patient?

1. **Safety**
   - Highly efficient ‘open’ system that eliminates the need for a closed mask design, valves or reservoirs
- Reduces risk of CO₂ rebreathing and aspiration of emesis
- Does not contain any natural rubber latex or phthalates such as DEHP

2 Comfort
- Reduces feelings of claustrophobia
- Allows unrestricted communication with family, friends and caregivers
- Provides access for oral care, oral medications, drinking and eating
- Lightweight design allows mask to sit lightly on the face

3 Compliance
- Aids compliance of prescribed oxygen therapy by reducing interruptions

Are OxyMasks free of natural rubber latex and phthalates?
Yes, all OxyMasks are free of natural rubber latex and phthalates such as DEHP.

Are non PVC OxyMasks available?
Yes, OxyMask offers four codes that are non-PVC:
- OM-7025-8 OxyMask Standard 7’ Tube
- OP-7025-8 OxyMask Plus 7’ Tube
- OK-7025-8 OxyMask Kid 7’ Tube
- OT-7025-8 OxyMask Tyke 7’ Tube

Will the OxyMask™ ETCO₂ deliver 24-90% oxygen?
No, the ETCO₂ OxyMask will deliver between 24%-65% oxygen. This is because the OxyMask™ uses a different inverted sampling cup inside the diffuser to allow for better CO₂ sampling.

Can OxyMask be used with a humidifier?
Yes, the OxyMask can be used with a bubble humidifier, the same as one would use with a nasal cannula with flows from 1 to 6 litres per minute. But unlike a nasal cannula, the OxyMask does not cannulate an orifice and therefore, a bubble humidifier is usually not necessary. Additionally, during the patient’s inhalation, room air containing humidity is drawn in through the openings in the mask and is mixed with the prescribed oxygen flow.

Does extension tubing alter FiO₂ output from mask?
Yes, FiO₂ can be effected. To avoid changes in output, use back pressure compensated flow meters to make sure the delivered flow stays the same. In this case, extension tubing will not affect FiO₂ because the oxygen delivery will be the same. And, as with all OxyMasks’, simply adjust flow up or down to meet the patients required saturation.

Distributed by:
The Oxygen Store
Old Bank Chambers
4 Glebe Street
Stoke on Trent
ST4 1HG
United Kingdom