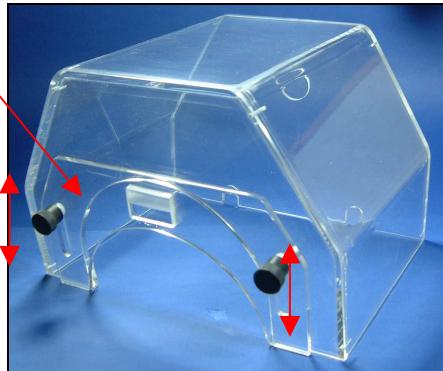


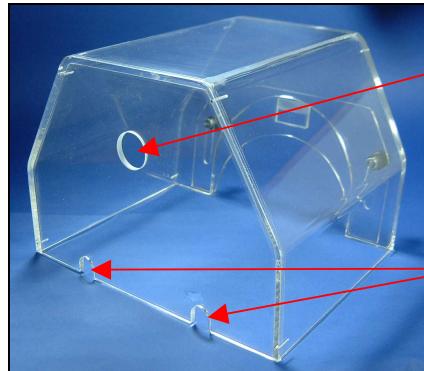


## REUSABLE OXYGEN HOODS - INSTRUCTIONS FOR USE

Sliding front for adjustment of the neck aperture.



22mm cut-out for introduction of oxygen or humidified gas.



Cut-outs for IV lines or oxygen sensor cables.

### CLINICAL APPLICATION

Viamed oxygen hoods are designed for use with neonatal and paediatric patients, for the short-term, stable delivery of oxygen.

An oxygen hood is probably the most common short-term method of oxygen delivery for the newborn and is a standard piece of essential equipment within neonatal nurseries. They have been used for over 50 years for delivering extra oxygen to babies who require it; maintaining stable  $\text{FiO}_2$  around the baby's head whilst leaving the body accessible for care.

The standard oxygen hoods incorporate an adjustable neck aperture and the smallest hood (Size 1) features a sloping front to accommodate the patient's chin. A 22 mm oxygen inlet and cut-outs for I.V. and ventilator tubing feature on the rear panel.

The standard size 1 & 2 oxygen hoods can also be use in conjunction with Viamed phototherapy light shields for use during phototherapy treatments.

|        | Oxygen hood | Associated light shield |
|--------|-------------|-------------------------|
| Size 1 | PP8000      | PP8400                  |
| Size 2 | PP8050      | PP8559                  |

Oxygen Hoods with side ports provide easier access to the patient, whilst minimizing disruption to the oxygen concentration within the hood.

Viamed phototherapy light shields and phototherapy oxygen hoods provide an alternative to traditional eye masks. They are manufactured from Amber 300 Perspex® and are designed to reduce the intensity of light - as well as blocking ultraviolet and blue light in the range of 300 - 500 nm.

## APPLICATION NOTES

- Regarding management of the oxygen hood the gas mixture must be maintained at an adequate flow, so as to flush exhaled gas with its elevated carbon dioxide content from the hood. A flow of 6 – 8 litres per minute is usually adequate for this purpose, in oxygen hoods sizes 1 - 4.

For custom designed oxygen hoods please follow local guidelines.

- An oxygen blender should be used in conjunction with the oxygen hood to deliver precise oxygen concentrations (between 20.9% and 100%). Flow from the blender should be warmed and humidified, especially for small babies.
- Nebulizers can be used with oxygen hoods, but should only be used in conjunction with blenders - so as to reduce the noise levels produced by the nebulizer.
- Oxygen percentage should be monitored inside the oxygen hood, particularly in larger or custom designed oxygen hoods. An oxygen analyser can be used; but an oxygen monitor with user adjustable low and high alarms is advisable, so as to warn of changing inspired oxygen concentrations. Viamed can supply oxygen analysers and monitors.
- A layering effect of oxygen may occur when using high oxygen levels. Since oxygen is heavier than air this layering produces higher oxygen levels at the bottom of the hood; especially if it is not humidified and not warmed. The oxygen percentage should be monitored adjacent to the infant, at the same level as the infant's nose, do not monitor oxygen at the top of the hood.
- Note that with small infants the hood should be pre-warmed before being placed over the infant, or the infant will contribute some of their body heat to warm the hood. This is only important if the infant is less than 1500g (roughly 32 weeks gestation or below).
- Temperature in the hood should be monitored to avoid overheating or under heating of the infant. Over heating may cause apnoea and dehydration. Under heating will cause increased oxygen consumption
- Oxygen hoods can also be used inside incubators, so that a baby may be maintained in a neutral thermal environment without the disadvantage of changing the oxygen concentrations whenever the incubator is opened. Care should be taken to maintain the oxygen hood temperature and the incubator temperature at the same level, so that the neutral thermal environment for the baby is sustained.

Without utilizing hoods, incubators are more susceptible to varying  $\text{FiO}_2$  and require longer stabilization times.

## INSTRUCTIONS FOR USE

1. Adjust the height of the sliding front, to reduce excessive gas / heat loss, whilst allowing for freedom of movement of the patient, and secure by tightening the locking knobs.
2. Use the access cut-outs in the base to run IV lines or oxygen sensor cables into the oxygen hood.
3. Oxygen / humidified gas is introduced into the oxygen hood through the 22 mm inlet using standard fittings. A 22 mm connector (PP1968) is supplied with each oxygen hood.
4. It is recommended that the delivered gas should be warmed and humidified prior to introduction.
5. It is recommended that an oxygen analyser or monitor be used to warn of changing inspired oxygen concentrations. The oxygen sensor should be placed adjacent to the infant, at the same level as the infant's nose.
6. In regard to the phototherapy oxygen hoods: PP8509, PP8533, PP8562 - phototherapy should be directed perpendicular to the light shield - do not direct any of the phototherapy towards the neck end of the hood.

|   |   |
|---|---|
|  | <ul style="list-style-type: none"> <li>▪ Carry out checks of the infant's blood oxygen level to be certain of adequate carbon dioxide washout.</li> <li>▪ For infants of less than 1.5Kg, pre-warm the oxygen hood to approximately 35°C before use.</li> </ul> <p>Placing a cold oxygen hood over a small infant may decrease the body temperature - as radiant-loss from the infant can contribute to the warming of the oxygen hood.</p> |
|---|---|

## ACCESSORIES

**PP1968** Connector, 22 mm Oxygen Stem (supplied with each oxygen hood)



**0120126** Connector, 22 mm O.D. – 22 mm O.D.



## CLEANING / DISINFECTION

Viamed Ltd recommends adherence to local hospital protocols and disinfection fluid instructions for use. Disinfection must be achieved by use of a hospital-authorised disinfectant.

Unless the device has been contaminated with body fluid, it is usually adequate to clean thoroughly with neutral detergent, then rinse and dry. If there is contamination the device must be cleaned thoroughly prior to disinfection to remove all organic matter and other residue. If the disinfectant contains bleach (sodium hypochlorite), the minimum concentration recommended by the disinfectant manufacturer should be used to prevent discolouring and crazing.

In the absence of the disinfectant manufacturers' advice the following strengths can be used as a guide:

- Heavy contamination with blood – 10,000 ppm available chlorine.
- Without gross contamination – 1,000 ppm available chlorine.
- Special attention should be paid to cleaning the surface with neutral detergent until it is completely free of the disinfectant solution, then rinse and dry.



- Cracked surfaces can harbour contamination.
- Do not use glutaraldehyde or phenolics, due to their toxicity.
- Do not use organic solvents, as they will cause crazing.

## APPLICABLE PRODUCTS

| Instructions cover: |                                       |
|---------------------|---------------------------------------|
| PP8000              | Oxygen hood – Size 1                  |
| PP8050              | Oxygen hood – Size 2                  |
| PP8060              | Oxygen hood – Size 3                  |
| PP8589              | Oxygen hood – Size 4                  |
| PP8020              | Oxygen hood – Size 1, with side ports |
| PP8055              | Oxygen hood – Size 2, with side ports |
| PP8065              | Oxygen hood – Size 3, with side ports |
| PP8715              | Oxygen hood – Size 4, with side ports |
| PP8509              | Phototherapy oxygen hood – Size 1     |
| PP8533              | Phototherapy oxygen hood – Size 2     |
| PP8562              | Phototherapy oxygen hood – Size 3     |

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