

<u>Product Description:</u> <u>Photo-Therapy Shield & Patient Head Enclosure</u>

Risk Analysis Report.

This product range was designed by hospitals in the early 1960's, and has been continually improved in line with medical practices.

Light Shields are flat sheets of Amber Acrylic 300 (Perspex), shaped to form small enclosures designed to surround the head, to reduce the intensity of light falling on an infants eyes during photo-therapy. Standard sizes are available covering a range of patients; neonate, infant & paediatric. Specials are manufactured to order. They are also available as Phot-therapy Oxygen Hoods, which are small enclosures usually used to surround a neonates head to allow a greater concentration of oxygen to be achieved, They are manufactured from transparent 4mm or 5mm Acrylic (Perspex) for bio-compatibility and minimal toxic risk to newborns and are shaped with a neck opening.

The Spectral Response curve, which has been checked by the National Physics Laboratory, shows the Amber 300 material removes almost all the Ultra Violet and Blue Lights in the 300-500 nm region.

Several "Standard sizes" are available for neonate, infant & paediatric patients.

Specials are manufactured to the user specification; all follow the basic description. The main requirements for change being, size and position of the access holes.

- Light Shields are designed to cover the Oxygen Hood for use during Photo-Therapy
- All Oxygen Hoods have at least a 22mm hole for oxygen.
- CO₂ can build up if there is no flow or a very low flow.
- All edges of the device are polished in the manufacturing process to prevent abrasion to the patient.
- The shape is a squared hemisphere without sharp corners to make cleaning and disinfection easy to achieve, and to minimise cross-infection.
- The flat panels are designed to maximise visibility of the patient and reduce distortion.

User Recommendations.

- 1. When used with neonates, the oxygen hood should be pre-warmed to prevent cooling of the infant from radiant loss to the Acrylic.
- 2. The gas used should be warmed and humidified before introduction into the oxygen hood to prevent cooling of the infant and fluid losses from the skin.

WARNINGS

To avoid carbon dioxide accumulation, a warning to use gas flows of at least 6 litres / mm is to be on a label affixed to the oxygen hood