

# Risk analysis

## Phototherapy Light Shields

This product has been in use in its present form since 1984

The main risks involved in manufacture are:-

Sharp edges,,

Wrong sizes,

Protruding screws on the hinges,

Loose screws on the hinges,

The main risks involved in use are:

The lid must fit over the cot and be fitted correctly so that the lid cannot fall off or into the cot.

Possible build up of CO<sub>2</sub> over time. Reduced by using the handles as ventilation slots.

These Shields are manufactured from Amber 300 Acrylic and are designed to reduce the intensity of light falling on the infants eyes during Phototherapy. Used correctly they can replace eye pads.

The spectral response curve which has been checked by N.P.L shows the Amber 300 material removes almost all the Ultra Violet and Blue lights in the 300-500 nm region.

There are several versions of Phototherapy Light Shield available:

### 1. Complete Amber Headbox

The complete Headbox is manufactured in Amber 300. This version reduces the need for a separate shield over the Headbox . It is also the most efficient and safest as it allows the Phototherapy light to be used at any angle without any having the chance to enter the Headbox.

### 2 Semi-Headbox

A range of headboxes in Amber 300 without a rear wall is available. This allows the open aspect to reduce CO<sub>2</sub> build up, yet retains most of the advantages of the full' Headbox. The neck aperture ensures that the Headbox will follow the baby's movement whilst still preventing the UV light to enter from the front sides and top.

N.B

UV light is able to enter directly or by reflection through the rear panel which is

Open.

### 3. Open Lightshield

This consists of one panel of Amber 300 formed to cover an existing Neonatal or Paediatric Headbox

NB

This is most suitable for Phototherapy units which direct the light vertically down as neither the front or rear is shielded

### 4. Specials

A standard range of the above product is available however it is appreciated that the user may have different requirements. Specials are therefore available on request. The only limitation in any customer design is the specification to ensure no UV or blue light reaches the patients eyes.