

Silver-Plated Lead Eye Shields

Eye shields protect the patients eye during radiation therapy treatments. They are silver-plated and highly polished to fit smoothly under or over the eyelid.

The small and medium size cups fit under the lid to protect the lens while permitting irradiation of the entire thickness and width of the lids in treatment of superficial basal cell carcinomas of the skin. When only a portion of the lid requires irradiation, an extra large cup with a window is properly placed over the lid. The large solid lead cups are used when areas surrounding the eyes require irradiation, in which case the cups are placed over the eyeball and lid.

A complete set consists of four pairs ranging from small, medium and large sizes, and one extra large pair with windows. It is supplied in a velvet-lined storage/carrying case. The eye shields are fabricated of virgin lead, 1/16 in thick, and are silver plated for a smoother surface and long life protection. Additionally, a dental boxing wax should be used over the silver plated lead eye shield to prevent scratching or irritation to the eyeball and for reduction of electron scatter.

The lead permits less than 1% transmission of the radiation intensity at 120 kVp (3 mm Al HVL). 6 MeV electrons have had a 16–25% transmission factor. Electron backscatter from eye shields has been reported to be 40–50%. Lead eye shields are not autoclavable; gas sterilization is required. Always consult the Radiation Physicist when using eye shields with electrons.

Please refer to the following paper: Field Shaping in Electron Beam Therapy, by F.M.Khan, Ph.D., Oct. 1976, British Journal of Radiology.

Sold Individually

- 934-012 Small, 2 cm x 2.3 cm x 1.7 mm thick
- 934-014 Medium, 2.3 cm x 2.53 cm x 1.7 mm thick
- 934-016 Large, 2.8 cm x 3 cm x 1.7 mm thick
- 934-018 Large, 3.1 cm diameter x 1.7 mm thick, with window

Set of four pairs

- 934-008 Includes two each of above, in storage case



Eye Shield Care Equipment

The plain lead eye shields can be coated with a dental base plate wax. The wax is melted in a small stainless steel, wide-top container on a small electric warmer plate. When the wax is melted, grip the eyeshield with a forceps and dip into the wax for ten seconds and then remove. Rotate the coated eye shield in all directions while the wax is cooling to assure even wax distribution. The coating may be too thick and lumpy if the wax temperature is too low, or too thin if the wax temperature is too high.

Please refer to: "Wax coating," The Physics of Radiation Therapy by F.M.Khan, Ph.D., under D. Internal Shielding, last paragraph.

Eye Shield Care Equipment

- 933-120 Dental base plate wax, 28 sheets
15.2 cm x 7.5 cm, 1.5 mm thick
- 933-140 Stainless steel beaker and electric warmer,
120 VAC

Unplated Eye Shields

- 936-320 2.00 cm diameter x 5 mm thick
- 936-322 2.25 cm diameter x 5 mm thick
- 936-330 3.00 cm diameter x 5 mm thick
- 936-333 3.30 cm diameter x 5 mm thick
- 936-350 3.50 cm diameter x 5 mm thick
- 936-425 2.50 cm diameter x 7 mm thick
- 936-427 2.70 cm diameter x 7 mm thick
- 936-430 3.00 cm diameter x 7 mm thick
- 936-433 3.30 cm diameter x 7 mm thick
- 936-434 3.40 cm diameter x 7 mm thick

