



Expect Service

Radiation Products Design Inc

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## INSTRUCTIONS

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### RPD INFORMATION

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### RPD PRODUCT INFORMATION

<b>Item Number</b>	<b>Eye Shields</b>
936-320	Lead Eye Shield, 2.00cm Dia x 5mm Thick
936-322	Lead Eye Shield, 2.25cm Dia x 5mm Thick
936-325	Lead Eye Shield, 2.50cm Dia x 5mm Thick
936-330	Lead Eye Shield, 3.00cm Dia x 5mm Thick
936-333	Lead Eye Shield, 3.30cm Dia x 5mm Thick
936-425	Lead Eye Shield, 2.50cm Dia x 7mm Thick
936-427	Lead Eye Shield, 2.70cm Dia x 7mm Thick
936-430	Lead Eye Shield, 3.00cm Dia x 7mm Thick
936-433	Lead Eye Shield, 3.30cm Dia x 7mm Thick
936-434	Lead Eye Shield, 3.40cm Dia x 7mm Thick

## INTRODUCTION

### Superficial Shielding or Electro Shielding

**Purpose** The external eye shield protects the lens and cornea of the eye during treatment.

**Applications** **External Shield of the Eye**

- Eye shields may be placed over the eyelid for external shielding during facial treatments.

**Specifications** **Lead Density:** 11.35 g/cm<sup>3</sup>

## SPECIAL PRECAUTIONS

### DO NOT store in liquid, MUST store dry

Rinse before and after use with sterile water for same patient after each use.

Always consult the Radiation Physicists when using lead eye shields in electrons.

**Shielding:** Electron Energy ÷ 2 = Lead Thickness (mm)

Electron backscatter from lead eye shields has been reported to be 40% to 50%.

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

## INSPECTION

Before each use and prior to sterilizing, examine eye shields for burrs or rough edges, which could have occurred through normal use.

## CLEANING

- All eye shields must be thoroughly cleaned before being disinfected or sterilized.
- The presence of organic matter can protect bacteria from the action of the disinfectant or sterilant, or react with the agent and make it ineffective.
- Cleaning can be done either with water alone or with soap and water (or detergent) or with water and detergent and

disinfectant.

- Cleaning with a disinfectant reduces the risk of contamination to the cleaning staff, but does not eliminate them completely.

Be sure to rinse thoroughly to remove all soap residue from eye shield.

Sterile water may be used.

## DISINFECT

**Cidex OPA** Wash Eye Shields with water and soap and detergent and disinfectant.

Soak in Cidex OPA for 12 minutes. Then rinse in three different batches of sterile water to remove all traces of Cidex OPA.

**Note:** This product does not require ACTIVATION.

Any quality Germicidal Solution mixed with the recommended amount of water will be satisfactory. Germicides containing a Quaternary Ammonium derivative should not be relied on to destroy spore bearing organisms or Mycobacterium tubercles or the etiologic agent of viral hepatitis. Thus, eye shields suspected of such contamination should be sterilized.

## STERILIZATION METHODS

**Autoclave (Steam)** Autoclave wrapped parts for 5 minutes at 270°F (132.3°C).

Sterrad® uses Hydrogen Peroxide solution; temperature must not exceed 140°F.

Validation studies conducted by the ASP support the following claims in its Instructions for Use (IFU) for each of the sterilizer models listed below:

<b>Sterrad® 50 &amp; 200</b>	Cleared
<b>Sterrad® 100S</b>	Cleared for Short and Long Cycle
<b>Sterrad® NX™</b>	Cleared for Standard and Advanced Cycle
<b>Sterrad® 00NX™</b>	Cleared for Standard Cycle

- DO NOT USE**
- **Steris System # 1 that contains a peracetic acid solution that will cause corrosion.**
  - **High temperature heat sterilizer**

## INSTRUCTIONS

1. The physicist must do calculations. The Lead Eye Shields are for superficial X-Ray.
2. Clean the eye shield with soap and water. Be sure to rinse thoroughly to remove all soap residues from the eye shield.
3. Inspect eye shield carefully for scratches.
4. Disinfect and sterilize according to the instructions.
5. The hole through the top of on the eye shield can be used with suture string to secure the eye shield to the patient's forehead using tape. Tape can also be used to hold the eyelid closed over the top of the eye shield.
6. After use, wash with soap and water, then rinse thoroughly.
7. Store eye shields dry.
8. The eye shields must be sterilized between patients.

## STORAGE

Store dry or in saline (sodium chloride) solution, but rinse before use with sterile water.

## WAX COATING

Eye Shields can be coated with a dental base plate wax, Item 933-122. The wax is melted in a small stainless steel wide top container on a small electric warmer plate, Item 933-140. When the wax is melted, grip eye shields with forceps and dip into wax for ten seconds and remove. Then constantly rotate in all directions while wax is cooling, to prevent the wax from building up in any one place. If the wax temperature is too low, it may go on the eye shield too thick and be bumpy. If the wax temperature is too high, it will not coat the eye shield very thick. See Wax Coating-The Physics of Radiation Therapy by Faiz M. Khan, Ph.D. under D. Internal Shielding-last paragraph.

**REMOVING WAX FROM EYE SHIELD**

Place eye shield in hot, soapy water. Wax should become soft enough to peel off. Repeat procedure, if necessary, until all wax is removed. Eye shield is then ready for sterilization and wax recoating

**WARRANTY**

1 year from date of purchase.

**ACCESSORIES**

<b>Item #</b>	<b>Description</b>
466-401	Cidex OPA, 1 gal
466-403	Cidex OPA Solution Test Strips, 60 strips/ bottle
933-122	Wax Sheets, 1 lb (approx 35 sheets)
933-140-1	Stainless Steel Cup, 2.5 oz
933-140-2	Warming Plate
934-020	8 Compartment Box for Eye Shields