Name: Cefazolin Ophthalmic Solution USP
Strength: 3.5 mg/ml
Dosage Form: Solution
Route of Administration: Ophthalmic

Date of Last Review or Revision: USP 26, 2003
Person Completing Last Review or Revision: Robert Shrewsbury

### Formula:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
<th>Physical Description</th>
<th>Solubility</th>
<th>Therapeutic Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cefazolin sodium</td>
<td>350.0 mg</td>
<td>white, crystalline</td>
<td>soluble in water; slightly soluble in methanol</td>
<td>antibiotic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>powder</td>
<td>and ethanol</td>
<td></td>
</tr>
<tr>
<td>Thimerosal</td>
<td>2.0 mg</td>
<td>white to cream</td>
<td>1 g/ml water; 1 g/8 ml alcohol</td>
<td>anti-infective;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>powder</td>
<td></td>
<td>preservative</td>
</tr>
<tr>
<td>0.9% Sodium Chloride Injection</td>
<td>qs 100 ml</td>
<td>clear, non-viscous</td>
<td>NA</td>
<td>solvent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>liquid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Calculations:

A stock solution of thimerosal in 0.9% Sodium Chloride Injection will be required for thimerosal. Maximum thimerosal concentration stated in Applied Pharmaceutics in Contemporary Compounding is 0.01%. Make stock solution 0.01% of thimerosal in 0.9% Sodium Chloride Injection. Use 20 ml of stock solution to deliver 2.0 mg of thimerosal.

### Equipment Required:

- Class A prescription balance
- 50 ml beaker, 100 ml beaker
- 50 ml graduated cylinder
- 20 ml sterile syringe with luer-lok tip
- membrane filter, 0.22 micron pore size
- pH meter

### Method of Preparation:

1. Accurately weigh cefazolin sodium and place in clean, calibrated 100 ml beaker
2. Add appropriate volume of thimerosal stock solution
3. QS with 0.9% sodium chloride injection in 100 ml beaker
4. Use about 50 ml for pH verification
5. Package remaining solution in laminar flow hood using aseptic techniques

### Description of Finished Product:

After filtration, clear solution, free from particles
Quality Control Procedures:
  chromatographic analysis for drug content
  sterility challenge
  pH measurement

Packaging Container:
  Preserve in tight, sterile ophthalmic container.

Storage Requirements:
  Store in a refrigerator.

Beyond-Use Date Assignment:
  Official compounded formulation of USP 26/NF21. Beyond use date is 5 days.

Label Information:
  For Use In The Eye
  Do Not Use If A Precipitate Is Present

Source of Recipe:

Literature Information: