

# Formulation Record

Name: Hydrocortisone Ointment  
Strength: 2.0%  
Dosage Form: ointment  
Route of Administration: Topical

Date of Last Review or Revision: 09/12/06  
Person Completing Last Review or Revision: Robert Shrewsbury

Ingredient	Quantity	Physical Description	Solubility	Therapeutic Activity
Hydrocortisone USP, micronized	2%	white, amorphous powder, odorless	0.28 mg/ml in water 15.0 mg/ml in ethanol	anti-inflammatory glucocorticoid
Glycerin USP	s.a.	clear, very viscous liquid sweetener, solvent	miscible with water	sweetener, solvent, levigating agent
Calamine USP	4%	pink, amorphous powder, odorless	insoluble in water; almost completely soluble in mineral acids	used as visual aid, topical protectant, astringent
Emollient Cream PCCA™	qs 60 gm	white, moist appearing cream, smooth texture, particle-free	NA	cream base

## Example Calculations:

## Equipment Required:

- Class A prescription balance
- ointment slab
- 2 stainless steel spatulas

## Method of Preparation:

1. Using the prescription balance, weigh hydrocortisone and calamine. Place on ointment slab.
2. Levigate the powders with glycerin to form a smooth paste.
3. Using geometric dilution, incorporate the levigated powders into the base. Use two stainless steel spatulas.
4. Package in ointment jar. Provide a professional finish.

## Description of Finished Product:

Uniform, lightly pink cream with no visible particles; spreads easily without a gritty texture

## Quality Control Procedures:

Observations for uniform consistency  
Weight of final product.

## Packaging Container:

Package in 2 oz. plastic ointment jar.  
How to pack an ointment jar: <http://pharmlabs.unc.edu/ointments/media.htm>

**Storage Requirements:**

Store at room temperature.

**Beyond-Use Date Assignment:**

USP Guidelines:

All other formulations (i.e., not a solid, not a liquid): 30 days or intended duration of therapy, whichever is less.

**Label Information:**

External Use Only

**Source of Recipe:**

Pharmaceutics Laboratory Web page: [pharmlabs.unc.edu](http://pharmlabs.unc.edu)

**Literature Information:**

Applied Pharmaceutics and Contemporary Compounding, Chapter 9, Dermatological Formulations: Ointments and Pastes.

How to levigate a powder: <http://pharmlabs.unc.edu/ointments/media.htm>

Incorporating a drug into an ointment: <http://pharmlabs.unc.edu/ointments/media.htm>

How to pack an ointment jar: <http://pharmlabs.unc.edu/ointments/media.htm>