

# **SUBJECT: PHARMACEUTICS**

# **TOPIC: CALAMINE LOTION**

**NAME OF TAECHEER : Zerah sonu**  
**Academic year : 2019**

**Aim:** To prepare and dispense 20 ml of calamine lotion.

**Requirements:**

- **Apparatus:** Dispensing balance and fractional weights, mortar and pestle, measuring cylinder, coloured dispensing bottle with stopper, scissor, spatula, pipette, gum, white paper etc.

- **Ingredients & calculation:**

	<b>For 100 ml</b>	<b>For 20 ml</b>
Calamine	15 g	3 g
ZnO	5 g	1 g
Bentonite	3 g	0.6 g
Glycerine	5 ml	1 ml
Aqua ad.	100 ml	20 ml

# Procedure:

The balance was checked, appropriate corrections made

Required amounts of calamine, ZnO and bentonite were weighed, placed in a mortar,

The mixture was grinded to make them fine particles

1 ml of glycerine and 3-5 ml of water was added; and a fine paste was made out of them

Transferred to measuring cylinder, mortar was rinsed with water and rinsed water was transferred to the cylinder

volume was made upto 20 ml by adding water to the cylinder

Transferred to dispensing bottle

bottle was labeled and dispensed

# Label:

SHAKE WELL BEFORE USE

FOR EXTERNAL USE ONLY

## The Lotion

Name: Mr. Raman

Age: 24 years

Sex : Male

Address: Safdarjung Enclv,  
New Delhi-29

Direction:- Apply on the affected area 2-3 times daily

Prepared at  
Pharmacy Lab  
VMC

Date: 29/09/2009

Dispensed by  
Name  
Regd. No.

## Notes:

- Indications:
  - Eczema
  - Impetigo
  - Sun burn
  - Dermatitis
  - Itching
  - Varicose ulcers
  - Psoriasis

- Calamine:

- ZnO (98%) + Fe<sub>2</sub>O<sub>3</sub> (2%)

- Fe<sub>2</sub>O<sub>3</sub> imparts color and it is irritant. So applied to only over intact skin, not on open wound

- ZnO:

- Antiseptic, astringent.

- Protective and soothing agent.

- Substances that precipitate proteins but do not penetrate cells, thus affecting superficial layer only.



- Bentonite:
  - Hydrated aluminium silicate.
  - When water is added it, swells up to give a gel-like but non-viscous consistency.
  - It acts as suspending agent and reduce viscosity.
  - It helps to make the lotion uniform.



- Glycerine:

- Hygroscopic in nature.
- Prevents drying of lotion, so lotion remains at the site of application for a longer time.
- Also antiseptic and emollient (oily substance). Soothes and softens the skin.
- Forms an occlusive film over skin and prevent evaporation, thus restores elasticity of cracked and dry skin.

- Precautions:
  - Should not be applied on wounds or injured areas because it precipitates proteins and form a layer which prevents healing.
- Lactocalamine:
  - Market preparation which contains casein and phenol besides the normal constituents.
  - Casein acts as soothing agent, while phenol acts as a preservative and antiseptic.

**THANK YOU**

