



CALAMINE LOTION FORMULATION

Theory: These are liquid preparation, meant for external application without friction. Lotion may be used for local application such as cooling and soothing and protective purpose. They are generally applied for antiseptic action. Alcohol is sometimes included in aqueous lotion for its cooling and soothing effect. Calamine is a combination of zinc carbonat mixed with ferric oxide, which gives pink colour to it. Zinc oxide has got astringent, protective and antiseptic action. Bentonite (colloidal hydrated aluminium silicate) is used for its suspending property. It helps in suspending the insoluble calamine in distilled water. Sodium citrate acts as deflocculatine agent or peptizing agent, i.e prevents the lotion from being too viscous, it also act as a buffer and maintain the pH appropriate to skin. Liquid phenol is an antiseptic as well as preservative, Glycerin acts as an emollient (smoothing effect) and as an humectant (prevents the loss of moisture from the skin)

Material required: Mortar and pestle, beaker, measuring cylinder, glass rod, and bottle.

Reagents: Calamine, zinc oxide, bentonite, sodium citrate, glycerin, liquefied phenol, lavender oil, distilled water.

Formula;-

INGREDIENTS	OFFICIAL QTY	REQUIRED QTY
Calamine	150g	15g
Zinck oxide	50g	5g
Bentonite	30g	3g
Sodium citrate	5g	0.5g
Liquid phenol	5ml	0.5ml
Glycerin	50ml	5ml



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Lavender oil	1ml	0.01ml
Distilled water (qs)	1000ml	100ml

Procedure:

1. Weigh the required amount of calamine, zinc oxide and bentonite.
2. Transfer it in a mortar and add a small quantity of water to make a cream.
3. Add required amount of liquid phenol.
4. Dissolve sodium citrate in small quantity of water and mix with above mixture.
5. Add required amount of glycerol and two drops of lavender oil
6. Finally add water to make up the volume.
7. Transfer it to a bottle, label it and dispense it in a suitable container.

Category: As a protective.

Storage: "Store in a well-closed container". "Keep it in a cool and dry place".

Uses:

1. It is used to remove roughness of skin.
2. Meant for external application without friction.