Shampoo

Shampoo is cleaning formulation of Chemicals
It has ability to surround oily material and rinsed away by water from hair scalp.

Characteristics of good shampoo

Pleasing foam
Ease of rinsing
Minimal skin and eye irritation (Low toxicity)
Thick and creamy feeling
Pleasant fragrance
Good Biodegradability
Slight acidic
No damage to hair or repair of already damaged hair

Aim: To carry out the preparation of shampoo.

Chemical Required:

- ***Steric Acid***
- ***Lanolin***
- ***Sodium lauryl sulphate***

LANOLIN is highly refined & purified natural grease which originates as a unique substance secreted by sheep from the sebaceous glands.

Lanolin is a complex mixture of Esters, Di-Esters & Hydroxyl Esters of high molecular weight Lanolin Alcohols and High Molecular Weight Lanolin Acids.

Lanolin readily penetrates the shaft of the hair, helping it to retain moisture and protecting it against breakage. Once it has been absorbed by the hair, lanolin works as a humectant

Sodium Lauryl Sulfate (SLS)

It is anionic surfactants and a widely used surfactant in cleaning products, cosmetic and personal care products.

The purpose of Sodium Lauryl Sulfate is to create a lathering effect to remove oil and dirt from hair. If shampoo easily makes a lather in the shower, there's a good chance it contains sulfates.

Stearic Acid

This odorless, colorless, wax-like fatty acid is commonly found in vegetables and animal fats. Stearic acid is ideal as an emulsifying agent and great for hair products to coat, condition and protect the hair shaft without dulling or weighing it down.

Procedure:

- Take 50 ml water in a beaker and 5 g of sodium lauryl sulphate.
- Add 1.3 g of stearic acid to this and heat up to 80 °C till homogeneous mixture is obtained.
- In another test tube dissolve 0 .5 g of NaoH and 15 ml of water heat on water bath.
- Pour the test tube in the beaker with stirring for 10 minutes
- Add 1.5 g of lanolin stir the mixture and heat for 10 minutes in water bath