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## Review Article

# Formulation And Evaluation of Herbal Body Wash Solution

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### ABSTRACT

Body wash is a liquid cleaner designed especially for the body. It aids in cleansing the skin of debris, perspiration, and pollutants, leaving it feeling renewed and clean. In order to accommodate various skin types and individual preferences, body washes frequently come in a range of fragrances and formulas. Usually, the substance is lathered onto a sponge or washcloth in the shower or bathtub before being applied to the body. It's a fantastic way to feel refreshed and clean at the beginning or finish of the day! One well-liked cleansing product made especially for the body is body wash. It is used in baths and showers and is a liquid that is typically supplied in bottles or other containers. Body wash's main objective is to cleanse the skin by eliminating perspiration, debris, and pollutants, leaving it feeling clean and renewed. Convenience is one of the key benefits of utilizing body wash. Body wash is in liquid form, which makes it simpler to apply and lather onto the skin than typical bar soaps. For a more complete and efficient cleaning experience, it can be used with a washcloth, loofah, or even just your hands. To accommodate various skin types and individual preferences, body washes are available in a broad variety of fragrances, formulas, and textures. While some body washes may include hydrating elements to help moisturize and nourish the skin, others are specially made for sensitive skin. Everybody may choose a body wash that meets their demands thanks to the wide range of options offered. Many body cleansers provide more advantages than just cleaning. Some include exfoliating components, including mild scrub granules or chemical exfoliants, which aid in the removal of dead skin cells and encourage the development of a more radiant, smoother complexion. Others could include components that offer further sustenance and skincare advantages, such as vitamins, antioxidants, or essential oils. The technique of using body wash is easy. Simply moisten your body with water, then apply a tiny bit of body wash to your hands or a washcloth, lathering it onto your skin while paying particular attention to trouble

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spots. Finally, give it a good rinse with water to get rid of any leftovers. Your skin is left feeling clean and renewed. Body washes can be a sensual pleasure in addition to being an efficient way to cleanse the body. The vast selection of fragrances, which range from fruity and floral to energizing and fresh, may make your bath or shower a sumptuous and fragrant experience. Throughout the day, the lovely scent may cling to your skin, leaving you feeling renewed and smelling fantastic. Although most individuals can safely use body wash, it's still a good idea to look at the contents and pick a product that works for your skin type and any particular issues you may have. It's advisable to choose fragrance-free or hypoallergenic products if you have any allergies or sensitivities.

## INTRODUCTION

A person's skin type, degree of activity, and personal preferences all affect how often they use body wash. Dermatologists advise taking a shower, bath, or washing your body every two to three days, with modifications made for things like perspiration from physical activity. It's crucial to remember that taking too many showers can cause dry skin and damage the skin's protective layer, increasing the risk of infection. However, taking too few showers can result in problems like body odor, acne, psoriasis and eczema, and an imbalance of beneficial and harmful microorganisms on the skin. In the end, body wash frequency ought to be customized based on personal demands, skin type, and lifestyle variables (1). It is advised to find a balance between practicing proper personal cleanliness and refraining from excessive washing, which can deplete the skin of its natural oils and cause skin issues.

### Advantages

Using body wash instead of conventional bar soap has the following benefits:

- 1) **Moisturising Properties:** Body washes frequently include moisturising compounds that aid in hydrating the skin, which is particularly advantageous for sensitive or dry skin.
- 2) **Exfoliation:** Body washes help to exfoliate the skin, which can be especially beneficial for skin

that is prone to acne. They also assist to remove dead skin cells and unclog pores.

- 3) **Hygienic:** Because body washes come in sealed containers, which lowers the possibility of bacteria and germs growing on the product, they are more hygienic than bar soaps.

- 4) **Aromatherapy Benefits:** A lot of body washes come with different fragrances that might give aromatherapy advantages, such as calming essential oils that improve the cleansing process.

- 5) **Travel-Friendly:** Body washes are convenient for travel as they are often available in travel-sized bottles, making them easy to pack and carry around.

These benefits collectively make body wash a popular and effective choice for personal hygiene routines, offering advantages in terms of moisturization, exfoliation, hygiene, aromatherapy, and convenience for travellers.

### Material And Methodologies-

Material: Plant Profile:-

1. Aloe Vera Gel:

Synonym: Aloe

Biological source: Aloe is dried latex of leaves of it also known as Curacao aloe.

Family: Liliaceae

Use: Helps to retain moisture.

2. Turmeric:

Synonym: Indian saffron, Haldi

Biological source: Curcuma longa

Family: Zingiberaceae

Use: Provide glow and luster to the skin.

3. Sandalwood:

Synonym: Yellow sandal wood

Biological source: Dried heart of Santalum album

Family: Santalaceae

Use: Prevents wrinkles

4. Licorice:

Synonym: Glycyrrhiza glabra

Biological source: It is obtained from dried peeled unpeeled roots of plant Glycyrrhiza glabra.

Family: Leguminosae

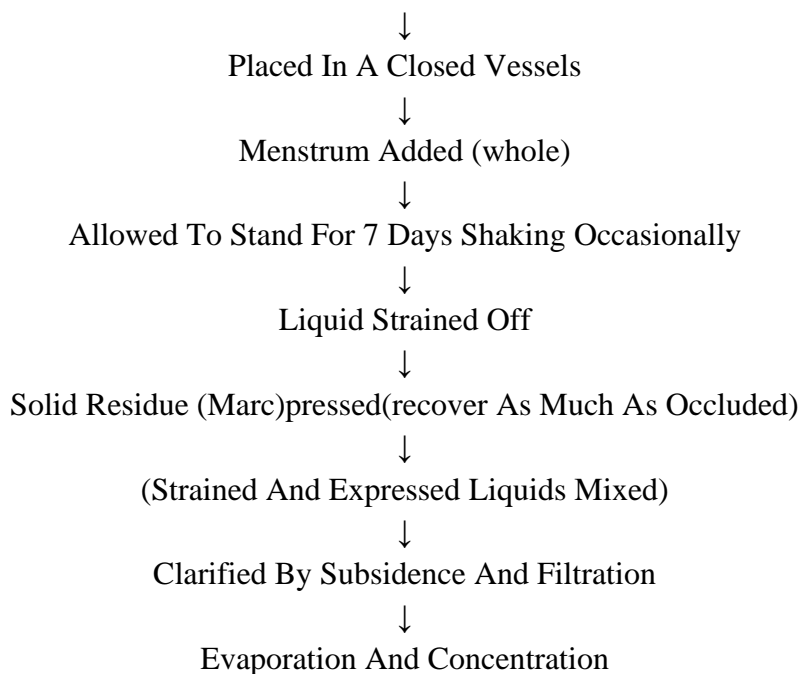


Use: Brightens complexion

Extraction Process (MACERATION)

Methodologies:

Plant Material (Crushed Or Cut Small Or Moderately Coarse Powder)



**Formula:**

Name Of Ingredients	Quantity Taken (gm) (For 100ml)
Aqua	Q. S
Carbopol 934	0.4
SLES Liquid	50
Ethylenediamine tetraactic acid	0.1
Sodium hydroxide	0.4
Ethelene glycol monostearate	1.5
Propylene glycol	2
Activated charcoal	0.3
Salicylic acid	0.5
Turmeric	0.1
Sandalwood	0.1
Aloe vera gel	0.1
Perfume	Q. S
Liquorice	0.1

## Preparation of Body Wash

Phase 1:-

Take 20gm distilled water + 0.1gm Di .EDTA +0.4 gm Carbopol 934 and heat up to 75° C till it dissolve properly.

Phase 2:-

15gm distilled water +1.5gm Ethelene glycol monostearate +50gm Sodium lauryl ethyl sulphate slowly heat up to 75° C

Phase 3:-

0.3gm Activated charcoal +2gm propylene glycol +0.1 turmeric extract +0.1 aloe vera gel mix it at room temperature.

Phase 4:-

9 gm distilled water + 0.5 gm salicylic acid mix it at room temperature.

### Procedure

Take a beaker of 250ml.



Add phase 1 and phase 2 in beaker and heat it upto 75° C.



Add phase 3 and phase 4 in different beaker and mix them at room temperature.



Add both solution at room temperature. Stir it properly.



Final product

### Evaluation Test

- 1) pH test :- A computerized pH meter was used to determine the pH. Before being read at room temperature, the cathode was immersed in the body wash solution for 10 minutes. Make a note of the PH meter's reading.
- 2) Foam Height Test: A sample is dissolved in water, shaken, and the foam volume is measured over time to determine the foam height and stability of a body wash. Stability and good foaming ability are desirable qualities.  $Sp = \frac{vt}{v_0} \times 100\%$ , where  $V_0$  is the foam volume after time  $t = 1$  minute [cm<sup>3</sup>],

$V_t$  is the foam volume after time  $t = 10$  minutes [cm<sup>3</sup>], and  $Sp$  is the foam stability [%].

- 3) Test of Dirt Dispersion and Cleaning: A thumb imprint test can be used to determine how well a body wash removes dirt and microorganisms. Before and after being cleaned with the test product, thumbs that are exposed to the environment are pushed onto agar plates. Good cleaning efficacy is indicated by decreased microbial growth on the cleaned thumb print.
- 4) Skin Irritation Test: A panel of volunteers was used to evaluate body cleansers for skin irritation and compatibility. There were no indications of discomfort or sensitization.
- 5) Viscosity Test: Viscosity is measured using an Ostwald viscometer. The amount of time needed for the liquid to flow by gravity between marks A And B inside the capillary tube is found. The test liquid's flow time is compared to the amount of time needed for a known-viscosity Liquid and an unknown-viscosity liquid.

### CONCLUSION

The process of creating body wash is intricate and necessitates a deep comprehension of the functions and interactions of the many components. The objective is to develop a solution that addresses various skin types and issues, provides a pleasing sensory experience, and effectively cleans the skin. Humidity (typically 5–15%), pH (slightly acidic or neutral, usually 6-8), total quantity of fatty components (59–91%), free alkali (ideally below 0.1%), and total alkali content (0.98–1.60%) are the most crucial physicochemical criteria to consider when assessing body wash products. The composition and user preference can affect the optimal foam height. Formulators must adhere to systematic procedures, adjust to shifting consumer tastes and trends, and work to provide premium personalized body washes that satisfy all



skin types and needs. A successful body wash business depends on navigating cosmetic restrictions, developing a unique brand identity, and consistently innovating

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