



Anti-blemishing Soap with Ylang Ylang oil

Rohit D. Marodkar¹, Anushri P. Adhau² & Dr.Madhuri Pardeshi (Gahalod)³

^{1 2 3}Department of Cosmetic Technology, Vidyabharati Mahavidyalaya, C.K.Naidu Marg, Camp, Amravati -444602 (M.S.) India.

Email Id: rohitmarodkar90@gmail.com

DOI: 10.5281/zenodo.4564330

Abstract

The marketing of face cleanser in the form of solid called soap. Anti-Blemishing soap is water-soluble sodium salts of fatty acids. Advantageous over a simple bar soap-Blend of fixed oils, waxes, and butter using on the face can remove natural oils from the skin that form a barrier against water loss seborrhea. It helps in maintaining the excessive oil secretion of the sebum from the sebaceous gland.

Keywords: Anti-Blemishing, Seborrhea, Sebum, Soap.

Introduction

Blemishes refer to dark marks or skin discoloration left behind due to acne, whiteheads, blackheads, or pimples. They usually develop on the face, back, upper arms, or chest but generally can spread on any part of the body with hair follicles or pores. To condition, the face giving Anti-Blemishing properties in the form of solid is called as Anti-Blemishing Soap.

Anti-Blemishing Soap is an alkaline solution often called lye or sodium hydroxide includes saponification whereby the triglyceride fats first hydrolyze into salts of fatty acids. The alkaline solution known as lye brings about a chemical reaction called saponification.

Base (lye) + Acid (oil/fat) = Salt (soap)

Glycerol water-soluble sugar alcohol is a byproduct of this reaction. Ylang Ylang oil has a soothing effect on overly oily skin by balancing the secretion of sebum.

Material and method:

A) Raw Material and active: Was gotten active ylang ylang oil from ocean perfumery Pvt. Ltd Kannauj, U.P. The base formula would be prepared from the raw materials available in our college.

B)Method: Prepare the soap base to melt it by heating add ylang ylang essential oil at a temperature 60⁰ c pour the melted base into the mould again pour the soap base completely into the moulds.

Formulation

Table no: 1 Formulation of Anti-Blemishing Soap

Sr. no	Ingredients	Quantity(100)g
1	Propylene glycol	25g
2	Sorbitol	25g
3	Sodium lauryl ether sulphate	23g
4	Stearic acid	9.5g
5	Sodium hydroxide + water	6.5g
6	Triethanolamine	1.5g
7	Tween80	0.5g
8	Preservative and perfume	q.s
9	Color	3g
10	Ylang-ylang oil	5g

Evaluation of Soap

Evaluation of physicochemical parameters



1) Determination of color, odor, and appearance:

Procedure: The appearance and color of the product were examined by naked eyes against cream context, the odor was smelled.

2) Determination of pH:

Procedure: The 10g of formulation dissolved in 100ml of distilled water and then it's stored for one hour after completing one hour it measures the pH of the product with the help of a digital ph meter.

3) Determination of alcohol insoluble matter:

Procedure: 5g of sample was taken in a conical flask, and then added to 50ml of warm ethanol and stirred vigorously to dissolved the solution was refined through a tarred filter paper with 25ml of warm ethanol and dried it at 105⁰c for one and half hour. The weight of the dried paper was taken.

Formula:

$$\% \text{ alcohol insoluble matter} = \text{weight of residue} \times 100 \div \text{weight of a sample}$$

4) Determination of percentage free alkali:

Procedure: Around 5g of sample was taken in a conical flask and then added into 50ml of neutralized alcohol. It was boiled under reflux on a water bath for 30 minutes, after 30 minutes it takes for cooling the product and after that adds 1ml of phenolphthalein solution. Then it was immediately titrated with 0.1NHCL.

5) Determination of foam height:

Procedure: 0.5gm of a sample of soap was taken and dispersed in 25ml of distilled water. Then transferred into 100ml of measuring cylinder; volume was made up to 50ml with water, 15 strokes were given and stand till aqueous volume measured up to 50ml and measured the foam height, above the aqueous volume.

6) Determination of foam retention:

Procedure: 25ml of the 1% soap solution was taken into 100ml of a graduated measuring cylinder. The cylinder was covered with a cap and stirred 15 times. The volume of foam at 1-minute intervals for 4 minutes was recorded.

7) Photographic Evaluation:

Procedure: One human volunteer of the age group [30-50] was required to assist in this research. The newly formulated tightening soap was requested to apply for 20 days.

Photographs of their right and left sides of the face were taken before applying the product and then after using 10 days, 20 days of the Anti-blemishing product the comparison can be easily made between two state sides, before applying the product and after applying the product. The differences between the skin before and after applying the formulated soap were able to distinctly visualize easily.

Result

Evaluation of physicochemical parameters of soap formulation+

Table no 2: Evaluation results of physicochemical parameters of soap formulation

Sr. no	Parameter	Sample result
1	Color	Light brown
	Odor	Fragrant
	Appearance	Good or solid like
2	pH	7.5
3	Alcohol insoluble matter	16.0
4	% of free alkali	0.26
5	Foam height(cm)	24
6	Foam retention(min)	7.0

7. Photographic Evaluation:



Fig.No.1. Left side of the face: Before applying the soap



Fig.No.2. Left side of the face: After 15 days of applying the soap



Fig.No.3. Right side of the face: Before applying the soap



Fig.No.4. Right side of the face: After 20 days of applying the soap

Result

The above photographs show that the blemishes were minimized within 10 or 20 days of application of the product.

Conclusion

Anti-Blemishing soap aims in improving the skin texture by fighting blemishes. The main motto of preparing this soap formulation in solid form so as it will cleanse the face as well as condition the skin with the moisturizing property. By correcting the formulation of a typical soap and by the inclusion of such effective ingredients as ylang ylang oil which in addition to its aromatherapy treatments benefit the skin in all possible ways.

References:

- [1]. Reed, W.H., Soap Chem. Spec, 32(5), 197 (1956).
- [2]. IS: 11479 (Part 1) – 2001, Antibacterial Soap, Bureau of Indian Standards, New Delhi.
- [3]. Ferguson, RH. Roservear, F.B., Stillman, RC., Ind. Eng., Chem., 35: 1005, 1943.



- [4]. IS : 11303-1986, Specification for Transparent Soap, Bureau of Indian Standards, New Delhi.
- [5]. IS : 4199-1999, Liquid Soap – Specification, Bureau of Indian Standards, New Delhi.
- [6]. IS : 2888-2004, Soap – Specification, Bureau of Indian Standards, New Delhi.
- [7]. Poucher's Perfumes, Cosmetics and Soaps, Hilda Butler, Michael Willcox, Volume 3, Ninth Edition (1973), pg. no- 393
- [8]. Sellers, R. L., Carpenter, F.G.: Cosmetics and Toiletries, 107, 119 (1992).
- [9]. McBain, J.W., Ross, S.: Oil and Soap, 24, 97 (1944).
- [10]. Textbook of Cosmetics, Rajesh Kumar Nema, Kamal Singh Rathore, Bal Krishna Dubey, First Edition 2009 Pg. no. 224, 225, 226, 227, 228
- [11]. Shlomo Magdassi, Elka Touitou, Cosmetic and Technology Series, Volume 19 pg. no. 1-4.
- [12]. Arakane, K. and Active Cosmetics, 3rd [third] Edition, 281, CRC Press, New York 2016. Pg. no. 75-77
- [13]. Baki, G. and Alexander, K.S. Introduction to Cosmetic Formulation and Technology. New Jersey 2015. Pg. no. 284, 291
- [14]. Aramo, Skin and Hair Diagnosis System. Sungnam Aram Huvis Korea Ltd 2012; Pg. no. 1-9