



REVIEW ON SOAP

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ABSTRACT:-

Cleaner is a swab of a adipose acid used in a variety of sanctification and slicking products. In a domestic setting, detergents are surfactants generally used for washing, bathing, and other types of housekeeping. In artificial settings, detergents are used as thickeners, factors of some lubricants, and precursors to catalysts. When used for cleaning, cleaner solubilizes patches and smut, which can also be separated from the composition being gutted. In hand washing, as a surfactant, when lathered with a little water, cleaner kills microorganisms by disorganizing their membrane lipid bilayer and denaturing their proteins.(citation demanded) It also emulsifies canvases , enabling them to be carried down by running water. Cleaner is created by mixing fats and canvases with a base. Humans have used cleaner for glories; substantiation exists for the product of cleaner- suchlike accoutrements in ancient Babylon around 2800 BC.

KEYWORDS: Soap, Foaming, Antibacterial activity.

INTRODUCTION^[1] :-

Cleaner has been produced around the world for glories. Cleaner is primarily made for its use as a sanctification agent, still it's also used extensively in artificial settings as an component in grease and other artificial lubricants. According to Wikipedia, the foremost given cleaner fashions were recorded on ancient sumptuous complexion tablets around 2800 BC. Systematised cleaner timber diligence first appeared in Syria and other Middle Eastern countries around the eighth and ninth centuries announcement. Cleaner is technically a sodium or potassium swab of a adipose acid – a type of swab emulsion that's produced as a result of the chemical response called „ saponification, “ which takes place when adipose acids(factory canvases or beast fats) are emulsified with a sodium or potassium hydroxide(alkali – „, lye “) result.(See my cleaner making terms runner for further information). previous to the development of ultramodern cleaner making constituents, ashes were used as the alkali to make cleaner. In ultramodern times, the primary alkali used in hand wrought cleaner timber is sodium hydroxide, else known as acidulous soda pop(NaOH). Potassium hydroxide(KOH) is another type of alkali that's used to make liquid cleaner. Both sodium hydroxide(bar) and potassium hydroxide(liquid) detergents can be made by home cleaner makers.

Sanctifying every day has been a social norm since the ancient period. The act of sanctification, which originally served purely functional purpose of hygiene, has now been promoted as an act of relaxation to ameliorate one's skin health. Cleaner made of fat and ash has been in use since the Mesopotamian period for drawing clothes and hair. The significance of cleaner for particular hygiene was honoured only after the first century. Since also, the particular cleaner assiduity has evolved fleetly with scientific backing.

HISTORY OF SOAP^[1,2,3,4,5]:-

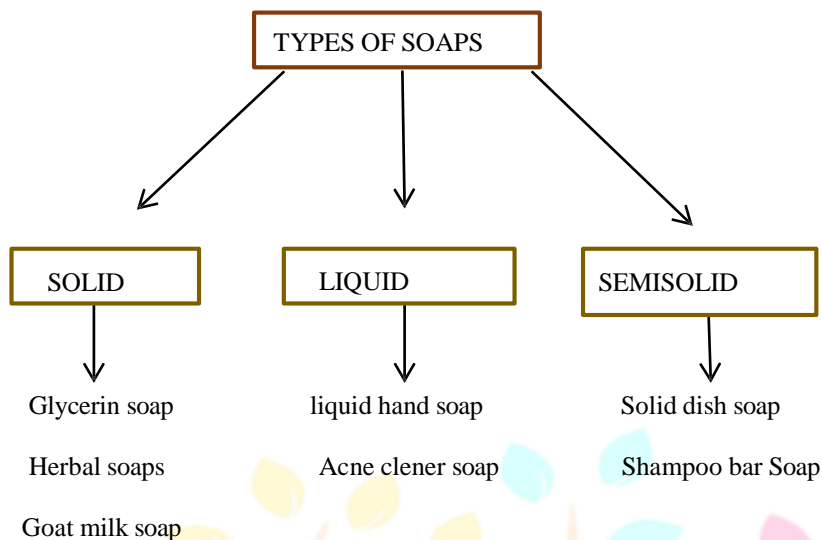
Cleaner is a generally used skin sanctification product, the chemical composition of which is an alkali swab of a adipose acid. The history of cleaner dates back thousands of times to ancient Babylonians. The first cleaner made was a slithery gunk with unwelcome smell produced from cooking beast fat with an alkali called” lye” deduced from woody ashes. Since also, cleaner has experienced an evolutionary change with numerous kinds and colourful constituents added to make it cosmetically respectable. – The present day skin cleaners are more complex than the name” cleaner” implies, containing not only surfactants but also skin- conditioning agents.

The art of skin sanctification has progressed over several 1000 times rehearsed for particular hygiene or religious ritual or remedial purpose. The oldest responsible diurnal ritual of bathing can be dated back to ancient Indians as recorded in "grihya sutras." Sanctification in ancient days was done using a piece of bone or gravestone to scrape off the contaminations. Latterly societies used the suspense of soapwort factory ash to wash their hands. Indeed the ancient Romans who innovated conduit systems for running water and public cataracts didn't use cleaner for cleaning. It was mentioned that Cleopatra used essential canvases and white fine beach as abrasive for bathing.

The foremost record of cleaner timber was set up in Sumerian complexion tablets dating to circa 2000B.C. The cleaner was made by boiling a admixture of fat with wood ashes and used for removing grease from hair before dying. In Ebbers Papyrus, an Egyptian scroll, it was mentioned that the ancient Egyptians bathed regularly and used a combination of beast oil painting with ashes dating to 1550B.C. By 600B.C., the Phoenicians prepared cleaner using tree ash and beast fat. Cleaner got its name from the Roman legend that mentioned Mount Soap where the creatures were offered. The rain washed off the beast fat and woody ashes which formed cleaner along mountainside. The Roman women discovered that this material helped in washing clothes. The Roman scholar, Pliny the Elder, mentioned in his book "Naturalism historia" from 77 bulletin, that the cleaner made from tallow and ashes was used by Gaul's for giving a sanguine shade to the hair. The Greek croaker Galen(130- 200 bulletin) was the first to write about the use of cleaner for particular hygiene.

By the 7 century, cleaner timber came an art in Spain, Italy, and France where olive oil painting was used for cleaner timber. Ultimately, spices were added to cleaner and technical detergents for bathing, shampooing and laundry were available. By the 13th century, cleaner timber began in Britain which led to the destruction of large areas of British woods. As a result, cleaner was heavily tested and came a luxury product that only the royals could go for everyday bathing Castile cleaner was manufactured by Europeans grounded on olive oil painting making it a pure white cleaner. It got its name from the crown of Castile, where the cleaner was manufactured in large scale. The cleaner came veritably popular among royal houses of Europe. Meanwhile, a cleaner began in West Africa, named "Dudu- Osun" made from the ash of locally gathered shops and peels which gave it a black colour By 1853, Gladstone abolished the duty on cleaner and made it affordable. In 1791, the French druggist Nicolas Leblanc discovered an alkali soda pop ash by chemically transubstantiating sodium chloride. As alkali was a crucial component in cleaner, this discovery came a corner for marketable cleaner manufacturing. The demand for cleaner increased when Louis Pasteur placarded that good particular hygiene reduced the spread of infections. During world war II(1948), there was an acute deficit of raw accoutrements for cleaner manufacturing. This led to the discovery of synthetic soap by German scientists. This came a crucial event in shaping the current day skin cleaner assiduity as utmost of the ultramodern cleaners were grounded on synthetic soap(Syndetic) systems

Lever sisters in England started importing ultramodern cleaner by the name "Lifebuoy" in India during the British period By 1897, the first cleaner manufacturing factory was set- up in India by North- west cleaner company in Meerut, Uttar Pradesh. Mr. Jamshedji Tata, set up a cleaner manufacturing factory after buying coconut oil painting manufactories in Cochin, Kerala. In early 1930s, the first ingrained cleaner grounded on coconut oil painting appeared in the Indian request. Indeed though cleaner was originally anticipated to deliver only sanctifying benefits, consumer prospects came with time to deliver health and ornamental benefits. Face-active substance(Surfactant) is the top component in a cleaner which is responsible for raging and sanctifying. Surfactant's capability to lower the face pressure is because of its unique structure with hydrophobic and hydrophilic ends. Surfactant is also responsible for the damage to the stratum carenum(SC) causing blankness, vexation, increased trans epidermal water loss, flaking, and occasionally itch. With a lesser understanding of the part of SC factors, newer technologies surfaced for manufacturing mild and moisturizing cleaners. There are two types of surfactants-natural and synthetic. Natural surfactants were used in the manufacture of traditional detergents, transparent bars, super-fatted detergents, and comber's. Whereas synthetic surfactants were used in the manufacture of syndet bars. It was well established that syndic bars have significantly lower irritant eventuality compared to cleaner with natural surfactants. The present day syndet bars employ milder surfactants similar as sodium cocoyl isethionate and glycinate in manufacturing to reduce the vexation and emollients similar as canvases, glycerine, and petrolatum for moisturization. Liquid body wetlands are veritably popular for their convenience in allocating and hygiene. They deliver lesser emollient deposit than cleaner or syndet bars. Facial cleaners are specifically curated for the health of facial skin occasionally. Within-aging benefits. They're different from liquid body cleaner by containing milder and premium surfactants and lower emollients to avoid the heavy" after- use sense.



A] A Solid soaps:-

1) Glycerine soap:-



Figure- 2 : Glycerin soap

METHODS OF PREPARATION^[8] :-

1. The needed volume of canvases were counted and mix together and hotted until it get melt and blend duly
2. contemporaneously the needed volume of lye is dissolved in water.
3. also the result of lye were added into the admixture. of canvases sluggishly with vigorous shifting until the saponification response takes place.
4. After the conformation of thick homogenous admixture the remaining quantum of constituents like orange peel greasepaint excerpt, sandalwood greasepaint excerpt, one teaspoon of honey and bomb oil painting were added to the admixture and stirred the

admixture for some time.

5. also this admixture was poured into the moulds and covered with aluminium antipode kept for 24 hrs in refrigerator

EQUIPMENT :-

1. Containers
2. Thermometer
3. Mixing utensils
4. Soap moulds
5. Heat source
6. Fragrance, colorants, additives

EVALUATION PARAMETERS^[6,7]:-

PHYSICAL

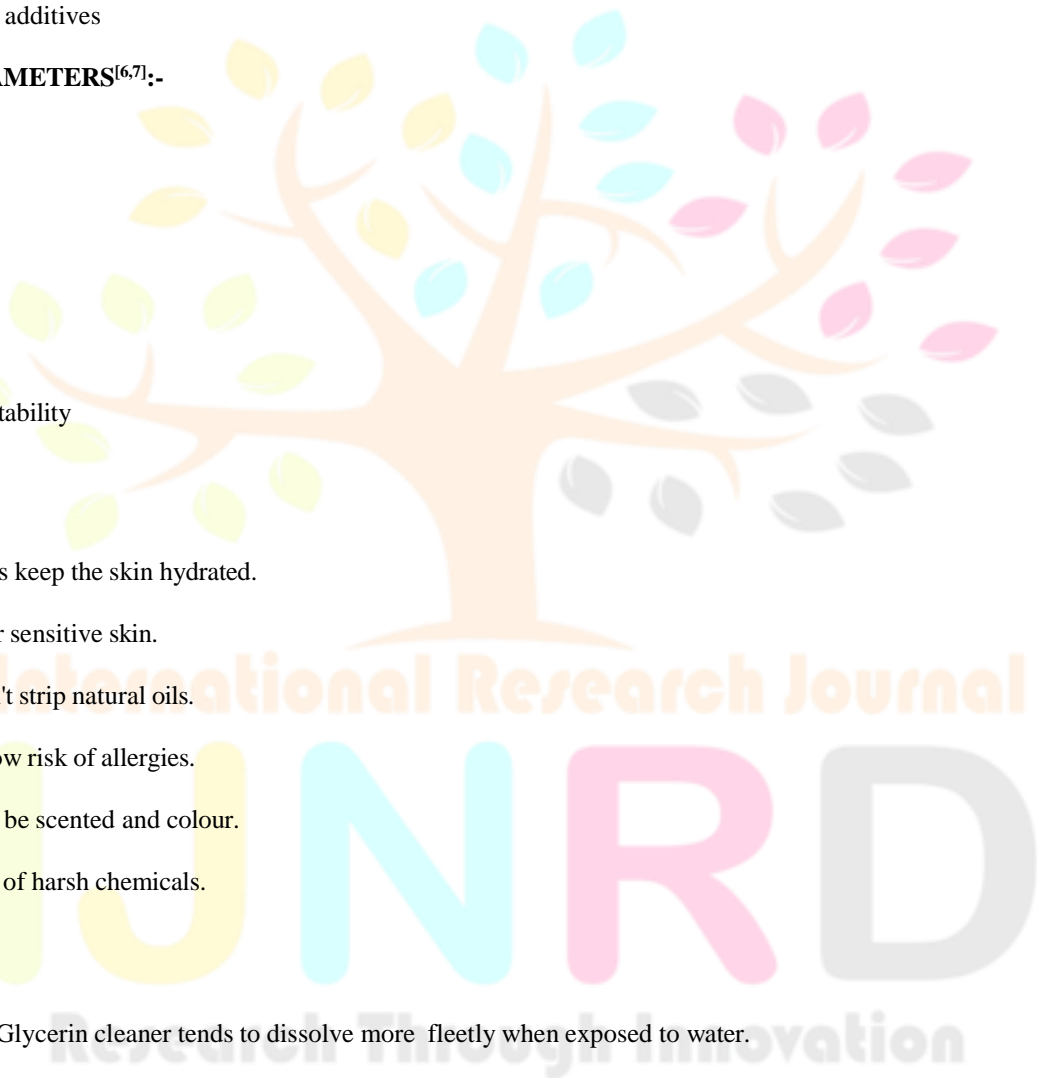
1. Colour
2. Odour
3. pH
4. Foam
5. Foam Height
6. Foam retention
7. High temperature stability
8. Skin Irritation Test

ADVANTAGES :-

1. Moisturizing: Helps keep the skin hydrated.
2. Gentle: Suitable for sensitive skin.
3. Non-drying: Doesn't strip natural oils.
4. Hypoallergenic: Low risk of allergies.
5. Customizable: Can be scented and colour.
6. Natural: Often free of harsh chemicals.

DISADVANTAGES :-

1. Quick Dissolution Glycerin cleaner tends to dissolve more fleetly when exposed to water.
2. Limited Lather It may produce lower lather compared to other detergents.
3. Fragility Glycerin cleaner can be soft and break fluently if not handled precisely.
4. Price It can be more precious than traditional cleaner options.
5. Shorter Shelf Life Due to its high glycerin content, it may have a shorter shelf life.



2) HERBAL SOAP:-



Fig.2:Herbal soap

METHODS OF PREPARATION ^[9,10,11] :-

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1. Take Needed volume of Beeswax and Liquid paraffin in demitasse dish. toast this admixture in water bath for melting purpose. Remove dish from water bath.
2. Take Borax and distilled water in teacup. toast this result in water bath for about 75C.
3. This Borax result added drop wise in demitasse dish with nonstop shifting. Add Methyl paraben in demitasse dish dissolved it.
4. Add Neem oil painting and Almond oil painting in this result. Add incense for scent
5. Herbal Cold Cream was attained

EQUIPMENT:-

1. Double Boiler or Microwave oven
2. Soap Base - This can be melt- and- pour glycerin cleaner base or manual cleaner.
3. Herbal constituents
4. Colourings"
5. Fragrance Oil
6. Cleaner Molds
7. Mixing implements
8. Spray Bottle with Rubbing Alcohol

EVALUATION PARAMETERS^[15]:-

1. Constituents – Check for natural and safe constituents, with a focus on sauces and essential canvases known for their skin benefits.
2. Scent – The cleaner should have a pleasing and natural scent, not overpowering or artificial.
3. Texture – Assess the cleaner"s texture; it should be smooth and not contain any gritty or rough patches.
4. Lathering – estimate the cleaner"s lathering capability, as it should produce a rich lather for effective sanctification.
5. Moisturizing parcels -A good herbal cleaner should leave the skin feeling moisturized and not exorbitantly dry

PHYSICAL :-

1. Colour
2. Odour
3. pH
4. Foam
5. Foam Height
6. Foam retention
7. High temperature stability
8. Skin Irritation Test

ADVANTAGES^[12,13,14] :-

1. It Prevents geriatric and dehumidification of skin.
2. As cold creams contain enough quantum of water and oil painting, they keep skin safe from the rough surroundings.
3. They also keep skin moisturized and safe
4. Cold creams are designed to remove makeup and smooth the skin
5. Medicated cold cream is substantially used as topical pharmaceutical lozenge form for the treatment of skin.
6. To help in the conservation of humidity balance of skin and avoid rough skin co uses of cold cream(non- treated).
7. As sanctification medication to remove make
8. To give an emollient effect and unctuous defensive subcaste on the skin.
9. Also, give a chemical hedge as with sun block constituents

DISAVANTAGES :-

1. Limited lather and raging parcels.
2. Potentially shorter shelf life due to natural constituents.

3. Advanced cost compared to synthetic detergents.
4. Variable scents grounded on natural constituents.
5. threat of antipathetic responses to herbal factors.

3) GOAT MILK SOAP :-



Fig.3:Goat milk soap

METHODS OF PREPARATION ^[20,21]:-

Melt and pour process:

The most notable benefit of melt and pour soap bases is that they avoid the need to deal with lye, a caustic chemical that has already been mixed into the soap base. Another benefit of melt and pour soap bases is that, unlike cold-processed soaps, the final product does not require a curing period, which means the soap does not need to be left untouched for days or weeks in order for the lye to be neutralised and the saponification process to be completed; melt and pour soaps are ready to use right away once they have been removed from their moulds. As the soap sits, it will get harder and gentler. As a result, the melt and pour approach has gained popularity.

PROCEDURE :-

1. The goat milk basis should be weighed and sliced.
2. Grind the kapok gum and strain it through a number 150 sieve to make a fine powder. Then mix together the finely powdered kapok seed and the excipients specified below.
3. The juice of a musk melon, Aloe vera juice comes from a plant called aloe vera, Argan oil is a Moroccan oil that derives from the Argan tree (vitamin E), Orange, Before pouring these ingredients into the goat milk base, fully combine them.
4. Base melt it into a liquid and properly incorporate all of the ingredients while it's heating. After adding the essential oil, pour the liquid into the mould and place it in the refrigerator for about 2 hours
5. Pour Into Molds: Pour the soap mixture into your soap molds. You can use silicone molds or wooden molds lined with parchment paper.
6. Curing- Cover the molds with a towel and let them sit in a cool, undisturbed place for about 24-48 hours.
7. Cut and Cure: Once the soap has set, remove it from the molds and cut it into bars. Place the bars on a rack in a well-ventilated area to cure for 4-6 weeks. This allows the soap to harden and the lye to fully neutralize. Packaging: After curing, your goat milk soap is ready to use. You can package it as desired.

EQUIPMENT:-

1. A glass measuring cup, a microwave, and a water bath.
2. Spoon
3. Moulds for soap As a soap base.
4. Optionally, add goods, colour, and aroma to the mix.
5. Digital balance.

EVALUATION PARAMETERS^[22,23] :-

PHYSICAL

1. Moisture content
2. Total Fatty Matter
3. Free Caustic Alkali
4. Foam Height
5. Mush Value
6. Freedom From Grittiness
7. Freedom Form Cracking
8. Skin Irritation Test
9. Clean Efficiency

ADVANTAGES ^[19]:-

1. Moisturizing Provides natural skin hydration.
2. Gentle Suitable for sensitive skin, less likely to beget vexation.
3. Rich in Nutrients Contains vitamins and minerals for skin health.
4. slipping Helps with skin texture and fine lines.
5. Acne Management May help in managing acne.
6. Anti-Inflammatory Reduces skin inflammation.
7. Natural constituents frequently made with chemical-free factors.

DISADVANTAGES:-

1. Cost It can be more precious than regular marketable detergents.
2. Limited Lather Goat milk cleaner produces lower lather compared to some synthetic detergents.
3. Antipathetic responses Some people may still be sensitive or antipathetic to constituents in scapegoat milk cleaner.
4. Shorter Shelf Life Due to natural constituents, it may have a shorter shelf life.
5. Variable Scentscan vary grounded on natural constituents, which might not be harmonious.



B] LIQUID SOAP:-**1) LIQUID HAND SOAP :-****Fig.4:Liquid hand soap****METHODS OF PREPARATION^[19,20] :-**

1. Measured quantum of canvases for the expression were kept in the swell in the teacup
2. Canvases were hotted at 160 ° C formals
3. While the canvases were hotting up, lye- water result were prepared.
4. When the lye- water is fully mixed and clear, 15 h sluggishly it was added into canvases . quantum of lye and water needed to dissolve
5. Canvases and lye were stirred together. also, started was blasting it with the mechanical stirrer.
6. Depending on the type of canvases , it'll take a long time and to get to trace. occasionally as important as 30 twinkles. 7. Once the cleaner has reached trace it was stirred for one further time and hotted by placing a lid.
8. Cleaner was checked every 15- 20 twinkles for any separation.
9. It was cooked for 3- 4 hours. While cooking it was converted and go through several
10. Sufficient quantum of water was add to get the desire thickness and mixed it well.
11. After the cleaner paste has fully dissolved in the water
12. scent and colour were added in this step.
13. It was also cooled and poured it into a suitable dispenser and stored it in room temperature and used it for the farther evaluations

EQUIPMENTS^[18] :-

1. Pot or Saucepan
2. Long-Handled Spoon
3. Measuring Utensils (cups and spoons)
4. Soap Dispenser or Bottle
5. Heat Source
6. Safety Equipment (gloves and goggles)

EVALUATION PARAMETERS^[21,22] :-

PHYSICAL

1. Colour
2. Fragrance

CHEMICAL

1. PH of soap
2. Foam height
3. Foam retention
4. Test for chlorides
5. Alcohol insoluble matter

ADVANTAGES :-

1. Convenience Easy to use and lower messy than bar cleaner.
2. Hygiene Reduced threat of participating origins due to contact.
3. Variety Available in colorful scents and phrasings for different skin types.
4. Moisturizing numerous liquid hand detergents contain moisturizing constituents.
5. Allocating Control You can control the quantum of cleaner used, reducing waste.
6. Lower Residue Leaves lower cleaner proletariat and residue on cesspools and dishes.
7. Trip-Friendly Easy to carry in small holders for on- the- go use.

DISADVANTAGES :-

- 1) Environmental Impact Liquid cleaner frequently comes in plastic holders, contributing to plastic waste.
- 2) Cost It can be more precious per ounce compared to bar cleaner.
- 3) Chemical Complements Some liquid hand detergents may contain further synthetic complements.
- 4) Lower provident Liquid cleaner tends to be used up briskly than bar cleaner.
- 5) Packaging Waste The bottles and pumps produce fresh packaging waste.
- 6) Tumbles and Mess Liquid cleaner can be prone to tumbles and mess in the restroom or kitchen.

2) ACNE CLEANER SOAP:-**Fig.5:Acne clear soap****METHOD OF PREPARATION [25]:-**

1. Solidified introductory glycerine cleaner was counted and broken down into lower pieces.
2. It was transferred into a sword vessel and also hotted
3. In a water bath to melt the cleaner base and stirred Continuously with a glass rod.
4. The grease paint compositions were added to the base after the cleaner base was liquefied. Step
5. The mixture was stirred continuously to avoid lumps.
6. There was nonstop agitation with a glass rod for 15 twinkles until the molten admixture came Homogeneous.
7. The homogenous admixture was removed from the water bath, and Vitamin E oil painting and Tea Tree essential oil painting was added – It was stirred sluggishly.
8. The circumfluous admixture was poured into a mould and allowed to solidify.
9. The cleaner was allowed to solidify at room temperature until set and kept under physical observation for any characteristic changes.

EQUIPMENTS :-

- 1) Soap Base
- 2) Essential Oils
- 3) Herbs or Botanicals
- 4) Colorants (optional)
- 5) Soap Molds
- 6) Mixing Tools
- 7) Digital Scale
- 8) Thermometer
- 9) Safety Gear (gloves, safety glasses)

EVALUATION PARAMETERS [24] :-**PHYSICAL:-**

- 1) Colour
- 2) Odour
- 3) pH
- 4) Foam height
- 5) Foam retention
- 6) High temperature stability
- 7) Skin Irritation Test

ADVANTAGES :-

1. sanctification -Acne cleaner effectively cleanses the skin, removing dirt, redundant oil painting, and contaminations that can contribute to acne flights.
2. Exfoliation - Some acne detergents contain slipping constituents like salicylic acid or glycolic acid, which help unclog pores and remove dead skin cells.
3. 3.Oil Control - They can help regulate oil painting product, reducing redundant sebum that can lead to acne.
4. 4.Bacteria Control - Certain acne detergents contain antibacterial agents like tea tree oil painting, which can help combat the bacteria associated with acne.
5. Reduction of Inflammation - constituents like chamomile or aloe Vera in acne cleaner may have anti-inflammatory parcels, reducing greensickness and lump.

DISADVANTAGES :-

1. 1.Drying -Some acne detergents, especially those with high attention of acne- fighting constituents like salicylic acid, can be drying to the skin. This can lead to flakiness, greenishness, and discomfort.
2. 2.vexation - The active constituents in acne detergents, similar as benzoyl peroxide or salicylic acid, may beget skin vexation or a burning sensation in some people, especially those with sensitive skin.
3. 3.Overuse - inordinate use of acne cleaner, in an attempt to clear acne snappily, can lead toover-cleansing, which may worsen the condition by stripping the skin of its natural canvases .
4. 4.Ineffectiveness -Not all acne detergents work for everyone. Some individualities may not see significant enhancement in their acne using these products.
5. Skin Type comity -Acne detergents may not be suitable for all skin types. What works for unctuous skin may not be applicable for dry or sensitive skin, potentially aggravating being issues.
6. 6.Antipathetic responses -Some individualities may be antipathetic to certain constituents in acne detergents, leading to rashes, itching, or other adverse responses.

C] SEMI-SOLID SOAP:-**1. SOLID DISH SOAP^[27,28]****Fig.6:Solid dish soap****METHOD OF PREPARATION :-**

1. Grate or measure castile cleaner or use cleaner flakes.
2. Pustule water and add cleaner, stirring until it dissolves.
3. Mix in washing soda pop, also let it cool.
4. Add a many drops of essential canvases for scent.
5. Voluntarily, include bomb juice for redundant cleaning power.
6. Pour the admixture into a vessel and marker it.

7. Store in a cool, dry place and use as demanded for dishwashing.

EQUIPMENTS :-

- 1) Large Pot
- 2) Grater or Measuring Tools
- 3) Mixing Spoon
- 4) Storage Container
- 5) Funnel (optional)
- 6) Label

EVALUATION PARAMETERS :-

1. Cleaning Power
2. Suds Formation
3. Fragrance
4. Skin-Friendliness
5. Environmental Impact
6. Packaging
7. Antibacterial Properties
8. Customer Reviews
9. pH Level

ADVANTAGES:-

- 1) Effective drawing -Liquid dishwashing cleaner is known for its capability to effectively remove food remainders, grease, and smut from dishes, leaving them clean and candescent.
- 2) Accessible operation – It's easy to control and apportion, making it accessible for use without wasting redundant product.
- 3) Pleasant Fragrance – numerous liquid dish detergents come in a variety of appealing scents, making the dishwashing experience more pleasurable.
- 4) Gentle on Hands – Some formulas are designed to be gentle on the skin, reducing the threat of blankness or vexation, indeed with frequent use.
- 5) protean Use – Liquid dish cleaner is suitable for drawing a wide range of dishes and cookware, including dinnerware, pottery, Andon-stick shells.

DISADVANTAGES :-

- 1) Residue- Some liquid dish detergents may leave behind a adulatory residue on dishes if not irrigated completely, affecting the taste and appearance of food.
- 2) Environmental Impact-numerous conventional liquid dish detergents contain chemicals that can be dangerous to the terrain, similar as phosphates ornon-biodegradable constituents.
- 3) -Liquid dish cleaner can be more precious per unit compared to other dishwashing styles, like solid dish cleaner or dishwasher soap.
- 4) Packaging Waste- The plastic bottles used for liquid dish cleaner can contribute to plastic waste if not duly reclaimed.
- 5) Limited Life-Liquid dish cleaner tends to be used up more snappily than solid druthers, taking further frequent relief.

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2)SHAMPOO BAR SOAP^[27]:**Fig.6:Shampoo bar soap****METHOD OF PREPARATION :-**

1. There are two general approaches to creating a soap bar The cold process(Mould press process) and the Hot process(Melt and pour process) In our disquisition, the hot process was chosen over the cold process. This choice was grounded on different experimental studies that revealed that the final lustrous finish needed in the bar could only be fulfilled by the hot process. A 5050 lye result was prepared by combining NaOH and H₂O in a labelled vessel. Polypropylene glycol, vegetable glycerine, sorbitol, and surfactant were contained in a teacup and hotted
2. To 60oC with nonstop shifting. Once this temperature was reached, stearic acid and cetostearyl alcohol was added to it, and was hotted
3. To 68oC. After reaching this temperature, the lye result was sluggishly added and mixed for 20 mins by breaking and continuing at intervals. The result was allowed to settle for 1 hr at 68oC. After 1 hr, pulverized active element, in our case guava leaves greasepaint was precisely and sluggishly added with constant shifting to avoid lumps. This was followed by the addition of triethanolamine and preservatives. The cleaner result was allowed to cool to 62- 64oC before pouring into the cleaner earth to cool and harden.

EQUIPMENT

1. Simple balance
2. Analytical balance
3. Thermometer
4. Beaker
5. conical flask
6. stirrer
7. sabouraud agar plates and sieves
8. lab equipment included pH Meter
9. heating plate
10. thermostatic bath
11. incubator

EVALUTION PARAMETER^[28,29]

1. Dirt Dispersion
2. Foaming Ability
3. Determination of PH
4. Foaming Stability
5. Washability/Detergency
6. Isolation of Malassezia species

ADVANTAGES:-

1. Eco-friendly- Shampoo bars are eco-friendly because they usually have little or no plastic packaging, which reduces plastic waste.
2. Space saving-They are compact and space saving, making them ideal for small bathrooms or travel.
3. Longevity-Shampoo bars often last longer than liquid shampoos, saving you money and reducing the frequency of purchases.
4. Natural Ingredients-Many shampoo bars contain natural and organic ingredients that are good for hair and scalp.
5. Travel Friendly-Shampoo bars are easy to pack and carry while traveling because they have no liquid restrictions and won't leak into luggage.

DISADVANTAGES:-

1. Transition period-Some people experience an adjustment period when they change shampoo bars, where their hair may feel different because liquid shampoos do not contain certain chemicals.
2. Residue buildup-Depending on the hardness of the water and the particular bar, shampoo bars can sometimes leave a residue on the hair if not washed properly.
3. Limited selection - You may have a more limited selection of shampoo bars compared to traditional liquid shampoos, especially at brick-and-mortar stores.
4. Possibility of breaking- Shampoo sticks can break or fall apart if they get too wet or stored incorrectly, which can lead to product wastage.
5. Learning curve-Using a shampoo stick effectively may take some practice as it may differ from using a liquid shampoo and may not lather as easily. Despite these disadvantages, many people find shampoo bars to be a durable and effective alternative to traditional liquid shampoos.

CONCLUSION:-

Detergents is the combination of Potassium and Sodium mariners with the adipose acids. Due to its Foam forming property it's veritabily important in day to day life. Now a days Soap is veritabily important part of the life. Detergents are used for the colorful purposes like drawing, disinfection and colorful use in the domestic purpose, detergents are substantially answerable in water, Sanctifying every day has been a social norm since the ancient period. The act of sanctification, which firstly served purely functional purpose of hygiene, has now been promoted as an act of relaxation to meliorate one's skin health. Cleaner made of fat and ash has been in use since the Mesopotamian period for drawing clothes and hair. The significance of cleaner for particular hygiene was fete only after the first century. Since also, the particular cleanser sedulity has evolved swiftly with scientific backing

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