



# **Aloe Vera In Cosmetic Products: Striking A Balance Between Beauty And Safety Of Consumer Through Cosmetovigilance.**

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## **ABSTRACT:**

While the use of aloes has been useful in making beauty and cosmetic products more attractive, ingredients to check unwanted prices on abuse could be managed through a concept of cosmetovigilance.

Aloe Vera: You have probably heard in some natural cosmetic formulas because of its multifunctional actions, Aloe vera has earned a place ingredient that is already parament for moisture and hydration to hydrate or oriented from home care consumers as it acts moisturizing, anti-inflammatory, healing; This abstract examines the optimization given by Aloe Vera as an adjuvant for cosmetic efficacy and opens accessible approaches to unsafe considerations of cosmetovigilance. However, the challenges for Aloe Vera continue to be its efficacy and safety for all who are now exposed to many hair care products one-handed: mimicking the excellent skin-care world. Although its natural ingredients are fantastic for maintaining skin hydration, counteracting the signs of aging, and treating acne; if used long term can have side effects which may include allergic reactions or your own body getting too good at moisturising itself... over-moisturisation. To maintain the benefits of Aloe Vera in cosmetics, while preventing risks from overshadowing consumer safety, it becomes indispensable follow-up by cosmetovigilance practices. Such an overview in the current review is essential to highlight balancing strategies i.e., cosmetic benefits provided by Aloe Vera should be balanced with strict safety evaluations which are necessary for safeguarding consumer health and maintaining the integrity of a product. Incorporation of thorough safety assessments; and consumer feedback during the Product Development Lifecycle would promote the overall reliance on safe Aloe Vera-based cosmetics. This will attempt to synchronize the beauty benefits that are obtained from Aloe Vera with proper use while building trust amongst consumers and responsible cosmetic innovation.



Image :01

## Introduction

The tradition of using natural cosmetics ingredients goes far back than this time and might possess a curious background. Aloe Vera is one fine example of the many plants that serve their healing purpose and has been known throughout time as a universal home remedy for its soothing, moisturizing & healing factors[1]. The history of which Aloe Vera is a part leaves its lasting legacy, proven time and again in the scientific validation present in today's modern cosmetics[2]. However, the expanding use of Aloe Vera brought up a requirement for cosmetovigilance to guarantee it is securely used across various products[3].

## Historical Background

The constituents of Aloe Vera belong to different vitamins, and minerals in high content which are essential for the human body history starts with civilization which goes back a long time ago when ancient Egypt named this a Plant of Immortality[4]. acknowledged in antiquity, it was part of the beauty regimes of legends such as Cleopatra and Nefertiti. It was also used for its medicinal uses by assisting in the treatment of wounds, burns, etc. Despite this fact, Aloe Vera would not be seen again for several centuries until it penetrated the medical traditions of ancient Greece and Rome— as well as others such as India and China. All of these cultures appreciated this value for its medicinal as well as cosmetic purposes[5].

The Ayurvedic practice is called Aloe Vera Ghritkumari, and it is also a popular skin health product for balancing doshas. TCM also recognizes Aloe Vera as a particularly cooling herb and therefore suitable for clearing inflammation such as rashes of the skin. The Greco-Roman civilizations, however notable in their botanical compendiums of herbal pharmacopeia by the way the Dioscorides and Pliny the Elder knew well of Aloe Vera as a remedy for skin soothing.[1]

## Biological Source

Aloe Vera (also named *A. barbadensis*) is a member of the Asphodelaceae family scientifically known as the Aloe genus. A desert perennial that blooms in the great deserts and semi-arid lands. This succulent plant can store water in its leaves, allowing it to survive even under extreme conditions making it a hardy species. More than 500 species are in the genus Aloe, but a single owing to its widespread use in cosmetics and drugs is *Aloe barbadensis* miller[6].

Known for its rosette of plump, fleshy, and grey-green leaves. They tend to have serrated leaves and contain a clear gel full of vitamins, enzymes, amino acids & minerals. Cosmetic formulators will recognize aloe vera gel as the blue-ribbon ingredient that is appreciated for its moisturizing, cooling, and emollient properties. Aloe vera plants also contain strong laxatives in the yellow latex that occurs just below but are not produced from leaf surfaces where it is rich in anthracene which at present is generally used for cosmetic purposes due to potential irritant properties [7].

### **Microscopical and Anatomical characters**

Under the scanner, a microscopic examination of Aloe Vera shows its entire bio-structure which has an impact on all facets including its cosmetic uses. The leaf skin is made up of dense and achlorophyllous cells covered with a cuticle to allow for water retention. Underneath the epidermis is a two-layered mesophyll containing chlorenchyma and parenchyma cells. The chlorenchyma formed towards the perimeter of the stem is a photosynthetic part consisting of cells with chloroplasts[8].

The parenchyma cells are in the majority and contain a gelatinous mucilage. The gel contains mainly polysaccharides (80–90%) and ace Mannan is the main component responsible for its moisturizing properties. set side by side with the mesophylls many vascular bundles dot, each one enclosed by a casing of sclerenchyma fibers. These structural features play a key in how the plant stores and keeps water, making Aloe Vera an excellent hydrating agent for the skin[8].

### **Cosmetic Properties of Different Parts of the Aloe Herb**

**Leaf Gel:** Leaf gel is the most common and widely consumed part of Aloe Vera in cosmetics. The gel is known for containing hygroscopic ingredients that restore, soothe, and heal the skin. Polysaccharides, glycoproteins, vitamins (vitamins C and E), antioxidants, and amino acids are the important compounds making up gel composition, which ultimately contributes to its skin benefits. It is a common ingredient in countless products, including moisturizers, lotions, sunscreens, and after-sun care products. The gel is well regarded for its anti-inflammatory and antimicrobial benefits, making it useful for acne relief or sunburns[10].

**Bark:** Aloe Vera bark i.e., can contain anthraquinones in the form of aloin and emodin, mainly because it is less commonly used. These compounds still have very powerful laxative effects and are used in some herbal preparations much like a doctor is sometimes employed today, i.e. sparingly However, in cosmetics the bark is rarely used as it can lead to skin irritation. Certain formulations may utilize bark extracts for the antimicrobial properties they provide, but these ingredients should be used with caution and only when dosed accurately[11].

### **Substitution. Adulteration. Allied Species**

Aloe Vera may be substituted for another succulent plant that also possesses hydrating properties, but substitutes such as agave or various Opuntia species are not Aloe Vera. However, these replacements will not have the same benefits as Aloe Vera specifically in healing and its anti-inflammatory properties[12].

**Adulteration:** Adulteration is the second in line as Aloe Vera has become very popular and it is now a big topic of concern where gel or extract obtained from its leaves are being uptaken to the ubiquitous extent that they have to reach prima facie, some merchants or manufacturers tend to be indulged with this type of fraud by adding less expensive ingredients or other plant extracts causing serious impact on human well-being. Adulteration can decrease the quality of Aloe Vera-based products and could even expose consumers to allergens or irritants. Concerns like these regarding the substitution of Aloe barbadensis miller with other artificial additives, or adulteration by lower quality Aloe species underline the importance of strict quality control and cosmetovigilance practices in this sector[13].

Related Species: Occasionally other species will be substituted for *Aloe barbadensis* miller -- most notably, *a. arborescent* and *a. forex* is used interchangeably with the traditional Hawaiian variety of so-called "Aloe Vera." While some of these cosmetic properties (a moisturizing, cool soothing gel) are seen in other species Close to the *Aloe barbadensis* L., other bioactive compounds and their concentrations may vary. *Aloe ferox* has more anthraquinones — and is thus a stronger laxative that can give you an upset stomach when drunk, or possibly rash & irritation if applied to the skin[14].

### cosmetovigilance

Indeed, cosmetovigilance is the post-marketing surveillance in place to monitor and evaluate the safety of a cosmetic product. This includes the collecting, reviewing, and handling of side effects or any other problems linked to beauty products. The major objectives of cosmetovigilance are consumer safety, product quality enhancement, and ensuring public health standards[15].

### Collection and Cultivation of Aloe Vera in India Incorporating Cosmetovigilance Concerning Geographic Distribution

Unlike so many soap molecules, The Aloe Plant (*Aloe barbadensis* Miller) stands as an introduction for the cosmetic industry at large — revered hereafter; of the parched and sun-beaten epidermis; writer to skin soothing collectively with moisturizing also healing. Aloe Vera: We all know that This plant has gained a special scene in Indian agriculture as it can grow well in different Agro-Climatic zones and Market demand is increasing for this pharmaceutical-grade oil crop. Incorporating cosmetovigilance, when it comes to the cultivation and collection practices of Aloe Vera in India makes certain that the product derived from this plant meets two parameters i.e., safe for human use as well as efficacy is assured[16].

#### In India Geographical Distribution

Ideal for India: Aloe Vera grows very well in the tropics and sub-tropics, hence one of the best places to grow these succulents will be none other than our country. The plant is grown in India at a large scale only in states like Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, and Tamil Nadu. Regions with a hot and dry climate where Aloe Vera thrives, have an average temperature of 20°C to 40°C as well as low rainfall levels[18].

Due to the varied agro-climatic zone characteristics in India, Aloe Vera can be grown which may vary in bioactive content. One such example is the aloe plant grown in the arid setting of Rajasthan which ends up producing higher levels of aloe, used for its laxative qualities but also causing skin reactions when applied to skin at high dosages. On the other hand, Aloe Vera from middle climate areas like some parts of Tamil Nadu can have a gentler chemical profile and are used for sensitive skin applications[18].

#### Collection Practices in India

Handling Aloe Vera leaves in India, ensuring to minimal damage the plant and due preservation of its bioactive compounds These leaves are generally harvested around 18-24 months after the plant is grown. The harvest typically happens during the cool hours of the day (usually early morning) to prevent breakdown which can occur when these compounds oxidize.[17]

In India, where sustainability and organic sourcing are a way of life — the process results in only mature, healthy leaves from indigenous trees being selected. It is essential to keep the reliability of Aloe Vera gel, which takes prime importance in the cosmetics industry. But if the leaves do not handle properly to bruise it often leads to oxidizing some compounds like anthraquinones that can cause side effects when used and affects its effectiveness.[17]



## Cultivation in India

Because of its easy care and hardiness, aloe vera farms in India are also simple to maintain. It is generally grown in highly-drained, sandy loamy soil that is wealthy within the regions where it's cultivated. The crop is also low irrigation-intensive, which may bode well in regions water-starved like India. To cater to the demand for organic Aloe Vera in the cosmetic and healthcare industry, over growing preference from both these sectors states like Rajasthan & Gujarat are moving towards eco-friendly cultivation thereby there is traction over sales volume for this station.[17]

The people in our country often use organic fertilizers like compost and manure for their benefits, leading to the good health of the plant rather than artificial supplements which may harm them. Pesticides are not used because of potential pesticide residue left in the skin after application and using organic pest control methods like neem oil is standard practice.[17]

The concept of Cosmetovigilance also assumes significance when it comes to the cultivation and processing of Aloe Vera in India. Because of the regional variances in biochemistry for Aloe Vera, or very similar genus, this is why a tool must be built that standardizes cultivation and collection practices which will deliver consistency within what companies call their products concerning years coming from now. This also involves creating standards to maximize the plant's growing conditions, harvesting methods, and post-harvesting practices so as not to degrade any beneficial properties of the plant.[17]

If you purchase Aloe Vera products from different regions of India then these should be tested for aloin level, again to show it is within cosmetic limit if not exceeded. This is especially useful for sensitive skin and preparing daily products. Manufacturers who enforce stringent quality control practices during planting and harvesting stages can mitigate reactions due to allergy risks, in turn supporting consumer safety and confidence with Aloe Vera products[18][19].

In addition, ongoing monitoring of Aloe Vera cultivation practices through cosmetovigilance may also be applicable to detect and avoid risks potentially linked with environmental issues including pollution from soil or using fertilizers in non-organic conditions[20]. This is a proactive measure to ensure that the use of Aloe Vera products from Indian farms will be useful and harmless in the long run[22].

There are many factors such as the geographical distribution of Aloe Vera in India, and collection and cultivation practices which determine the quality and safety of plant derivatives used in cosmetics. By incorporating cosmetovigilance within these, Aloe Vera products in India can not only comply with standards set by international safety parameters but also capture the economic opportunity that its plant offers naturally. This method not only ensures consumer safety but also enforces the status of Aloe Vera from India to be one of the most high-quality products in the global cosmetic industry[18].

## Phytoconstituents of Aloe Vera: Cosmetic Value

Phytoconstituent	Cosmetic Relevance
Aloin	Skin lightening, reduces hyperpigmentation
Aloe-emodin	Anti-inflammatory, anti-aging properties
Aloesin	Inhibits tyrosinase, prevents skin darkening
Acemannan	Moisturizing, enhances skin hydration
Glucomannan	Improves skin elasticity, promotes collagen production
Anthraquinones	Exfoliation, promotes cell turnover
Saponins	Cleansing, natural foaming agent
Lignins	Enhances skin penetration, improves absorption
Salicylic Acid	Anti-acne, reduces redness and swelling

Vitamins (A, C, E, B12)	Antioxidant, protects skin from oxidative stress
Minerals (Calcium, Magnesium, Zinc)	Nourishes skin, supports skin barrier function
Enzymes (Amylase, Lipase, Catalase)	Promotes healthy skin, reduces inflammation

Fig 01 : [60.61]



Image : 2[63]

### COSMETIC USES:

Aloe Vera has been use for centuries in traditional medicine and popular for cosmetic uses. The gel from the leaves of aloe vera is rich in vitamins, minerals enzymes, and amino acids which are very good for your daily cosmetics. Some uses of aloe vera by the cosmetic industry

#### 1. Skin Moisturization

Aloe Vera gel is the most effective natural cleanser. It Gets more absorbed in the skin layers and hydrates it to the fullest finish without any oil stains left behind. It's 99 percent water and has polysaccharides that make up a barrier on top of the skin that prevents moisture from escaping. That is why it works perfectly in lotions, creams, and after-sun products.[23]

#### 2. Can be Relaxing & Calming

Whether it be from sunburn to small cuts or even just some random burn, Aloe Vera is an anti-inflammatory and cooling which helps you with great effect. Types of healing one or more will eventually be acquired that contain anti-inflammatory compounds with gibberellins, and auxins, to stimulate the wound-healing process following skin infections. These are the characteristics that offer advantages in after-sun gels, burn relief lotions, and soothing serums.[24]

#### 3. Anti-Aging Benefits

It is loaded with antioxidants which are Vitamin C >>>>> E and beta-carotene. These antioxidants are from a natural source and on regular application to our skin they act as anti-oxidants also which are responsible for the most common cause of premature aging. Applying fresh Aloe Vera directly onto your skin can assist you with that because it does wonders in terms of collagen and elastic synthesis, which are one way or the

other involved in having wrinkles. Now you understand why Aloe Vera is an indispensable part of all anti-aging-based treatments![25]

#### 4. Acne Treatment

Aloe Vera Causes Of it An antibacterial, may also help with anti-inflammatory acne protection. This salicylic acid in the gel form will keep your pores from clogging and it is a strong antiseptic that kills bacteria upon contact with skin. In addition, aloe vera additionally prevents the overproduction of oil (sebum), which is one of the most common reasons for acne. It is also commonly found in acne treatment products: face washes, spot treatments, and masks.[26]

#### 5. Skin Brightening

The enzymes in Aloe Vera, such as aloe sin restrain tyrosinase activity in human melanocytes. Exfoliates Skin and Lightens Hyperpigmentation Therefore Giving the Face a more glowing Appearance Aloe Vera soap is used in all skin-lightening creams, serums, and masks.[27]

#### 6. Hair Care

Aloe Vera — A natural blessing for healthy hair It moisturizes and softens your hair, using it as a natural conditioner so that the frizz is not able to make them look mad. Aloe Vera contains enzymes that can aid in the breaking down of dead skin cells on the scalp, thus allowing healthy hair to grow without obstacles and soothe/relieve itching dandruff. Aloe Vera — is a patented ingredient in commercial shampoos, conditioners, and scalp treatments.[28]

#### 7. Exfoliation

Natural exfoliation: Aloe Vera Features natural enzymes that will remove dead skin cells and uncover a brighter, smoother complexion This is safe for people with acne on sensitive skin as Aloe Vera helps soften the pores hence you do not need to use harsh exfoliants. Since then, it has been abundantly added to exfoliation scrubs and masks.[29]

#### 8. Anti-Inflammatory Effects

Aloe Vera is a known skin conditioner Aloe vera because it has natural anti-inflammatory and helpful properties to reduce inflammation (redness or swelling of the skin) might be beneficial for inflammatory diseases such as psoriasis which reduces irritation; commonly used in soothing products where redness could occur. Aloe Vera is used often as a soothing agent in many calming lotions, serums, and such that are marketed for irritated or sensitive skin.[30]

#### 9. Anti-Pollution Protection

Aloe Vera protects the skin from toxic pollutants. This helps to inhibit free radicals originating from pollution by their antioxidant properties and prevents fine dust by forming a barrier against the skin. There has been an increase in the use of ingredients like Aloe Vera which are composite after being used with anti-pollution creams and serums that remove pollutants from inside.[31]

#### 10. Makeup Primer

Aloe Vera gel has been used for ages as a natural makeup primer, as it is good enough to give you an even hydrated and non-greasy network. Reportedly, it helps the makeup to last longer as well as adhere better.[32]

#### 11. It diminishes dark circles and puffiness.

Aloe vera — Contains hydrating properties to reduce puffy and dark circles across the eyes. It increases blood circulation and when this happens it can help to diminish dark circles as well as fine lines. Aloe Vera is Briefly present in eye gel and cream formulas.[33]

## 12. Lip Care

Since Aloe Vera is a succulent, it has high moisture levels which makes this an ideal ingredient for Lip care products. It repairs chapped lips and heals damaged lip skin within no time. Lip Balms and Lip Masks: Probably Aloe Vera is the ingredient in most lip balms.[34]

## 13. Shaving Gel

If shaving gel, you also can go with Aloe Vera. Razors glide over the surface of your skin, but it makes that smooth texture less likely to nick and cause irritation. It is anti-inflammatory and when combined with its Vitamin C antioxidant effects, it helps soothe the skin after shavings as well.[35]

## 14. Toner

Aloe Vera: It is a natural toner and will balance your skin's pH, including closing pores. These astringents help in absorbing any extra oil and impurities from your skin, they make the skin refreshed & toned. Aloe Vera toners are some of the best solutions for oily skin and combination.[36]

## 15. Hand and Foot Care

The Deep moisturizing properties of Aloe Vera can help those whose hands & heels get dry, cracked, and infested fast. Highly hydrating properties make it a potent aid for dry skin, so you can find shea butter in many formulations intended to alleviate dryness — such as hand cream or foot balm.[37]

## 16. Stretch Mark Reduction

Stretch Marks — Aloe Vera: Its hydrating effect on your skin, coupled with increased elasticity can curb the onset of stretch marks. May be healing, and regenerative and assist in the long-term fading of stretch marks. Aloe Vera which is contained in many stretch mark creams and body oils[38]

## 17. Body Wash and Soap

But Aloe vera is a popular ingredient for body wash or soap due to its moisturizing and calming nature. It can be used daily to help keep the skin clean without using any of its natural oils, and it is gentle enough for all types of skin.[39]

## 18. Makeup Removal

Natural Makeup Remover Aloe Vera This soothing formula also acts as an aloe makeup remover, gently removing everyday beauty looks without taking away the skin's natural moisture or tone. Individuals with sensitive skin can benefit from Aloe Vera-based makeup removers.[40]

## 19. Sun Protection

Aloe Vera — Aloe is not a sunblock, but it can help to heal and cool off skin that's been over-roasted. It is also one of the ingredients in sunscreens, and after-sun lotions with its cooling effect on skin that will give quick relief from pain or discomfort when too much exposure to sunlight.[41]

## 20. Wound Healing

It even helps in speedy recovery of wounds especially those that are stuffed with little scratches and cuts. Anti-bacterial property helps in shave burn and infection inhibition, it acts as a moisturizing agent too, allowing you to recover faster. That is also the reason why Aloe Vera gel is often incorporated in most ointment and first-aid creams.[42]

## 21. Scar Reduction

Promote Nevertheless, According to Various Medical Surveys aloe vera can encourage minor scrapes & scar reductions to matter be it pimples, skin problems, or burn scars. Hangup is the fabrication serve that speeds up your revitalized skin weave and helps quercetin to change itself over abstraction.[43]





Image:03[64]

### Long-term use of Aloe Vera in cosmetics —

#### (Adverse Reactions)

let us face it... Everything has a downside; you only get to hear the benefits most time. Aloe Vera is, of course, safe and healthy (for most people in the realm of skincare), but this doesn't mean it has a free pass with long-term use. While rare, these side effects should be identified and followed up more specifically by the cosmetovigilance.

#### 1. Allergic Reactions

**Contact Dermatitis** — Topical application of Aloe Vera over your skin for a more extended period may trigger allergic contact dermatitis, especially in people with sensitive skin. All these consequences lead to redness, itchiness, and irritation in the application zone. Others might experience a rash or hives.

**Allergic reaction:** Over time it is possible that a person who uses Aloe Vera regularly might become allergic to the same and this can be so severe as to prevent usage [Rare].[44]

**2. Over Moisturization:** If you use a moisturizer containing Aloe Vera This may cause the skin barrier to break and cause redness as well as infections.

Use in high concentration, or mixed with other low doses of active ingredients can cause irritant dermatitis (redness, swelling, and pain).[45]

#### 3. Photosensitivity

**Sun Sensitivity:** Although not unsafe in use, aloes increase sun sensitivity for a range of people when applied (either due to antibacterial activity at high pH or simply presence on the surface) after its frequent application directly onto sun-exposed skin. More time in the sun burns or darkens those areas of my skin.

**Phototoxicity** It is also documented that Aloe Vera exposure to UV light can lead to phototoxic reactions and results in damage or skin discoloration.[46]

#### 4. Hormonal Effects

These are plant Oestrogens: Aloes have a few chemicals in them that can act as the female hormone estrogen. In theory, drastically raising the use of Aloe Vera can disturb hormone balance and activity which may cause irregular menstruation or some other hormonal problems as well. However, these effects may need to be confirmed by a greater number of studies before we can draw a firm conclusion.[47]

#### 5. Delayed Wound Healing

Centauray: would make wounds take longer to mend, making the pain relief mechanism of Aloe Vera mentioned above pale in comparison. It remains possible that this is the result of consumers overutilizing Aloe Vera and their skin produces less fresh regeneration naturally.[48]

Granulation tissue is a type of unorganized connective tissue that forms in response to wound healing and eventually results in the formation of a proper, mature scar (or cicatrix) on the injury site.[49]

#### 7. Altered Skin Barrier Function

Change: Prolonged frequent use of Aloe Vera at high concentrations or as a combination with other actives can compromise skin barrier function and induce allergic sensitization. When water from the cutaneous surface might be evaporated more by larger skin barrier damage, it may reduce moisture-reserve faculty and increase trans-epidermal water loss (TEWL).[50]

Sensitization: This may be a little alarming but Aloe Vera, with long-term use, can sensitize the skin to it over time and repeated exposure is more likely to cause an irritation or allergies.

#### 8. How It Works With Other Ingredients

Combination of Aloe Vera and MN Synergistic irritation: Aloe Vera is incorporated in the product formulation with another ingredient which together when applied on the skin causes synergistic irritations (Bit Converter & Wiedersberg, 2015). While it's by and large a soothing agent, occasionally — when mixed with super freaks like exfoliating agents or alcohol-based skincare products — it can even elicit responses other than basic stings.

Increased Sensitivity: After a long time intercalating with stronger actives such as retinoids or acids, the skin can become more sensitive peel, and redden easily.[51]

#### 9. Microbial Contamination

Preservation Problem: Aloe Vera- The usage in cosmetics of not properly preserved or contaminated cosmetic raw materials with this poison substance results in spoilage, and quality defects. Continuing to use contaminated products over time could lead to skin infections, irritation, or exacerbation of certain conditions.[52]

10. Product instability: Aloe Vera being a natural product can decompose and chemically modify cosmetic ingredients over a very short term deceptively pushing formulas to be diluted weakening the action of the other components (as well as potential for critical disease outcomes).10. Product instability: Aloe Vera being a natural product can decompose and chemically modify cosmetic ingredients over very short term deceptively pushing formulas to be diluted weakening action of the other components (as well potential for critical disease outcomes).[52]

**MARKETED FORMULATION:**

Type	Brand Name	Brand Name	Dosage Form	Price (INR)					
<b>Sunscreen Lotion</b>	Lotus Herbals Safe Sun Aloe Vera Gel SPF 20	Lotus Herbals Safe Sun Aloe Vera Gel SPF 20	Gel	395 for 100 g					
<b>Moisturizing Gel</b>	Patanjali Aloe Vera Gel	Patanjali Aloe Vera Gel	Gel	90 for 150 ml					
<b>Face Wash</b>	VLCC Ayurveda Aloe Vera Face Wash	VLCC Ayurveda Aloe Vera Face Wash	Face Wash	135 for 100 ml					
<b>Hair Gel</b>	Set Wet Hair Gel (Aloe Vera)	Set Wet Hair Gel (Aloe Vera)	Gel	85 for 100 ml					
<b>Lip Balm</b>	Himalaya Herbals Lip Balm (Aloe Vera)	Himalaya Herbals Lip Balm (Aloe Vera)	Lip Balm	45 for 10 g					
<b>After Sun Gel</b>	WOW Aloe Vera Multi-Vitamin Face Gel	WOW Aloe Vera Multi-Vitamin Face Gel	Gel	399 for 130 ml					
<b>Night Cream</b>	Khadi Natural Aloe Vera Night Cream	Khadi Natural Aloe Vera Night Cream	Cream	315 for 50 g					
<b>Shampoo</b>	Dabur Vatika Naturals Shampoo with Aloe Vera	Dabur Vatika Naturals Shampoo with Aloe Vera	Shampoo	260 for 340 ml					
<b>Body Lotion</b>	Nivea Aloe Hydration Body Lotion	Nivea Aloe Hydration Body Lotion	Lotion	395 for 400 ml					
<b>Anti-Acne Gel</b>	Plum Green Tea Clear Spot-Light Gel	Plum Green Tea Clear Spot-Light Gel	Gel	475 for 15 ml					

	(Aloe Vera & Green Tea)	(Aloe Vera & Green Tea)							
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Fig 02: [63]

### DIY Aloe Vera Remedies(home made remedies)

Aloe Vera: Possibly the most loved and used miracle plant in households around the world, aloe vera is nothing short of magical when it comes to taking care of your skin. Aloe Vera for Acne: Home Remedies

#### 1. Aloe vera gel for Sunburn relief

Things: A Fresh Leaf of Aloe Vera

Application: Take one leaf of Aloe Vera and cut it from the center to extract fresh gel. For treating sunburns – You can use Aloe Vera gel for all your burn-related problems, just rub it gently on the burned area :) This gel properties allows a fast-cooling process for Burn and also helps in burns to heal early.

Directions: Apply 2-3 times daily until the sunburn has been relieved.[53]

#### 2. Similar Post: Aloe Vera Face Mask for Dry Skin

Also Read: Ingredients- 2 tablespoon Aloe Vera gel,1 tablespoon Honey, Cucumber juice (One whole cucumber minced)

Blitz: Blend all the ingredients until smooth. Apply on your face and let it stay for 15 to 20 minutes, now rinse with lukewarm water making sure you are wiping away the mixture gently.

How to use: Use this mask two times a week for softer, glowing skin.[54]

#### 3. Strengthen Aloe Vera Hair Mask

Things we require: 3 Table Spoon Aloe Vera gel,2 tablespoons coconut oil,1 tablespoon of Yogurt

ALL in a blender and blend smoothly Raise the hair to rub on the head or just root your biotherapy on the scalp into Hair Then Quantity of 30 hours, then wash with mild proporid All that you can (including spray) Massage until cool. Undo all Patchy Shaves Repeat every dripping Water towel out

Tip: 1x/week -Unbreakable Strep[55]

#### 4. Aloe Vera and Lemon Juice Face Mask for Acne

Ingredients: 1 tablespoon Aloe Vera Gel three drops Lemon Juice

Aloe Vera gel+ lemon juice Apply it on particular spots of the face. Leave for 10-15 minutes and wash with normal water.

Usage: Use daily to clear active acne and prevent new breakouts.[56]

#### 5. Aloe Vera & Turmeric paste for skin whitening.

Aloe vera gel – 1 tablespoon Turmeric — a pinch of Milk—I teaspoon

Mix all the above ingredients and make a paste. Applying evenly in the face, and neck regions. Allow drying for 20 minutes and then wash off with lukewarm water.

Tips: Twice a week should be used to make the skin shine and blemish-free.[57]

#### 6. Digestive Health — For Neutralizing Stomach Acidity Aloe Vera Juice



Ingredients of Aloe Vera juice 2 spoons of Aloe vera gel Black salt a pinch One glass of water

To prepare this: Just take the Aloe Vera gel and mix it with water(B), sandalwood powder(A) regards black salt. Take this mix first thing in the day, on an unfilled stomach with a glass of warm water.

Hidden Perks: Aid Digestion and Keep Your Gut Healthy Intake Frequency: Daily[58]

## 7. Aloe Vera Eye Soother

Things you will need: 1 tbsp Aloe Vera gel, 10 ml frigid cucumber juice

Steps: Mix Aloe Vera gel with cucumber juice. Saturate two cotton pads with the mixture and place them on your closed eyes. Let sit for 15 minutes, then rinse off.

When to: Use it whenever you feel like it, for relaxing tired eyes, or when your under-eye bags act up.[59]

## CONCLUSION

We all know about aloe vera and its cosmetic properties that have gained sheer popularity. Aloe Vera A rich source of vitamins, enzymes, and polysaccharides a perfect addition to cosmetic formulary for radiant skin. Nonetheless, we also need a realistic evaluation of the effects on cosmetovigilance when Aloe Vera-based cosmetics, should be concerned. UNRELATED

Cosmetovigilance refers to the systematic and active surveillance of data on adverse effects deriving from cosmetics after their release onto the market to obtain new information about risks resulting from cosmetic use. Using frequent and correct test results, these manufacturers can assume the risks if they must but still be sure that any Aloe Vera products are labeled properly to work as per specifications without risk to their consumers. This proactive approach is just as crucial in keeping the health of consumers intact, as it is in racing towards rectifying Aloe Vera's image by using it with all due care and prudence.

We should use cosmetovigilance inland for cosmetic purposes even though Aloe Vera constitutes a large proportion of the products as indicated. This fine line of using its aesthetic characteristics to the maximum without deteriorating quality & safety is really necessary so that in turn consumers eventually get authenticity & quality treatment while consuming aloe vera-based products saving the product from selling.

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65. Image 01 AI GENERATED ALOEVERA IMAGE.

