



KALON LUEUR AD Shampoo: A Revolutionary Approach to provide nutritive solution to hairs with new age nanocosmeceutical technology with NO harmful chemical ingredients.

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ABSTRACT

India has become a dumping ground for the products which are banned in Europe and USA, whether it is FMCG products or popular drugs. One such thing is shampoo with harmful chemical ingredients, some of the popular shampoo brands available in Indian market contain ingredients dangerous for our health. Ingredients found in these shampoo brands may pose a threat to our health. Research has shown that various chemicals lurking inside popular shampoo brands may induce serious health risks, like memory loss, eye and skin irritation, hair follicle damage that can lead to hair loss, and even cancer. Propylene glycol is main ingredient of shampoo. It can cause allergic reactions. Sodium lauryl sulfate and ammonium lauryl sulfate are common causes of eye irritation as well as cancer. They can also damage hair follicles. When absorbed into the body from continuous contact, they can bring on asthma attacks. Synthetic fragrances contain hundreds of chemicals, some of which have been known to cause headaches, dizziness, rash, hyper pigmentation, coughing and vomiting. Diethanolamine (DEA) is readily absorbed through the skin and can also be toxic to the brain. KALON LUEUR AD Shampoo, A Revolutionary Approach to provide nutritive solution to hairs with new age nanocosmeceutical technology developed by scientists of pugos nutrition research centre Hyderabad with NO harmful chemical ingredients with new age nanocosmeceutical technology provides nutritive healthy solution to hairs.

Keywords: KALON LUEUR AD Shampoo, NO harmful chemical ingredients, new age nanocosmeceutical technology.

INTRODUCTION

Shampoo (/ʃæm'pu:/) is a hair care product, typically in the form of a viscous liquid, that is used for cleaning hair. Less commonly, shampoo is available in bar form, like a bar of soap. Shampoo is used by applying it to wet hair, massaging the product into the scalp, and then rinsing it out. Some users may follow a shampooing with the use of hair conditioner. The typical reason of using shampoo is to remove the unwanted build-up of sebum in the hair without stripping out so much as to make hair unmanageable. Shampoo is generally made by combining a surfactant, most often sodium lauryl sulfate or sodium laureth sulfate, with a co-surfactant, most often cocamidopropyl betaine in water. The sulphate ingredient acts as a surfactant, essentially heavy-duty soap that makes it easier to trap oil and grease. Shampoo is generally made by combining a surfactant, most often sodium lauryl sulfate or sodium laureth sulfate, with a co-surfactant, most often cocamidopropyl betaine in water to form a thick, viscous liquid. Other essential ingredients include salt (sodium chloride), which is

used to adjust the viscosity, a preservative and fragrance. Other ingredients are generally included in shampoo formulations to maximize the following qualities:

- pleasing foam
- ease of rinsing
- minimal skin and eye irritation
- thick or creamy feeling
- pleasant fragrance
- low toxicity
- good biodegradability
- slight acidity (pH less than 7)
- no damage to hair
- repair of damage already done to hair

Many shampoos are pearlescent. This effect is achieved by the addition of tiny flakes of suitable materials, e.g. glycol distearate, chemically derived from stearic acid, which may have either animal or vegetable origins. Glycol distearate is a wax. Many shampoos also include silicone to provide conditioning benefits.



Commonly used ingredients in synthetic shampoo

- Ammonium chloride
- Ammonium lauryl sulfate
- Glycol
- Sodium laureth sulfate is derived from coconut oils and is used to soften water and create a lather. There was some concern over this particular ingredient circa 1998 as evidence suggested it might be a carcinogen, and this has yet to be disproved, as many sources still describe it as irritating to the hair and scalp.
- Sodium lauryl sulfate
- Sodium lauroamphoacetate is naturally derived from coconut oils and is used as a cleanser and counter-irritant. This is the ingredient that makes the product tear-free.
- Polysorbate 20 (abbreviated as PEG(20)) is a mild glycol-based surfactant that is used to solubilize fragrance oils and essential oils, meaning it causes liquid to spread across and penetrate the surface of a solid (i.e. hair).
- Polysorbate 80 (abbreviated as PEG(80)) is a glycol used to emulsify (or disperse) oils in water (so the oils do not float on top like Italian salad dressing).
- PEG-150 distearate is a simple thickener.
- Citric acid is produced biochemically and is used as an antioxidant to preserve the oils in the product. While it is a severe eye-irritant, the sodium lauroamphoacetate counteracts that property. Citric acid is used to adjust the pH down to approximately 5.5. It is a fairly weak acid which makes the adjustment easier. Shampoos usually are at pH 5.5 because at slightly acidic pH, the scales on a hair follicle lie flat, making the hair feel smooth and look shiny. It also has a small amount of preservative action. Citric acid, as opposed to any other acid, will prevent bacterial growth.
- Quaternium-15 is used as a bacterial and fungicidal preservative.

- Polyquaternium-10 has nothing to do with the chemical quaternium-15; it acts as the conditioning ingredient, providing moisture and fullness to the hair.
- Di-PPG-2 myreth-10 adipate is a water-dispersible emollient that forms clear solutions with surfactant systems
- Chloromethylisothiazolinone, or CMIT, is a powerful biocide and preservative.

Benefit claims regarding ingredients

In the United States, the Food and Drug Administration (FDA) mandates that shampoo containers accurately list ingredients on the products container. The government further regulates what shampoo manufacturers can and cannot claim as any associated benefit. Shampoo producers often use these regulations to challenge marketing claims made by competitors, helping to enforce these regulations. While the claims may be substantiated, however, the testing methods and details of such claims are not as straightforward. For example, many products are purported to protect hair from damage due to ultraviolet radiation. While the ingredient responsible for this protection does block UV, it is not often present in a high enough concentration to be effective.

Health risks

A number of contact allergens are used as ingredients in shampoos, and contact allergy caused by shampoos is well known. Patch testing can identify ingredients to which patients are allergic, after which a physician can help the patient find a shampoo that is free of the ingredient to which they are allergic. The US bans 11 ingredients from shampoos, Canada bans 587, and the EU bans 1328.

Specialized shampoos

Dandruff

Cosmetic companies have developed shampoos specifically for those who have dandruff. These contain fungicides such

as ketoconazole, zinc pyrithione and selenium disulfide, which reduce loose dander by killing fungi like *Malassezia furfur*. Coal tar and salicylate derivatives are often used as well. Alternatives to medicated shampoos are available for people who wish to avoid synthetic fungicides. Such shampoos often use tea tree oil, essential oils or herbal extracts.

Colored hair

Many companies have also developed color-protection shampoos suitable for colored hair; some of these shampoos contain gentle cleansers according to their manufacturers.

Baby

Shampoo for infants and young children is formulated so that it is less irritating and usually less prone to produce a stinging or burning sensation if it were to get into the eyes. For example, Johnson's Baby Shampoo advertises under the premise of "No More Tears". This is accomplished by one or more of the following formulation strategies.

1. dilution, in case the product comes in contact with eyes after running off the top of the head with minimal further dilution
2. adjusting pH to that of non-stress tears, approximately 7, which may be a higher pH than that of shampoos which are pH adjusted for skin or hair effects, and lower than that of shampoo made of soap
3. use of surfactants which, alone or in combination, are less irritating than those used in other shampoos (e.g. Sodium lauroamphoacetate)

4. use of nonionic surfactants of the form of polyethoxylated synthetic glycolipids and polyethoxylated synthetic monoglycerides, which counteract the eye sting of other surfactants without producing the anesthetizing effect of alkyl polyethoxylates or alkylphenol polyethoxylates

The distinction in 4 above does not completely surmount the controversy over the use of shampoo ingredients to mitigate eye sting produced by other ingredients, or the use of the products so formulated. The considerations in 3 and 4 frequently result in a much greater multiplicity of surfactants being used in individual baby shampoos than in other shampoos, and the detergency or foaming of such products may be compromised thereby. The monoanionic sulfonated surfactants and viscosity-increasing or foam stabilizing alkanolamides seen so frequently in other shampoos are much less common in the better baby shampoos.

Sulfate-free shampoos

Sulfate-free shampoos are composed of natural ingredients and free from both the sodium lauryl sulfate and sodium Laureth sulfate. The purpose of these sulfates is to create a lathering effect to remove oil and dirt from your hair. If your shampoo easily makes a lather in the shower, there's a good chance it contains sulfates. Sulfate-free shampoos make little to no lather.

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COMPOSITION

		INGREDIENT NAME	%
A	A1	DEMINERALISED WATER	45.700
		SODIUM GLUCONATE	0.100
		POTASSIUM SORBATE	0.500
	A2	KELTROL CG SFT	1.000
		GLYCERIN	3.000
B		COCOAMIDOPROPYL BETAINE	10.000
		PLANTACARE 810 UP	10.000
		PLANTACARE 2000 UP	10.000
		MIRANOL ULTRA C-32	5.000
C		DEMINERALISED WATER	3.000
		CITRIC ACID MONOHYDRATE (NATURAL)	0.750
D		FISION KERAVERG 18	1.000
		MULTIMOIST CLR	0.250
E		POLY SUGA MULSE D9	3.000
		COLA LIPID C	1.000
		ZEMEA (100% NATURAL)	1.000
		LEXGARD NATURAL	1.000
		LAVENDER OIL	0.500
		TEA TREE OIL	0.200
F		VITAMIN D3 NANO MICRO EMULSION	0.500
		ASTAXANTHIN NANO MICRO EMULSION	0.500
G		DEMINERALISED WATER	2.000
		TOTAL	100.000

KALON LUEUR Hair care range of products maintaining Ecocert in accordance with cosmos V3 Standards

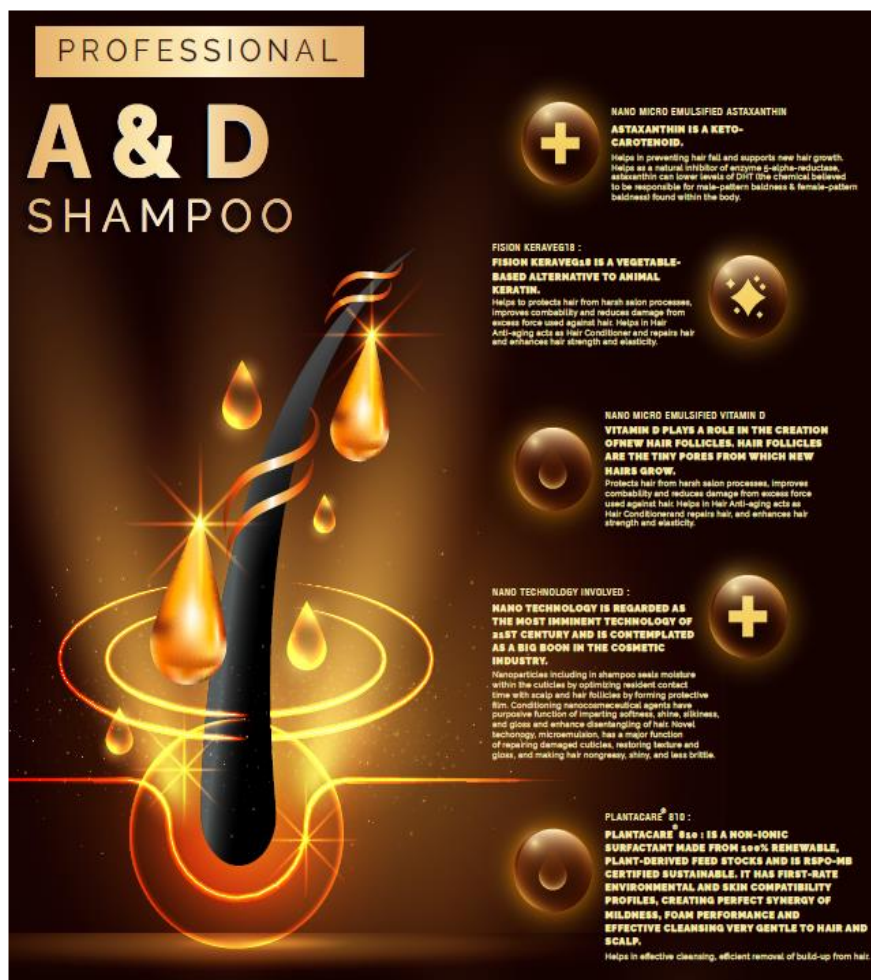
A natural biodegradable shampoo cum conditioner with nanotechnology incorporated, helps in the formation of new hair follicles and strengthens the hair.

High foam quality which is neither effected by PH nor hardness of water with high substantivity with broad spectrum antimicrobial activity

Effectively cleanses the dirt build up in the scalp with extra mild natural biodegradable ingredients and reduces irritancy.

Heat stable, reduces frizz and enhances elasticity, Contains natural ingredients which makes hair look shiner and healthier.

Helps Eliminate Dandruff and restores scalp Health by reducing scalp itching and flaking from 1st application



CONCLUSION

KALON LUEUR AD Shampoo, A Revolutionary Approach to provide nutritive solution to hairs with new age

REFERENCES

1. American Heritage Dictionary of the English Language, 4th Edition, See Shampoo; Also see Shampoo. Hobson-Jobson (1903), University of Chicago.
2. Smith (2007), Clean: A History of Personal Hygiene and Purity, Oxford University Press, ISBN 978-0199297795
3. Teltscher, Kate (2000). "The Shampooing Surgeon and the Persian Prince: Two Indians in Early Nineteenth-century Britain". *Interventions: International Journal of Postcolonial Studies*. 2 (3): 409–23. doi:10.1080/13698010020019226.
4. Victoria Sherrow, *Encyclopedia of hair: a cultural history*, 2007 s.v. "Advertising" p. 7.
5. "Agar RAMBUT Selalu Sehat". *Kompas Cyber Media*. 2004-04-11. Archived from the original on 2007-03-12. Retrieved 2007-03-26.
6. Diaz, Eden (1990). *Home Economics, Practical Arts and Livelihood Education for College: Book Two*. Rex Bookstore, Inc. p. 75. ISBN 978-971-23-0795-9. Retrieved 18 June 2021.
7. Salas, Kinny (21 March 2014). "Thick, lush, sexy hair from drugstore products". *Philippine Daily Inquirer*. Archived from the original on 25 March 2014. Retrieved 18 June 2021.
8. Gonzales, Lucas L.; Quimio, Jr., Marcos J.; Calinawan, Rogelio. "Response of gugo to differing potting media" (PDF). *Canopy International. Department of Environment and Natural Resources*. 27: 3. ISSN 0115-0960. Retrieved 18 June 2021.
9. C. Michael Hogan. 2008. Coastal Woodfern (*Dryopteris arguta*), *GlobalTwitcher*, ed. N. Stromberg Archived 2011-07-11 at the Wayback Machine.
10. Schlanger, Zoe (27 June 2017). "Will your shampoo make your hair fall out? The US government isn't sure". *Quartz*. Retrieved 27 June 2017.
11. Aburjai, Talal; Natsheh, Feda M. (November 2003). "Plants used in cosmetics". *Phytotherapy Research*. 17 (9): 987–1000.
12. Suhira, Munshi. "Sulfate-free Shampoo Recipe". *Shebegan*. *Shebegan Mag*. Retrieved 29 May 2020.

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