ISSUE DECEMBER 2023

COSMETOPOLITAN

COS-INSIDE Latest News from RAHN

LAB-NEWS

Natural Surfactant Systems and how to formulate them; Hi, my name is ... Meadowfoam Seed Oil AROUND THE WORLD RAHN-Cosmetic Actives – A story of success, dedication and nerdiness **GOOD TO KNOW** Natural vs. Synthetic

Astaxanthin



Dear Readers,



Welcome to a new edition of Cosmetopolitan.

You might recognise our first male cover picture, dedicated to the recent International Men's Day celebrated on 19th November every year and marked in around 80 countries worldwide. This year's theme is "Zero Male Suicide", highlighting the importance of helping men and boys manage their mental health. It aims to raise awareness of men's well-being and create a safe environment in which men can be vulnerable.

As the month December has arrived, 2023 is about to come to an end. We would like to take this opportunity to say a big **"Thank you"** to all of you for a great cooperation, interesting projects and conversations, friendships, new product launches, and your loyalty. We are excited to continue all of this in 2024 and hope to see you in person soon at one of our trade shows or any of our RAHN events.



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WHO IS NEW?

A very warm welcome to the new colleagues joining our team:



DILEK ÖZTÜRK

Function Customer Service (90 %) Division Zurich HQ Joined 1st July 2023



DIDIER MARCELINO Function International Sales Manager RAHN Cosmetic Actives Division RAHN France

RAHN France Joined 1st September 2023



MARIEM AIDOUDI Function Product Information Expert Cosmetics Division Zurich HQ Joined 1st October 2023

Welcome aboard! Excited to have you on our team. We look forward to working with you all.

RAHN – Behind the scenes! Not just any team ...

Who actually works in what department and what does the department do? Meet the team ...



ARDIANA ZAN

Part of the team since?	November 2022
Responsible for?	As Cosmetics Product Manager for our trade goods, my job is to ensure their successful launch. I'm responsible for the product portfolio throughout its life cycle. This includes communicating with suppliers, processing customer complaints and maintaining product documentation.
How would you describe yourself in three words?	Creative, research-loving soul
What are you passionate about?	My passion lies in the world of photography, capturing a moment in just one click and telling stories through pictures that are designed to last for eternity.
What do you like about RAHN?	At RAHN, I appreciate the short decision- making paths, the opportunity to drive continuous improvements, the inclusive- ness and the strong team spirit, which makes it possible to collaborate effectively and implement innovative ideas.

BARBARA OBERMAYER

Part of the team since?	March 2009
Responsible for?	The team that supports our brand RAHN- Cosmetic Actives: Our activities involve innovation development from the idea to market launch and then managing distribution in Asia-Pacific, Southern Europe and South America.
How would you describe yourself in three words?	Fun-loving and goal-achieving
What are you passionate about?	My sewing and knitting projects, my homemade bread, a vegan diet and its positive impact on our health, the breathtaking view from the top of a mountain.
What do you like about RAHN?	The freedom we have to create ground- breaking innovations together as a team. The social and cultural responsibility of the company. The blend of international character and family feel to our coopera- tion.

MATTHIAS EGLIN

Part of the team since?	September 2021
Responsible for?	Head of Sales Cosmetics Europe
How would you describe yourself in three words?	Cheerful, emotional, curious
What are you passionate about?	My family, who is always supportive, and my job (when it's going well ☺). I would also like to contribute to advancing the company, making it even more successful.
What do you like about RAHN?	The fact that we are a hidden champion! A small company in terms of personnel from Switzerland that operates internatio- nally and delivers added value to various industries. Other people might call us a gem!



Oh hello Berlin ...

Berlin, a city that never fails to delight, hosted the SEPAWA e.V. exhibition every October. The vibrant spirit of the event, combined with the bustling atmosphere of the city, created the perfect environment for networking and the consolidation of valuable collaborations.

In the midst of the exhibition, we enjoyed working with our partners who have been instrumental in our journey. We extend our gratitude to RAHN-Cosmetic Actives, Ajinomoto, BDI-BioLife Science GmbH, Elementis Global, and Laboratoires ERIGER for their great support at our RAHN booth. The teamwork displayed contributed significantly to the success of our presence at the event. Leaving Berlin, we reflect on the valuable connections made, the knowledge exchanged, and the collaborative efforts that will undoubtedly propel us forward.

To everyone we had the pleasure of meeting at SEPAWA e.V., thank you for contributing to this enriching experience. Until next time ...







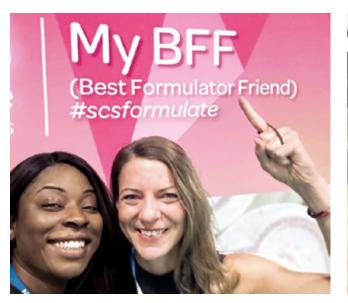
Every year in Coventry ...

We recently concluded another successful show in Coventry at SCS Formulate, the UK's largest exhibition for the cosmetics industry. The event primarily focuses on showcasing raw materials, ingredients, and formulation services used in creating personal care and cosmetic products.

We extend our heartfelt thanks to everyone who visited our booth. We thoroughly enjoyed engaging in conversations and presenting our latest news. Special thanks are also to Inge from Ajinomoto, Alexander from BDI-BioLife Science, Noreza from Laboratoires ERIGER, Olivier from Sytheon, and Tiffany from Elementis.

If you attended one of our presentations, we hope you found them insightful:

- "Energize your look: Amping up your Skin and Hair, with Chiara Degl'Innocenti from RAHN-Cosmetic Actives
- "Perfect Skin Glow, Pillar of Total WellBeing, with Olivier Garnier from SYTHEON
- "ASTACOS® OL50 The red diamond for excellent biological cell protection and prevention of digital ageing, with Alexander Pototschnik from BDI-BioLife Science GmbH
- "Natural Surfactant Systems How to formulate them, with Roman Ott from RAHN



Missed our presentations? Don't worry! You can catch all the highlights here:

• TAKE ME THERE

Alternatively, feel free to reach out to your dedicated sales representative for access to the presentations. We would be delighted to send them to you upon request.





Natural Surfactant Systems and how to formulate them

The most common sulfate-based ingredients found in personal care products are sodium coco sulfate, sodium lauryl sulfate and sodium laureth sulfate. Sulfates possess cleansing and foaming properties, making them essential in cosmetic products such as shower gels, shampoos, conditioners, facial cleansing gels, liquid hand soaps, and more.

In recent years, sulfate-free surfactant systems have gained popularity as the primary concern with sulfates lies in their potential to cause varying levels of skin and eye irritation. This means the market is in need of modern surfactant system solutions; sustainable cleansing formulations with a high Natural Origin Index (NOI).

Now, new regulations have been published, presenting the next challenge for sulfate-free and COSMOS-approved natural products: COSMOS announced the end of sulfates' acceptance by the end of 2028.

12.3.2 Specific cases

- §8 packaging criteria: must be met before 1st of June 2025, if the submission date is prior to the 1st of June 2023
- §6.1.3 physically processed agro-ingredients/ primary raw materials harvested/ collected by threatened species listed in the IUCN red list: criteria must be met before the 1st of December 2024, regardless of the submission date
- Appendix II sulphated surfactants are allowed until the 1st of January 2029

SULPHATION/SULPHATATION (at carbon or oxygen atom, without use of chlorinated sulfation reagents) – permitted only for surfactants for rinse-off products

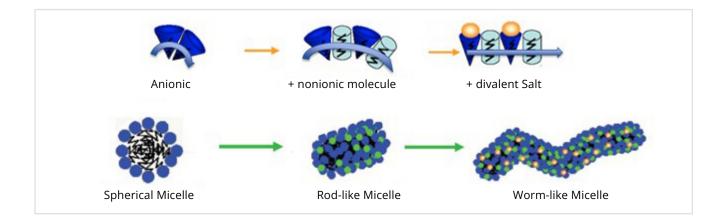
Surfactant thickening system options

Option 1: Hydrophobic Thickening System

Amphoterics are key sulfate replacements, such as:

- Sodium Cocoamphoacetate
- Cocamidopropyl Betaine (CAPB)

The thickening effect is created through worm-like micelle formation. Hydrophobic thickeners support the correct organisation of surfactant molecules, moving from spherical micelles to worm-like micelles (see picture below).



Formulation Example: Transparent Hair & Body Shampoo

St	Substance	INCI name USA	% [w/w]	Manufacturer	
1	Water demin.	Water	45.25	several	
	Plantacare 1200 UP	Lauryl Glucoside, Water	9.00	BASF, DE	
	Plantacare 818 UP	Coco Glucoside, Water	2.50	BASF, DE	
	Amisoft ECS-22W	Disodium Cocoyl Glutamate, Water	14.50	Ajinomoto, JP	
	Rewoteric AM C	Sodium Cocoamphoacetate	17.50	Evonik, DE	
	Exotic Dream	Fragrance	0.25	Aromatic Flavours & Fragrances Europe Ltd., GB	P. C. T.
	Ajidew NL-50N	Sodium PCA, Water	2.00	Ajinomoto, JP	5
	Dermosoft 1388 ECO	Glycerin, Water, Sodium Levulinate, Sodium Anisate	2.50	Evonik, DE	Constant of
	TEGO Remo 95 MB	Glyceryl Oleate, Sorbitan Caprylate	0.50	Evonik, DE	
2	Citric Acid Solution 30%	Water, Citric Acid	6.00	several	

Option 2: Biopolymer Thickening

Lambda-Carrageenan is used to create viscosity with a nice flow, such as:

• Genuvisco CG-129 (CP Kelco)

When using this type of polymer option, it comes with a significant benefit: the freedom to choose the surfactant type and solubilisers freely. However, it's important to note that the use of long-chain quats is typically not possible.



Left: Genuvisco CG-129 (Carrageenan) Right: Keltrol CG-SFT (Xanthan Gum)

St	Substance	INCI name EU	% [w/w] Manufacturer
1	Water demin	Aqua	68.3 several
	Sodium Citrate	Sodium Citrate	0.2 several
	CAE	PCA Ethyl Cocoyl Arginate	0.2 Ajinomoto, JP
2	Dermosoft Pentiol Eco	Pentylene Glycol	5.0 Evonik, DE
	Genuvisco CG-129	Chondrus Crispus Powder	3.0 CP Kelco, US
	Amilite ACS-12	Sodium Cocoyl Alaninate, Water	7.0 Ajinomoto, JP
3	Amisoft ECS-22W	Disodium Cocoyl Glutamate, Water	6.0 Ajinomoto, JP
	Plantacare 818 UP	Coco-Glucoside, Water	5.0 BASF, DE
4	Нарру ХР2	Fragrance	0.3 several
5	Ajidew NL-50N	Sodium PCA, Water	2.0 Ajinomoto, JP
6	Citric Acid solution 10%	Citric Acid, Water	3.0 several

Formulation Example: Natural Face Cleansing Gel

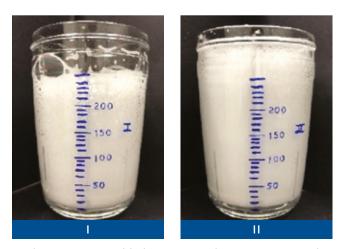
What if these system don't deliver enough foam?

Foam Booster: Foaming is a key factor in creating a satisfying user experience, as it is associated with the perception of cleaning and the effectiveness of the product. However, it is not uncommon to encounter challenges during the development or reformulation process, such as insufficient foam or poor foam quality.

A great option is Amilite[™] ACS-12, which is a mild anionic surfactant derived from the amino acid L-Alanine. This ingredient boasts impressive foaming capabilities, generating a rich and long-lasting lather, even in the presence of oils. In addition, it has the ability to significantly enhance foam volume, effectively boosting the performance of surfactants such as Cocamidopropyl Betaine, while keeping skin and hair moisturised.

Being 100 % natural and COSMOS, Natrue certified, Amilite™ ACS-12 is an environment-friendly solution for natural sulfate-free product applications, optimally between pH 6 and 8.





Amilite[™] ACS-12 is added to a CAPB solution (II) compared to the solution with only CAPB (I)

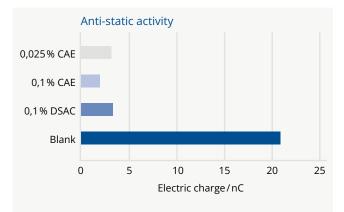
Ingredient	1	Ш
	(wt%)	(wt%)
Amilite™ ACS-12	0.0	5.0
САРВ	15.0	10.0
Lauramide DEA	3.0	3.0
Butylene Glycol	2.0	2.0
Preservative	q.s.	q.s.
Citric acid	q.s. pH 6.8	q.s. pH 6.8
Water	q.s.p. 100%	q.s.p. 100%

What kind of conditioner can I use instead of quats?

Conditioning Booster: When working with natural cosmetic systems and employing polymers like carrageenan, finding suitable conditioning options can be challenging due to compatibility issues with polyquaterniums.

CAE by Ajinomoto presents a compelling solution. CAE is an amino acid cationic surfactant derived from L-Arginine, DL-Pyrrolidone Carboxylate, and fatty acids. Functioning as an anti-static and conditioning agent with antimicrobial activity, CAE is adsorbed to the hair, acting as an effective hair conditioner. Additionally, CAE is highly biodegradable and environmentally friendly.

Explore our latest **video** "Natural Face Cleansing Gel". Simply click the button below to watch and discover more.





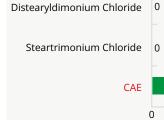
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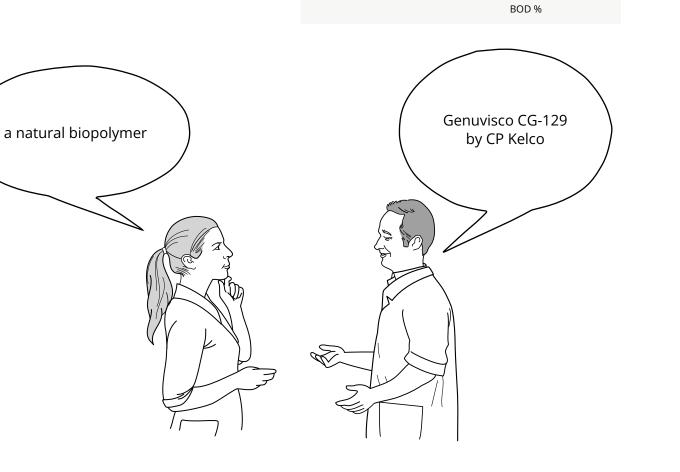
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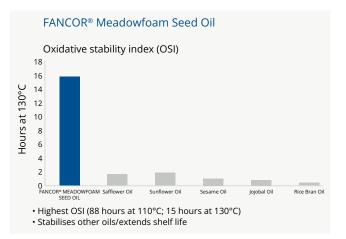
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Hi, my name is ... FANCOR[®] Meadowfoam Seed Oil

Meadowfoam Seed Oil, derived from the seeds of the meadowfoam plant (*Limnanthes alba*), has gained immense popularity in the cosmetic industry for its remarkable benefits. This resilient plant oil possesses unique properties that make it a desired ingredient in skincare and haircare products.



- 1 Rich in Antioxidants: Meadowfoam Seed Oil is abundant in antioxidants, such as vitamin E, which helps combat free radicals and protect the skin from environmental stressors. This contributes to a youthful and radiant complexion.
- 2 Excellent Moisturizing Properties: Due to its high fatty acid content, particularly long-chain fatty acids, meadowfoam oil forms a barrier on the skin's surface, effectively locking in moisture. This makes it an excellent choice for dry or dehydrated skin types.
- **3 Enhanced Stability:** Meadowfoam Seed Oil has an impressive shelf life, thanks to its natural resistance to oxidation. This stability ensures that products containing this oil remain effective over an extended period.



- **4 Skin Barrier Support:** The oil's composition closely resembles human sebum, making it a suitable choice for nourishing and fortifying the skin's natural barrier. This aids in maintaining optimal skin health.
- **5** Non-Comedogenic: Meadowfoam Seed Oil is non-comedogenic, meaning it won't clog pores. This makes it suitable for various skin types, including acne-prone or sensitive skin.
- 6 Hair Nourishment: When applied to the hair, meadowfoam oil imparts a silky, smooth texture, and helps to lock in moisture. It also provides a protective coating, guarding against damage caused by heat styling and environmental factors.
- 7 Eco-Friendly and Sustainable: Meadowfoam plants are known for their efficient use of resources and low environmental impact, making this oil a sustainable choice in the cosmetics industry.

Meadowfoam Seed Oil is now a star ingredient in a wide range of cosmetic products, from moisturizers and serums to hair conditioners and masks. Its versatility, combined with its natural goodness, positions it as a frontrunner in the pursuit of effective, nature-inspired skincare and haircare solutions.

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RAHN-Cosmetic Actives – A story of success, dedication and nerdiness

We have a question for you: Did you notice any changes in RAHN-Cosmetic Actives this year?

Use your mobile phone camera to scan the QR code below and share your response to this question with us.

The answer options:

- 1 No, it remained as I knew it.
- 3 Yes, the graphic changed.
- 5 Yes, both the graphic and the communication changed.
- 4 Yes, I learned that it is now an independent brand.
- *) QR-Code valid for the next two weeks

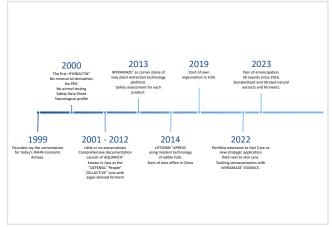




Founded in 1999, RAHN-Cosmetic Actives emerged through interactive collaboration, drawing inspiration and market insights directly from our customers. The vision was conceived by three individuals: René Guildmann, Roman Ott, and André Rohner (see picture below). What's truly remarkable is that two of the original founders continue to play an active role in RAHN, actively participating in the ongoing journey. Since the launch of the first two RAHN-Cosmetic Actives, PERFELINE[®] and HYDRACTIN[®], we've achieved numerous milestones and taken significant steps forward. In the picture below, you'll find a summary of the most important ones for us.



The three RAHN-Cosmetic Actives founders





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Returning to our initial question, if you chose the first answer, it means we might not have effectively conveyed our changes to you, as there has indeed been a significant transformation.

While all the other answers are accurate, the most fitting is the last one (number 4). Over the past 24 years, we have evolved into a manufacturer and engineer of award-winning cosmetic active ingredients, proudly part of the RAHN-Group.

This year, we've chosen to highlight our independence as a leading active ingredient manufacturer by giving a distinct identity and style to our brand, RAHN-Cosmetic Actives. We are thrilled to share the secrets of beauty with you.





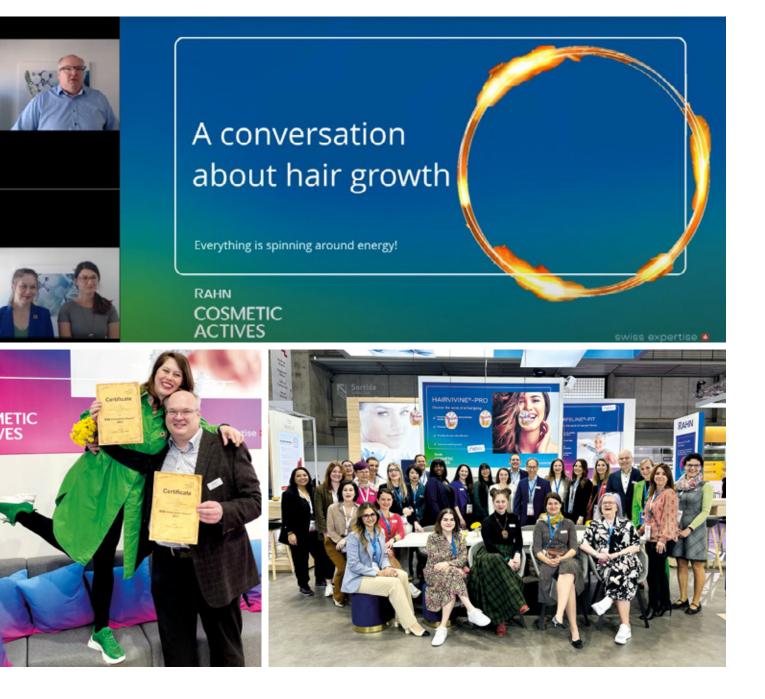
We take immense pride in standing as an independent brand, extending our knowledge, innovation, and cutting-edge technologies infused with Swiss perfection and a touch of magic to every corner of the world. Armed with the secrets of beauty, we engineer high-tech cosmetic actives that our customers trust and find both easy and enjoyable to work with. Our commitment is to support and assist you in developing superior cosmetic products for both skin and hair.

• CLICK ME

So, come and enjoy the magic with us. Start interacting with us in every possible way. A great initial step is to visit us at:

• www.rahn-cosmeticactives.swiss

The following photos showcase a selection of various activities by RAHN-Cosmetic Actives throughout the year. Why not join us for one of the next?

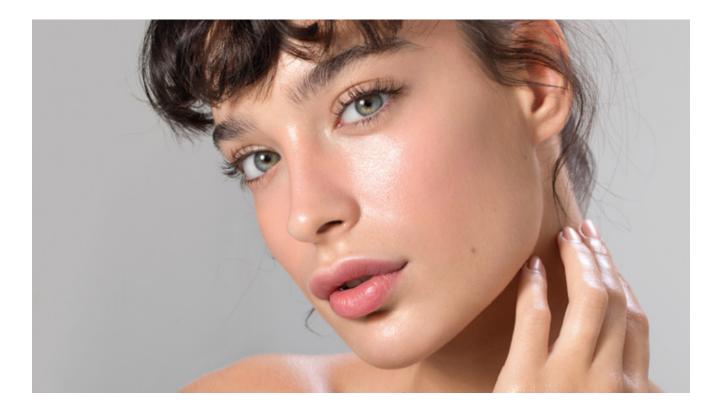


Polyglutamic Acid (PGA) – The Hero You Didn't Know You Needed

Have you ever wondered about Bacillus subtilis? Picture this – a bacterium with unparalleled poly-gamma-glutamate productivity, sourced from the heart of traditional Korean seasoning, Chung-Kook-Jang.

This is the magic of PGA, a cutting-edge, water-soluble peptide crafted through meticulous fermentation and naturally present in our bodies, revealing its extraordinary hydrating power, unmatched water retention, and a myriad of anti-aging properties. Dive into the science behind it with an exclusive video by BL Corporation. Just click the button below...

CLICK ME



Natural vs. Synthetic Astaxanthin

Astaxanthin, a powerful antioxidant belonging to the carotenoid family, has gained significant attention for its benefits. As the demand for this powerhouse antioxidant rises, the pivotal question arises: natural or synthetic astaxanthin? In this article, we delve into the key differentiators between natural and synthetic astaxanthin. Natural and synthetic astaxanthin are different because of how their molecules are arranged. Imagine the molecules as shapes – chirality means the shapes are the same, but like reflections in a mirror. In synthetic astaxanthin, the shapes are a bit different, with more of one type (3R,3'S) compared to what's mainly found in natural astaxanthin (3S,3'S, like in Haematococcus). So, it's like natural astaxanthin has a special arrangement that makes it unique.



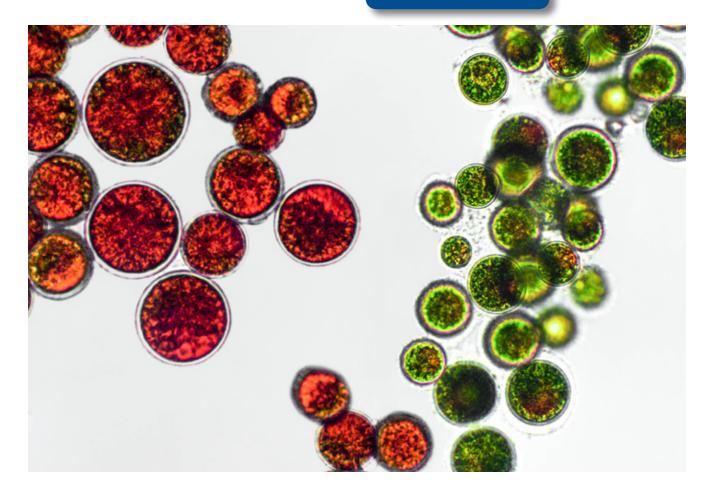
Further, natural astaxanthin is characterised by a higher oxygen radical absorbance capacity (ORAC), indicating its enhanced ability to neutralise free radicals. Additionally, it exhibits greater stability and better assimilability within the human body, providing optimal support for various health benefits. The disparities in isomeric composition between natural and synthetic astaxanthin play a pivotal role in their respective attributes. The presence of specific astaxanthin stereoisomers in synthetic preparations is associated with a lower ORAC and decreased stability, contributing to a potential disparity in health benefits when compared to their natural counterparts.

Another noteworthy difference is the regulatory status of natural versus synthetic astaxanthin. In the United States, synthetic astaxanthin lacks Generally Recognized as Safe (GRAS) status, highlighting potential concerns about its safety for human consumption. While regulations for cosmetics may vary, products utilising dried biomass (powder) of natural astaxanthin bypass these concerns, offering a safer alternative for health-conscious consumers.

In conclusion, for consumers navigating the world of astaxanthin in skincare, understanding these distinctions is pivotal for making well-informed choices promoting skin health and overall well-being.

Curious about our natural and potent Astaxanthin, **AstaCos OL 50**? Learn more about its exceptional qualities.

i MORE INFO



The Encyclopaedia of Cosmetics



- ...**T**-Zone
- ...**T**alc
- ...**T**anning
- ...**T**aurine
- ...**T**ea
- ...**T**EWL
- ...**T**one
- ...**T**onicity
- ...**T**riglycerides
- ...**T**yrosinase



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T-Zone

The T' shaped area spanning your forehead down to your nose and chin is your T-zone. Your T-zone has more sebaceous glands than any other part of your face, so it makes sense that it looks oilier than the rest of your face. Many people with oily or combination skin find that their T-zone is prone to acne and blemishes, as well as easily becoming shiny and oily.

Talc

Is a natural mineral that belongs to the same family as clays. It is made from magnesium silicate, a naturally occurring crystalline mineral, by powder reduction and purification. Because of its numerous properties and benefits, talc is used in a wide range of cosmetic products, including antiperspirants, powdered foundation and more. It is used for its absorbency and transparency. It leaves the skin feeling soft and silky.

Tanning

UV-induced skin pigmentation. Melanocytes are stimulated by UV light to produce melanin, the skin's natural pigment.

Taurine

Is a naturally occurring amino acid that is found in the brain, eyes, heart, and muscles. When it comes to skin care, taurine is a powerful anti-fatigue agent. It stimulates fibroblasts, which are responsible for collagen production and the firmness and elasticity of the skin. Taurine rejuvenates skin when applied topically, reducing signs of fatigue. Taurine also protects the skin from the damaging effects of free radicals, which speed up the aging process. It is therefore most frequently included in anti-aging products.

Tea

Also known as triethanolamine (TEA). It is used in cosmetics as a pH balancer and emulsion stabilizer.

TEWL

Transepidermal water loss (TEWL), which measures water loss from the epidermis unrelated to perspiration, can be used to evaluate the barrier properties of the stratum corneum.

Tone

Another term for skin colour. It is the skin complexion; the shade you see at a glance, which simply comes down to the amount of melanin in the skin. Skin tones range in variety, from palest hues to darkest browns, but are usually placed into four categories: fair, light, medium or dark.

Tonicity

Skin firmness and refers to the skin's ability to recontract after extension.

Triglycerides = fats = lipids

Oils and fats composed of esters of fatty acids with glycerol (glycerin). Glycerol has three OH groups to which fatty acids can attach via an ester bound; thus three fatty acids to one glycerol molecule give a triglyceride.

Tyrosinase

Is the enzyme responsible for the initial step in the production of melanin. It is part of the conversion process that results in the pigment melanin being transported to the top layer of your skin, resulting in skin darkening.

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