COBMETOPOLIT/

COS-INSIDE Latest News from RAHN **LAB-NEWS** What is Astaxanthin?

AROUND THE WORLD Bye-bye Anti-Aging, and Hello Well-Aging **GOOD TO KNOW** Emotional Sensocosmetics



Dear Readers,



Welcome to our new edition of Cosmetopolitan.

May is the month where we celebrate **mental health awareness**. This year's theme is **loneliness** ...

Many of us have experienced loneliness at some point in our lives. We know that loneliness can be the cause and result of poor mental health.

Loneliness is becoming more prevalent, and it has had a significant impact on our physical and mental health during the pandemic. Our workplaces are changing as well. We need to embrace this transition while creating and maintaining important connections with our colleagues, as many are adapting to home and hybrid working.

Our connection to other people and our community is fundamental to protecting our mental health, so we must find better ways of tackling widespread feelings of loneliness. We can all play a part in this.

Here are some coping strategies that you might find useful:



Let's look out for each other.

Sandra

Yours, Sandra

WHO IS NEW?

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



RACHEL A. ROSS

Function Technical Sales Manager Division RAHN USA Joined 1st February 2022



ALESSIA POSTAI

Function Digital Marketing Manager Division RAHN AG Joined 1st April 2022



SANDRA PEYER Function Expert Regulatory Affairs RCA Division RAHN AG Joined 1st May 2022

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



RAHN's Golden Ticket

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LIFTONIN®-QI

At this year's in-cosmetics in Paris, we decided again to take a leaf out of Willy Wonka's book and hid multiple "Golden Tickets" in our RAHN chocolate.

And the winners are ...











Corporate Sustainability

Sustainability is a much-used term these days. What does it even mean? To be genuinely sustainable a business must not solely focus on its environmental impacts. It must benefit from sound governance, look after its employees, monitor its supply chains, mind its community, and of course offer excellent products to its customers.

We are proud to announce that we have been awarded with the Silver Sustainability Rating by EcoVadis – one of the most renowned business sustainability providers.

We did it! We achieved our goal of improving the EcoVadis Sustainability Rating from bronze to silver.

This Silver Award reflects our continuous efforts to improve our performance in terms of social and environmental responsibility. We made it into the top 25 %, which motivates us to continue to improve on this achievement and reach our goals to create a more sustainable future.





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

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



CHIARA DEGL'INNOCENTI

Part of the team since?	Almost 8 years
Responsible for?	Managing the RAHN Cosmetic Actives distribution network in Canada, Brazil, Scandinavian countries, South and East European countries, India
How would you describe yourself in three words?	Cheerful, natural and committed
What are you passionate about?	Observing the world's beauty is my passion. Spending time in the mountains and being in touch with nature: hiking, climbing, or simply standing in the green and taking in the scenery. I enjoy good food and wine, and I love trying new cuisines. Speaking with people from various cultures also inspires me.
What do you like about RAHN?	I like the working environment. The people I work with are great and really behave as a team. Everyone is collaborative and open to help each other. I think this is a very fundamental aspect in a company.



ISABELL STEGMANN

Part of the team since?	1 st of April 2020
Responsible for?	Technical Sales Manager in Northern Germany
How would you describe yourself in three words?	Open-minded, authentic, passionate and always in a good mood
What are you passionate about?	Business: every day for my job Private: for my family, friends and Carla (my cat ©), sports and voluntary work
What do you like about RAHN?	Lovely, supportive colleagues; familiar atmosphere within the company; great international team spirit combined with an attractive product portfolio and an excellent application laboratory team.



SARAH DERRER

Part of the team since?	1 st March 2020
Responsible for?	Customer Service for Switzerland, Austria, Poland and BeNeLux
How would you describe yourself in three words?	Cheerful, supportive and a good sense of humour
What are you passionate about?	Concerts & Music
What do you like about RAHN?	My colleagues and the generous social benefits

MELISSA PADUA

Part of the team since?	September 15, 2019
Responsible for?	Technical Sales Manager Cosmetics – West Coast USA
How would you describe yourself in three words?	Determined, meticulous, resilient
What are you passionate about?	Spending quality time with my family, exploring new places, being a tourist in my own city, enjoying different cuisines, learning about different cultures. And of course, all things beauty! I have always enjoyed exploring different sides of the cosmetics industry.
What do you like about RAHN?	Our amazing RAHN Cosmetic Actives, strong data, as well as our marketing. As a company, I appreciate the trust, support and understanding given to employees. It helps me to achieve a better work / life balance and to succeed all around. RAHN has provided me with the necessary tools to help deliver solutions to my customers. I truly enjoy being part of the RAHN family.



What is Astaxanthin?

Meet Astaxanthin – Nature's most powerful antioxidant.

Astaxanthin is a naturally occurring pigment that gives the reddish color to marine organisms such as crabs, shrimps, and salmon. Chemically, astaxanthin belongs to the oil-soluble carotenoid group, specifically to the xanthophylls. In natural surroundings, it can be found in photosynthetic organisms like bacteria, algae, and yeasts. The highest concentrations of natural astaxanthin can be accumulated from the freshwater microalgae Haematococcus pluvialis. When the algae is stressed by a lack of nutrients, increased salinity, or excessive sunshine, it produces astaxanthin. This is usually accompanied by the transformation of ovoid green vegetative cells into red cyst due to the increased carotenoid deposition (Figure 1).



Figure 1: Microscopic images of Haematococcus pluvialis showing its growth stages

Source: Kristoffersen, Arne & Svensen, Oyvind & Ssebiyonga, Nicolausi & Erga, Svein & Stamnes, Jakob & Frette, Øyvind. (2012). Chlorophyll and NADPH Fluorescence Lifetimes in the Microalgae Haematococcus pluvialis (Chlorophyceae) under Normal and Astaxanthin-Accumulating Conditions. Applied spectroscopy. 66. 1216-25. 10.1366/12-06634.

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What does Astaxanthin do? And should I use it?

Our skin is constantly exposed to free radicals such as the sun, smoke, toxins, and pollutants. Free radicals, also known as Reactive Oxygen Species (ROS), are highly reactive oxygen molecules and they are key players in the inflammatory process, which cause our cells to become dysfunctional and makes us age faster. They can accelerate the aging process and begin to cause visible damage, including the breakdown of collagen and elastin. Your skin will appear dull and thin with uneven tones, blemishes, pigmentation, fine lines and wrinkles.

Astaxanthin has been shown to neutralize free radicals. Because of its large number of conjugated double bonds, it has an enormous antioxidant potential and can thus neutralise ROS in cells, preventing oxidative stress and calming inflammation in the skin. It is possible for an astaxanthin molecule to transcend the cell membrane because of its length and shape; one end is lipid-soluble, while the other is water-soluble. As a result, astaxanthin is unique in its ability to protect the entire cell. Many antioxidants can convert into pro-oxidants under certain circumstances, causing damage to our cells. However, Astaxanthin is exceptionally stable and is well known as the "red diamond" of the antioxidant world. It shows significantly higher antioxidant activity than other superfood heroes:

- 54 times stronger than beta-carotene
- · 75 times more powerful than alpha lipoic acid
- 550 times more powerful than green tea catechins
- 800 times stronger than Q10
- 6,000 times greater than vitamin C

As an anti-inflammatory agent it reduces skin redness and calms down skin rashes and irritation. It helps to rejuvenate skin, reduce cell damage as well as protecting against UV induced pigmentation. Astaxanthin has also been proven to have a positive effect on sun protection. It does not shield or absorb UV light but has great skin protective benefits.

Numerous *in-vivo* and *in-vitro* studies by renowned institutes and medical universities have been conducted, verified, and confirmed the favourable benefits of AstaCos[®] OL50 on the skin. AstaCos[®] OL50 is a new trend ingredient that meets clients' needs in a variety of formulations and applications, including sustainable and certified natural cosmetics.

How to formulate with AstaCos® OL50?

AstaCos $^{\circ}$ OL50 has a 5 % astaxanthin standardisation level. It can be easily mixed with oil components due to its oil-soluble nature (Figure 2). The general use level is between 0.01 % and 0.3 %.

Incorporation temperatures:

Blending with the active phase at temperatures < 40°C

pH stability: pH 3–12



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Let's get glowing with our Fancy Red Glow Drops

Where AstaCos® OL 50 meets MYRAMAZE®-ESSENCE

How to use?

Simply take a small amount onto the palm of the hand and apply it over the face, neck and around the eye area. The formulation is particularly suitable as pre-care and supports the regeneration of the facial skin.

Positive vibes and a radiant appearance are guaranteed.

Key Benefits?

- Improves biological cell protection
- Potential to reduce digital ageing
- Outstanding antioxidant efficacy
- With the natural power of the resurrection plant awakens the skin and the mood
- · Ensures positive vibes and a radiant appearance
- A multisensory fireworks display for youthful skin
- Optimised skin sensation
- Silicon-like skin feel



Fancy Red Glow Drops



St	Substance	INCI name (EU)	%	Manufacturer
	AstaCos [®] OL50	Simmondsia Chinensis Seed Oil, Haematococcus Pluvialis Extract, Tocopherol	0.10	BDI-BioLife Science GmbH
	MYRAMAZE [®] -ESSENCE	Caprylic / Capric Triglyceride, Myrothamnus Flabellifolia Leaf / Stem Extract	3.0	RAHN AG
1	MCT Oil	Caprylic / Capric Triglyceride	19.36	AOT
	Eldew SL-205	Isopropyl Lauroyl Sarcosinate	77.44	Ajinomoto Co., Inc.
	Lucky Star	Parfum	0.10	H. Reynaud & Fils Matières Premières Aromatiques GmbH

Manufacturing procedure:

Mix ingredients in given order until all raw materials are dissolved.

AstaCos[®] OL50 delivers proven anti-ageing properties and strengthens the biological cell protection. Combined with MYRAMAZE[®]-ESSENCE, the product delivers a multisensory firework for youthful skin. The natural power of the resurrection plant awakens the skin and mood.

Bye-bye Anti-Aging, and Hello Well-Aging

Since the 1980s, anti-aging has been a beauty buzzword. It is a term used to describe the desire for people to slow down the ageing process. What all of this does, however, is overemphasise the negative aspects of aging. It reinforces the message that ageing is a condition we need to battle.

Anti-aging is associated with a youthful appearance, and both sexes are self-conscious in different ways about their appearance. The general consensus was that old age is stigmatised as an "unhealthy" stage of life, with body and mind naturally deteriorating and people being excluded from society. Therefore, anti-aging routines are typically viewed as either selfindulgent or motivated by anxiety about the body's inability to conform to the existing youthful ideal of beauty. The social support of our peers is essential as we age. Higher levels of social engagement, wellbeing, and improved mental health are all linked to increased satisfaction with one's personal appearance, according to research. One thing is certain: when women are unhappy with their appearance, they limit their social interactions, and their health and wellbeing may suffer as a result.



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In a culture where beauty standards emphasize youth, we prefer to talk about anti-aging rather than aging well. What if we could shift the way we talk about aging? Well-aging does not imply attempting to appear as if you are still in your twenties. Instead, it's about embracing your physical changes and the idea that beauty doesn't peak at any one point in your life, it keeps evolving. Choosing well-aging as an alternative will make the changes feel less difficult. The reason? You won't be fixated on the fact that aging is the enemy. Living life to the fullest and accepting and embracing new stages of life is what positive aging entails.

Language matters. When referring to a woman e.g., over the age of 50, it is common for people to use qualifiers such as "She looks great...for her age" or "She's beautiful ... for an older woman." Next time, stop yourself and consider what would happen if you just said, "She looks great." Together, we can start to shift the narrative and appreciate the inherent beauty in people of all ages.



Emotional Sensocosmetics – or how a fragrant cosmetic active ingredient lets your skin shine

No one can deny that the last two years have been a very stressful time. We could observe that not only our minds were sometimes on the edge of endurance, but also our skin. Whereby the phenomenon of mascne was rather a smaller part of the discomfort for the skin. This is because stress leads to the release of stress hormones, having an effect on the entire body - and thus also on the skin. It's time to calm down again, especially because the world order seems to be under pressure and one stress seems to take over from the next. As such, the topic of stress will remain with us in the cosmetics world for some time to come, and it has become a big trend. But what can be done to soothe both the mind and the skin? An age-old approach here is the use of luxury consumer goods. However, while the pot of cookie ice cream leads to immediate relaxation, it is not a long-term solution. The situation is different with fragrances, because they are absolutely calorie-free. And scents have actually always been used for relaxation.

Many essential oils have been employed in aromatherapy for thousands of years. When used as fragrance oils or perfumes, they not only make you smell good, but also influence your state of mind. It has long been known that the scents of rosemary, citrus and pine have a stress-relieving effect. All of these aromas are present in MYRAMAZE®-ESSENCE, an oily CO₂ extract from the South African resurrection bush *Myrothamnus flabellifolia*.

Rosemary, for example, can reduce the level of the stress hormone cortisol [1]. Citrus scents can have anti-depressive effects. Both are ideal when stress reduction and mood enhancement is required. A Japanese study found that a leisurely walk through a pine forest (Shinrin-Yoku) significantly reduces anxiety, depression and stress [2], and this "treatment" can now even be prescribed by a doctor. One of the main ingredients of the scent of pine is the fragrance cedrol. Just a tiny amount of it is enough to lower blood pressure and heart rate when inhaled.



Figure 1: *Myrothamnus flabellifolia*, a true resurrection bush. It can completely dry out for months just to revive after a refreshing rain shower.



Figure 2: Scent profile of MYRAMAZE[®]-ESSENCE judged by a naïve female panel. It exactly reflects the assessment of a trained panel of fragrance experts (not shown). The size of the words corresponds to the number of mentions.

The idea that fragrant cosmetic ingredients can benefit the skin is not just enshrined in traditional systems of medicine (such as Ayurveda) but is increasingly being investigated by scientists. Sandalore, for example, a fragrance obtained from sandalwood, can have a positive influence on the differentiation and maturation of keratinocytes and can enhance the skin barrier [3]. Bitter flavours, like amarogentine, bind to bitter taste receptors and have a similar effect [4].

During ageing or in stressful situations, the important calcium gradient of the skin is disrupted [5, 6] and the skin can look dry and dull. However, for a flawless, radiant skin, an excellent skin surface structure and an intact skin barrier are required. Calcium-regulating active ingredients are thus a good choice when the objective is to create a remarkable, radiant complexion. In view of the fact that small amounts of the right fragrance are sufficient to induce unconscious positive reactions of our body and mind through our sense of smell, it is apparent that such tiny amounts will also have an effect on skin. And this is exactly where MYRAMAZE®-ESSENCE comes into play. During transformation from stratum spinosum cells to stratum granulosum cells, the keratinocytes dramatically increase their metabolism and trigger a battery of calcium-dependent gene expression and enzymatic activities. Multiple stress factors, like mechanical impacts, radiation and wounds, disturb this pivotal calcium gradient while it also becomes less pronounced during the ageing process [7]. The result is a less effective cornified envelope and skin barrier, as well as a reduced capability to cope with inflammatory stresses. Without a properly functioning calcium gradient, the skin loses its moisture and dries out.

It has long been known that certain extrinsic molecules can have beneficial effects on skin. These are often molecules with a pleasant odour that also have holistic positive effects, as is the case in aromatherapy. Such fragrance molecules can indeed stimulate the maturation of keratinocytes by activating olfactory and bitter taste receptors present on their surface. Activation of these receptors lead eventually to an improved and fully moisturised epidermis (figure 1).



Figure 3: MYRAMAZE[®]-ESSENCE quickly moisturises the skin, especially in very dry skin regions, where moisture is needed most.

Clinical studies have shown that MYRAMAZE®-ESSENCE can elicit a more positive mood in persons under stress by instantly lowering levels of stress hormones. It generates exceptional radiance by activating five triggers: it balances facial hydration,

reduces redness, brightens, reduces roughness and increases gloss. In addition, the skin barrier is strengthened, and the skin becomes more elastic. The lips become plumper and wrinkles on the lips as well as on the skin are reduced.



Figure 4: The 5-fold action of MYRAMAZE[®]-ESSENCE for a vibrant skin.

Anti-Stress Face Cream

St	Substance	INCI name USA	% [w/w]	Manufacturer
1	Water demin.	Water	69.80	several
	Dermosoft Pentiol eco	Pentylene Glycol	3.00	Evonik, DE
	Dermosoft 1388 ECO	Glycerin, Water, Sodium Levulinate, Sodium Anisate	3.00	Evonik, DE
2	Dermofeel GSC	Glyceryl Stearate Citrate	3.00	Evonik, DE
	Keltrol CG-SFT	Xanthan Gum	0.20	CP Kelco, US
	Tego Alkanol 1618	Cetearyl Alcohol	2.00	Evonik, DE
	Myritol 312	Caprylic / Capric Triglyceride	15.00	BASF, DE
3	Citric Acid solution 10%	Citric Acid, Water	1.00	several
4	MYRAMAZE®-ESSENCE	Caprylic / Capric Triglyceride, Myrothamnus Flabellifolia Leaf / Stem Extract	3.00	RAHN AG, CH

Caring Lip Treatment

St	Substance	INCI name USA	% [w/w]	Manufacturer
1	Sheabutter	Butyrospermum Parkii Butter	25.00	All Organic Treasures GmbH, DE
	Kahlwax 2039 L	Euphorbia Cerifera (Candelilla) Wax	7.00	All Organic Treasures GmbH, DE
	Beeswax white	Beeswax	10.00	All Organic Treasures GmbH, DE
	WITARIX MCT 60/40	Caprylic / Capric Triglyceride	45.00	IOI OLEO GmbH, DE
	Tegosoft CR	Cetyl Ricinoleate	10.00	Evonik, DE
	MYRAMAZE®-ESSENCE	Caprylic / Capric Triglyceride, Myrothamnus Flabellifolia Leaf / Stem Extract	3.00	RAHN AG, CH

Micellar Water

St	Substance	INCI name USA	% [w/w]	Manufacturer
1	Water demin.	Water	88.50	several
	Dermosoft Pentiol eco	Pentylene Glycol	4.00	Evonik, DE
2	MYRAMAZE®-ESSENCE	Caprylic / Capric Triglyceride, Myrothamnus Flabellifolia Leaf/Stem Extract	0.50	
	Tego Solve 61	Polyglyceryl-6 Caprylate, Polyglyceryl-3 Cocoate, Polyglyceryl-4 Caprate, Polyglyceryl-6 Ricinoleate, Water	7.00	RAHN AG, CH



Media Corner



LEARN MORE

Make your skin shine with all your senses

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Learn more with our application videos ...

We're excited to share our first video tutorial on how to produce a thick, creamy wash cream without using thickeners.

Are you familiar with our Cold Production Wash Cream? And have you ever wondered how to use Amilite GCS-12K?



Take a break and enjoy ...





Cold Production Wash Cream

St	Substance	INCI name USA	% [w/w]	Manufacturer
1	Water demin.	Water	52.80	several
	Dermosoft MCAV	Dipropylene Glycol, Caprylyl Glycol, Glyceryl Caprylate	1.00	Evonik, DE
	Keltrol CG-SFT	Xanthan Gum	0.50	CP Kelco, US
2	Amilite GCS-12K	Sodium Cocoyl Glycinate, Water	35.00	Ajinomoto, JP
	Amisoft ECS-22W	Disodium Cocoyl Glutamate, Water	3.00	Ajinomoto, JP
	Sensual Flower	Fragrance	0.70	Aromatic Flavours & Fragrances Europe Ltd., GB
3	Water demin.	Water	5.00	several
	Citric Acid 100 %	Citric Acid	2.00	several

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The Encyclopaedia of Cosmetics



- ...**Q**10
- ...**Q**uercetin
- ... Rancidity
- ...**R**ed 27
- ...**R**etinol
- ... Retinyl Palmitate
- ...**R**heometer
- ... Risk assessment
- ...Rosacea
- ...**R**SPO



Q10

Also known as ubiquinone, it is a fat-soluble vitamin-like molecule that occurs naturally in the body. Coenzyme Q10 has been proven to help reduce the appearance of signs of ageing. According to the most recent studies, topical application of Q10 has antioxidant and skin-soothing properties.

Quercetin

It belongs to the family of flavonoids. They are the pigments that give fruits and vegs their beautiful rich colours. You'll find quercetin in apples, tea, olive oil, leafy vegs like cabbage and spinach, citrus fruits, red wine, and grapes. Quercetin has antioxidant and anti-inflammatory properties. It has the ability to fight and neutralise free radicals, which are the main cause of ageing.

Rancidity

When oils and fats are exposed to moisture, air, or even light, they get partially or completely oxidized, resulting in rancidity.

Red 27

It's a dye that goes by the name CI 45410 and is found in products like Color Changing Lipsticks. What makes Red 27 unique is that it is colourless when dissolved in a waterless base and it turns to a bright pink when exposed to moisture.

Retinol

Vitamin A is also known as retinol, a powerful antioxidant. It has the ability to counteract the negative effects of free radicals. Retinol also helps battle wrinkles and increases the production of collagen. Acne-prone skin, spots, and eczema can all be treated with retinol. It lightens skin discoloration and smoothes wrinkles caused by the sun's damaging rays.

Retinyl Palmitate

Retinyl palmitate is a combination of retinol (pure vitamin A) and palmitic acid, a fatty acid. It is a powerful antioxidant that is used in a variety of skin care products, including moisturisers, sunscreens, and topical acne treatments. It can help treat mild acne and slow the ageing process by boosting the production of collagen.

Rheometer

A rheometer is a laboratory device that measures how a liquid or suspension responds to applied forces.

Risk assessment

Risk-based safety assessments of cosmetic ingredients and products are based on evaluations of the risk they pose. Risk is defined as the probability of harm in relation to dose and exposure.

Rosacea

Rosacea is characterized by skin reddening and the appearance of small, superficially dilated blood vessels.

RSPO

Green organisations (such as the WWF) founded the Roundtable on Sustainable Palm Oil (RSPO) in 2004 in response to the negative consequences of the enormous global demand for palm oil. The RSPO is a non-profit member organisation and certification scheme whose members include NGOs, institutions, purchasers, and manufacturers. The members have collaborated to develop a manufacturing and traceability certification standard that ensures palm oil production complies to environmental and social principles and standards.

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