#### FIM

# Fagron Innovative Materials

Product Catalogue



Fagron goes beyond being just a supplier of ingredients; we are relentlessly **consumer-centric**. Our commitment to innovation is ingrained in everything we do for our partners, making us pioneers in shaping the future of **personalized health**. Our unwavering dedication to simplifying science expedites the journey from concept to consumer, empowering you to introduce **purpose-driven nutraceutical and cosmetic solutions** to the market swiftly.

When you collaborate with Fagron for personalized health solutions, you gain an inventive, purpose-driven, end-to-end partner. We draw inspiration from the most crucial health requirements of consumers to deliver your next product with a clear purpose in mind.

At Fagron, innovation is at the heart of everything we do. We are constantly striving to push the boundaries of what's possible in the world of pharmaceutical compounding, personalized medicine, and beyond. The Fagron Innovative Materials initiative is a testament to our commitment to innovation and our dedication to providing cutting-edge solutions.

The FIM initiative was born out of a clear vision – a vision to introduce a range of materials and compounds in recognition of the growing need to create the highest quality customized health solutions. We saw an opportunity to fill this gap and make a significant impact on the industry.

Ultimately, the FIM project is about empowering industry customers to achieve new levels of creativity and precision in their service. We believe that by providing access to innovative materials, we are enabling the delivery of the highest quality customized health and beauty solutions that improve outcomes and quality of life.

# Fagron's Value-Driven Innovative Materials for Market Success

#### **Market Insights and Trends**

We stay ahead of industry trends and emerging market insights to provide you with cutting-edge ingredients that align with consumer demands and current requirements.

#### **Differentiation and Branding**

Our portfolio offers you the opportunity to differentiate your products and build a distinctive brand presence in the market.

# Unique, Clean Label, High-Quality Ingredients

Fagron's materials are known for their uniqueness, clean label appeal, and uncompromising quality, ensuring the success of your formulations.

#### **Natural Ingredients**

We respond to the growing demand for natural ingredients and their growing clinical value.

#### **Innovation and Creativity**

Our range of materials can help you spark creativity and develop groundbreaking and successful solutions.

#### **Quality Compliance**

We adhere to high-quality standards, ensuring that our materials meet strict requirements.

#### Convenience & Time-Saving

Our streamlined processes and diligent behind-the-scenes work ensure that you receive complete documentation and your materials on time, saving you valuable resources.

#### Sustainability and Ethical Sourcing

We are committed to ethical sourcing practices and sustainable initiatives, contributing to a healthier planet and a responsible supply chain.

# Consumer preferences and market trends



#### Holistic Well-being

Consumers prioritize holistic well-being, disease prevention, and longevity.



#### **Personalized Health**

The demand for personalized health solutions is rising, with consumers seeking tailored products to meet their health goals.



#### **Natural and Plant-Based**

Natural and plant-based ingredients are in high demand, reflecting the desire for cleaner and more eco-friendly products.



#### **Specific Health Goals**

Products that address specific health goals such as energyboosting, weight management, immunity enhancement, cognitive health, stress relief, and beauty are in great demand.



#### **Alignment with Values**

Consumers prefer products that align with their values, including those promoting sustainability and ethical sourcing.



#### **Clinical Evidence**

Consumers look for products with clinical evidence supporting the effectiveness and safety of natural materials and compounds.



#### **Efficacy and Safety**

In their search for health solutions, consumers prioritize products that effectively address their needs while maintaining a focus on safety.

# Fagron Innovative Materials Categories

O1
Health
& Wellness industry

Focus

Well-being, nutrition, food supplements, nutraceuticals.

Designated use

Dietary supplements containing FIM products as main ingredients, or as synergistic ingredients in targeted formulations.

O2
Personal care
& Cosmetic industry

Focus

Skincare, skin treatment, haircare, beauty.

Designated use

Cosmetic formulations containing FIM products at a final concentration typically ranging between 0,5 to 3%.

## **Fagron Innovative Materials' Product Range**

#### OleaFrut™\*

Greek olive fruit extract

Olive Fruit dry extract standardized to 5-8% hydroxytyrosol.

#### OleaLifa™\*

Greek olive leaf extract

Olive Leaf dry extract standardized to 10% oleuropein.

#### OleaOlix™

Greek ultra-concentrated extract of Extra Virgin Olive Oil

High Phenolic Extra Virgin Olive Oil liquid extract standardized to 20% polyphenols.

#### SidTea+™\*

**Greek Mountain Tea extract** 

Greek Mountain Tea dry extract standardized to total phenolic content.

#### VinoPhex™

Greek grape pomace extract

Grape Pomace dry extract standardized to total phenolic content.

#### Akkermat™

Chili pepper extract encapsulated in fenugreek extract

Chilli pepper extract (2% capsaicinoids) combined with fenugreek extract (FENUMAT™ technology).

#### MetaboMelo™

Bitter melon fruit extract

Bitter Melon fruit dry extract standardized to 7% charantin.

#### NaringiCol™

Naringin compound standardized to 98%

Naringin powder, standardized to 98%, from Pomelo fruit.

#### Piceidox™

Polydatin compound standardized to 98%

Polydatin powder, standardized to 98%, from Polygonum cuspidatum.

#### Nervonex™

Nervonic acid standardized to 90%

Nervonic acid powder, standardized to 90%, from Macaranga adenantha fruit oil.

#### Calcionex™

Natural calcium source from red algae

Calcium-rich powder, standardized to 30%, from the algae *Lithothamnium calcareum*.

#### HydroLano™

Anhydrous Lanolin

Anhydrous Lanolin with high water absorption capacity.

<sup>\*</sup> The extract is available in both organic and conventional variants.

# **Summary of Key Features and Applications**

					Healt	h Applic	ation*					Prod design	
	Cholesterol	Blood pressure	Blood sugar	Weight	Digestive Health	Immune Health	Cognitive & Mental Wellbeing	Bone & Joint Health	Women's Health	Anti-microbial & anti-viral	Skin & Personal Care Products	Dietary Supplements	Cosmetics
OleaFrut™	•										•	•	•
OleaLifa™	•	•								•	•	•	•
OleaOlix™		•	•								•	•	•
SidTea+™		•				•	•				•	•	•
VinoPhex™	•	•	•								•	•	•
Akkermat™	•			•								•	
MetaboMelo™			•	•								•	
NaringiCol™	•		•	•								•	
Piceidox™					•				•		•	•	•
Nervonex™							•					•	
Calcionex™								•	•			•	
HydroLano™											•		•

<sup>\*</sup> At Fagron, we are committed to providing high-quality products that offer potential health benefits. However, we want to emphasize that the efficacy of the products may vary from individual to individual and can be influenced by several factors, including but not limited to dosage and usage, health status and conditions, lifestyle and diet, allergies and sensitivities, and individual variability.

For more information, see the product brochures or contact your local representative.

#### Join Us on this Journey

"We invite you to join us on this exciting journey of innovation and discovery. Explore the pages of this catalog to discover our range of Fagron Innovative Materials and see how they can elevate your business. Together, we can shape the future of personalized care and make a positive impact worldwide."

# OleaFrut™

#### The Health Potential of Olive Fruit



#### **General Information**

**Premium Extract:** OleaFrut<sup>™</sup> is an olive fruit extract that encapsulates health-enhancing compounds sourced from Greek olives.

**Potent Bioactives:** Olive fruits contain a rich array of polyphenolic compounds, including hydroxytyrosol, tyrosol, verbascoside, oleocanthal, and oleacin. OleaFrut™ is standardized to 5-8% hydroxytyrosol, a powerful antioxidant officially recognized by EFSA for its daily intake of at least 5 mg to protect blood lipids (LDL) from oxidative stress (Regulation EC No 432/2012).

**Biological Activity:** Hydroxytyrosol conducts an intricate symphony within the body, activating key molecular pathways and enhancing antioxidant and anti-inflammatory defenses.

**Eco-friendly Extraction:** OleaFrut $^{\text{TM}}$  is extracted using an environmentally friendly subcritical water extraction and natural chromatographic enrichment.

#### **Key Benefits**

**Cardiovascular Health:** Clinical data showed the ability of hydroxytyrosol to reduce low-density lipoprotein (LDL) and olive fruit extract was shown to provide protective effects in individuals at risk of arterial stiffness.

**Other Promising Health Benefits:** Olive fruit extract holds promise in supporting both metabolic health and bone health.

**Skincare:** Olive fruit-based extracts are highly valued in cosmetics due to their antioxidant and anti-aging properties.

#### Recommended Use, Dosage, and Safety

**Dietary supplements:** Can be formulated into capsules, softgels, sachets, drinks, and tablets, at dosages ranging from 100 mg/day to 1400 mg/day, depending on the desired final hydroxytyrosol concentration. It can be used alone or in combination with other (synergistic) ingredients.

**Topical Applications:** Up to 2% OleaFrut<sup>™</sup> extract in the final product (creams, lotions, or gels).

**Safety:** Olive fruit extract and its active compound, hydroxytyrosol, are generally regarded as safe for human consumption and cosmetic use.

#### **Specifications**

Botanical name	Olea europaea
Part used	Olive fruit
Composition	40-45% native extract, 55-60% maltodextrin
Appearance	Dark green-brownish powder
Total Phenolic Content	≥50 mg GA/g
Hydroxytyrosol Content	5-8%
Antioxidant Activity	IC50 ≤200 µg/ml (DPPH radical scavenging assay)
CAS No.	84012-27-1
Other	non-GMO, vegan, and vegetarian-friendly
Shelf-life	24 months unopened, stored in a cool and dry location

The extract is available in both organic and conventional variants.

# OleaLifa™

# The Healing Power of Olive Leaf

#### **General Information**

Premium Extract: OleaLifa™ is a high-quality olive leaf extract (OLE) derived from the Greek koroneiki olive plant, standardized to contain 10% oleuropein. Oleuropein, a type of phenolic bitter compound, is a well-recognized compound known for its potential health benefits.

**Potent Bioactives:** In addition to oleuropein, OleaLifa™ also comprises other valuable phenolic compounds, including hydroxytyrosol, tyrosol, acteoside (verbascoside), caffeic acid, p-coumaric acid, and vanillic acid, along with a substantial amount of flavonoids.

**Biological Activity:** OLE and its bioactive components demonstrate a wide range of pharmacological activities mediated by various molecular mechanisms that confer antioxidant, anti-inflammatory, and antimicrobial properties to the extract.

**Eco-friendly Extraction:** OleaLifa™ is obtained through an environmentally friendly subcritical water extraction process, followed by natural chromatographic enrichment.

#### **Key Benefits**

**Cardiovascular Health:** OLE consumption can lower blood pressure, LDL cholesterol, and inflammatory markers.

**Hypertension:** A relevant study on stage-1 hypertension patients showed similar significant effects on blood pressure reduction between OLE (500 mg twice daily) and a hypertensive medication (Captopril 12.5-25 mg twice daily).

**Antiviral Properties:** OLE holds promise in supporting the management of viral infections, for example, upper respiratory tract infections and skin infections such as herpes.

**Skincare and Personal Care:** OLEs are used in cosmetic formulations providing antioxidant and rejuvenating benefits.

#### Recommended Use, Dosage, and Safety

**Dietary Supplementation:** In the form of capsules, softgels, sachets, drinks, or tablets, at dosages ranging from 100 to 1000 mg/day. It can be used alone or in combination with other (synergistic) nutraceutical ingredients.

**Topical Applications:** OleaLifa $^{\text{TM}}$  can be integrated into creams, lotions, and gels at concentrations up to 2%.

**Safety:** OLE is generally regarded as safe for human consumption and cosmetic use.



#### **Specifications**

Botanical name	Olea europaea
Part Used	Olive leaf
Composition	70-75% native extract and 25-30% maltodextrin
Appearance	Light green powder
Oleuropein Content	~10%
Total phenolic content (Folin-Ciocalteu)	≥50 mg GA/g
Antioxidant activity	IC50 ≤200 µg/ml (DPPH radical scavenging assay)
CAS No.	8001-25-0 / 84012-27-1
Other	non-GMO, vegan, and vegetarian-friendly
Shelf-life	24 months unopened, stored in a cool and dry location

The extract is available in both organic and conventional variants.

# OleaOlix™

# The Extraordinary Ultra Concentrated Extract derived from Extra Virgin Olive Oil



#### **General Information**

**Premium Extract:** OleaOlix™ is an ultra-concentrated high phenolic liquid extract of Greek Extra Virgin Olive Oil (EVOO) standardized to 20% polyphenols. 1kg of OleaOlix™ extract is produced from 1000kg of olive oil.

**Biological Activity:** The secret behind EVOO's remarkable health benefits lies in its unique bioactive compounds, particularly polyphenols like oleocanthal, oleacein, hydroxytyrosol, flavonoids, and triterpenic acids. These active compounds exert their actions at the cellular and subcellular levels, interacting with nucleic acids, carbohydrates, proteins, and lipids to achieve powerful antioxidant and anti-inflammatory effects.

**Health Claim:** The EFSA has approved a health claim that olive oil polyphenols contribute to the protection of blood lipids from oxidation based on a daily intake of at least 5 mg polyphenols (hydroxytyrosol and its derivatives) per 20 g of olive oil (Regulation EC No 432/2012).

**Eco-friendly Extraction:** OleaOlix™ is extracted using ar environmentally friendly liquid extraction method.

#### **Key Benefits**

**Cardiovascular Health:** High Phenolic EVOO and its polyphenols help reduce cardiovascular risk factors, lower blood pressure, and improve arterial stiffness and inflammation.

**Metabolic Health and Diabetes Management:** High Phenolic EVOO, containing oleocanthal and oleacein, has shown positive effects on glycemic control and insulin sensitivity.

**Skincare and personal care:** Olive oils and their extracts are used in cosmetic formulations to provide moisturizing, antioxidant, and antiaging effects.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** can be formulated into softgels and liquid preparations at a daily dosage ranging from 25 mg (~5 mg polyphenols) to 125 mg (~25 mg polyphenols) OleaOlix™ extract.

**Topical Applications:** for cosmetic formulations with up to 2% OleaOlix<sup> $\mathbb{M}$ </sup> extract.

**Safety:** High Phenolic EVOO and its extract are generally well-tolerated and safe.

#### **Specifications**

High Phenolic Extra Virgin Olive Oil (EVOO) Extract			
Oil is obtained from olives, the fruit of the olive tree, Olea europaea			
100% native extract			
Viscous brown liquid			
~20%			
Gluten-free, non-GMO, suitable for vegan and vegetarian diets			
24 months unopened, stored in a cool and dry location			

# SidTea+™

## The Power-packed Greek Mountain Tea Extract

#### **General Information**

**Premium extract:** SidTea+ $^{TM}$  is a dry extract derived from the Greek Mountain Tea plant.

**Potent Bioactives:** SidTea+™ contains a wealth of bioactive compounds, including flavonoids (apigenin), phenolic acids, phenylethanoid glycosides (verbascoside), terpenoids (iridoids and kauranes), and essential oils.

**Biological Activity:** SidTea+™ delivers powerful antioxidative effects by neutralizing reactive oxygen species (ROS) and anti-inflammatory effects by inhibiting the production of pro-inflammatory cytokines. Scientific research highlights Greek Mountain Tea's remarkable antioxidant, anti-inflammatory, gastroprotective, spasmolytic, and antimicrobial properties.

**Eco-friendly Extraction:** SidTea+™ is extracted using an environmentally friendly subcritical water extraction and natural chromatographic enrichment process.



**General Health and Immune Support:** Recognized by the EMA (European Medicine Agency) for its efficacy in relieving coughs and mild stomach discomfort, Greek Mountain Tea is a go-to for relief of coughs and mild stomach discomfort.<sup>1</sup>

**Blood Pressure Management and Antioxidative Effects:** SidTea+ supplementation was shown to lower systolic blood pressure and reduce oxidative stress levels, contributing to cardiovascular health.

**Cognitive Health and Mental Wellbeing:** Greek Mountain Tea extract was shown to improve cognitive performance, increase cerebral blood flow, and reduce anxiety.



#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** at a daily dosage ranging from 100 to 1500 mg that can be formulated into capsules, softgels, sachets, drinks, or tablets. It can be used alone or in combination with other (synergistic) nutraceutical ingredients.

**Topical Applications:** up to 2% SidTea+ in the final cosmetic product.

**Safety:** Greek Mountain Tea extract consumption is well tolerated and safe.

#### **Specifications**

Composition	80% Sideritis scardica (Greek Mountain tea) native extract and 20% maltodextrin
Parts used Flowers, leaves, and stems	
Appearance	Beige powder
Total phenolic content	≥50 mg GA/g
Antioxidant activity	IC50 ≤200 µg/ml (DPPH radical scavenging assay)
Other	non-GMO, vegan and vegetarian-friendly
Shelf-life	24 months unopened when stored in a cool, dry place

The extract is available in both organic and conventional variants.

# VinoPhex™

# The Health Fountain of Grape Pomace



#### **General Information**

**Premium extract:** VinoPhex $^{\text{TM}}$  is a powerful Greek grape pomace extract derived from the remnants of winemaking.

**Potent Bioactives:** It boasts a wealth of bioactive compounds, including polyphenols like resveratrol, quercetin, and catechins, such as oligomeric proanthocyanidins.

**Biological Activities:** Bioactive compounds harness the antioxidant power by elevating antioxidant enzymes to scavenge free radicals and reactive oxygen species, while also offering anti-inflammatory capabilities by modulating key factors in inflammation.

**Eco-friendly Extraction:** VinoPhex™ is extracted using an environmentally friendly subcritical water extraction and natural chromatographic enrichment process.

#### **Key Benefits**

**Cardiovascular Health:** Clinical trials reveal the ability of grape pomace and seed extract to support heart health, lower blood pressure, and reduce low-density lipoprotein (LDL).

**Metabolic Wellbeing:** Grape pomace extract has been associated with improved blood sugar and insulin sensitivity which may promote metabolic health.

**Skincare:** Grape-based extracts are valued in cosmetics for their antioxidant, anti-aging, and UV-protection properties.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** Can be formulated into capsules, softgels, sachets, drinks, or tablets at a daily dosage ranging between 100-500 mg. It can be used alone or in combination with other (synergistic) nutraceutical ingredients.

**Topical Applications:** Up to 3% VinoPhex<sup>™</sup> in the final product (creams, lotions, or gels).

**Safety:** With a rich history of safe consumption and usage, grape pomace extract studies report it as safe for consumption and cosmetic use.

#### **Specifications**

Botanical Name	Vitis vinifera
Parts used	Grape skins, seeds, stems, and leaves
Composition	90% native extract, 10% maltodextrin
Appearance	Brown powder
Total Phenolic Content	≥40 mg GA/g
Antioxidant Activity	IC50 ≤200 μg/ml (DPPH radical scavenging assay)
CAS No.	85594-37-2 / 84929-27-1
Other	non-GMO, vegan, and vegetarian-friendly
Shelf-life	24 months unopened, stored in a cool, dry location

# Akkermat™

# The Power of Nature and Innovation for Weight Management and Metabolic Health

#### **General Information**

**Premium Formulation:** Akkermat™ combines a chili pepper extract, encapsulated in a fiber-rich fenugreek extract matrix using FENUMAT technology.

**Potent Bioactives:** Akkermat $^{\text{TM}}$  contains at least 2% of powerful capsaicinoids including capsaicin, dihydrocapsaicin, and nordihydrocapsaicin.

**Biological Activity:** Capsaicinoids, mainly capsaicin, act as a metabolic activator influencing several pathways, genes, and proteins involved in interconnected processes that impact energy metabolism

**Sustained-release effect:** Akkermat<sup>™</sup> thanks to its unique formulation offers a controlled release, ensuring a sustained, lasting effect and improved bioavailability.

#### **Key Benefits**

Metabolic Health Support and Weight Management: Akkermat™ harnesses the metabolism-boosting power of capsaicinoids that promote thermogenesis, and energy expenditure in brown fat tissue, adding to weight loss.

**Cholesterol Management:** Capsaicinoids intake is associated with the reduction of lipid oxidation and lower LDL cholesterol levels.

**Appetite Regulation:** Capsaicinoids may affect hormones that help curb appetite and enhance satiety.

Gut Health Modulation: Akkermat™ may positively influence gut microbiota composition and intestinal mucus production.

**Antioxidant and Anti-Inflammatory Effects:** Capsaicinoids exhibit antioxidant properties, scavenging free radicals and potentially reducing inflammation in adipose tissue.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements** targeting metabolic health and weight management, at a daily dosage ranging from 100-300 mg, equivalent to 2 to 6 mg of capsaicinoids.

For enhanced metabolic management, consider combining Akkermat™ with other synergistic nutrients.

**Safety:** Akkermat<sup>™</sup> and its ingredients are safe and well-tolerated when used as recommended but intake of capsaicinoids is contraindicated in individuals with digestive issues, pregnant and lactating women, and children.

#### **Specifications**

Ingredients	Chili pepper fruit extract (Capsicum annum), debittered fenugreek seed extract (Trigonella foenum-graecum) rich in soluble dietary fiber, cellulose powder
Total Capsaicinoids (capsaicin, dihydrocapsaicin, nordihydrocapsaicin)	≥2%
Additives/Excipients	Sunflower lecithin
Appearance	Free-flowing beadlets
Color	Light yellowish brown
Residual solvents	Ethanol, acetone
Other	Gluten-free, Vegan, Kosher, Halal, Non-GMO
Shelf-life	24 months when stored in tightly sealed containers, at 20-30°C, protected from direct sunlight

# MetaboMelo™

# Optimizing Carbohydrate Metabolism with Bitter Melon Extract



#### **General Information**

**Premium Extract:** MetaboMelo™ is a dried bitter melon fruit extract standardized to **7% charantin**.

**Potent Bioactives:** Bitter Melon's fruit contains triterpenoids like charantin (a natural compound with an insulin-like effect), momordicin (renowned for its antimicrobial, anti-inflammatory effects, and immune support), phenolic compounds such as quercetin, carotenoids like lutein, phytosterols, and alkaloids.

**Biological Activity:** Bitter melon exerts its beneficial anti-diabetic effects through several mechanisms of action and regulated pathways including regulation of energy metabolism pathways and genes.

**Gentle Extraction:** Metabo $Melo^{TM}$  is extracted using a gentle ethanolwater extraction method, preserving its natural properties.

#### **Key Benefits**

**Blood sugar regulation and hypoglycemic effect:** Bitter melon extract supplementation was shown to lower fasting plasma glucose levels and HbA1c levels.

**Metabolic Wellbeing:** Bitter melon extract may positively impact blood lipid levels and help combat advanced glycation endproducts (AGEs).

**Weight management:** Bitter melon extract may support reductions in body weight, body mass index (BMI), waist circumference, and body fat percentage.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** Alone or in conjunction with other synergistic nutrients, at a daily dosage ranging from 100 to 2000 mg, often administered in divided doses.

Designed for formulations supporting carbohydrate metabolism, body weight, and overall metabolic health.

**Safety:** bitter melon has a well-established safety record, having been consumed in various forms, including teas, extracts, and dietary supplements. Clinical data indicates that consumption is well tolerated and safe.

#### **Specifications**

Botanical Name	Momordica charantia L. Fruit		
Part used			
Standardization	7% charantin		
Appearance	Fine, slightly yellow powder		
Other	Gluten-free, non-GMO, vegan and vegetarian-friendly		
Storage	In a cool and dry place, do not freeze, keep away from light and heat		
Shelf-life	3 years		

# NaringiCol™

# Nature's Solution to Cholesterol Management

#### **General Information**

Premium Extract: NaringiCol™ boasts a high standardization of **98%** naringin.

**Potent Bioactive:** Naringin is a natural polyphenolic compound found in citrus fruits.

**Biological Activity:** Naringin has the potential to regulate multiple pathways and mechanisms within the body. It influences cholesterol and metabolic pathways, antioxidant pathways, and anti-inflammatory pathways.

**Gentle Extraction:** NaringiCol™ is extracted using a gentle ethanolwater extraction method, preserving its natural properties.



**Cholesterol Management:** Naringin helps regulate (LDL) cholesterol levels, promoting cardiovascular health.

**Metabolic Health Support:** Naringin may support blood sugar and metabolic health, aiding in weight management and overall vitality.

**Anti-inflammatory effects:** Naringin's anti-inflammatory properties may help reduce inflammation.

**Antioxidant effects:** Naringin may conquer oxidative stress and support the body's defense against free radicals.



#### Recommended Use, Dosage, and Safety

**For Dietary Supplements** targeting cholesterol metabolism and metabolic health, at a daily dosage ranging from 100-450 mg, used alone or in combination with other (synergistic) ingredients.

For enhanced cholesterol management, consider combining NaringiCol $^{\rm m}$  with fermented rice standardized in monacolin, or other synergistic nutrients.

It is considered a viable alternative for individuals with statin intolerance.

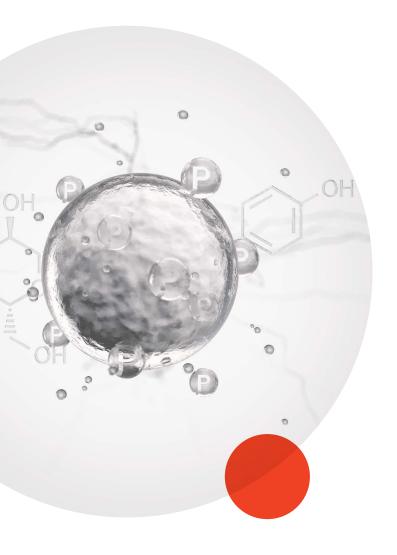
Safety: Naringin intake is well tolerated and safe.

#### **Specifications**

Source	Citrus grandis (L.) Osbeck, commonly known as Pomelo
Part Used	Fruit
Appearance	Light yellow powder
Other	GMO-free, gluten-free, allergen-free, irradiation- free, vegan and vegetarian-friendly
CAS No.	10236-47-2
Shelf-life	24 months when stored in a cool, dry place, away from light and heat.

## Piceidox™

# The Natural Antioxidant Firepower



#### **General Information**

Premium Extract: Piceidox™ is standardized to 98% polydatin.

**Potent Bioactive:** Polydatin, also known as piceid, is a natural compound derived from Japanese knotweed. Structurally, it's resveratrol's relative that shares similar health benefits. Polydatin is a potentially superior antioxidant compared to resveratrol.

**Biological Activity:** Polydatin activates molecular signaling pathways leading to the increased activity of antioxidative enzymes and anti-inflammatory molecules.

**Gentle Extraction:** Piceidox™ is extracted using a gentle method, preserving its natural properties.

#### **Key Benefits**

**Women's Health:** Based on clinical findings, polydatin in combination with palmitoylethanolamide (PEA), reduced pain associated with endometriosis and dysmenorrhea.

**Digestive Health:** Based on clinical findings, polydatin with PEA, significantly reduced the severity of abdominal pain in patients suffering from IBS (Irritable Bowel Syndrome).

**Skin Health:** Based on clinical findings, polydatin used topically and orally, contributed to the improvement of the skin barrier, mitigation of local inflammatory responses, and a reduction in itching and scratching tendencies in individuals with atopic dermatitis.

#### Recommended Use, Dosage, and Safety

**For Dietary Supplements:** Alone or in synergy with other active compounds, such as PEA, at a polydatin dosage falling within 40-80 mg per day.

**Topical Applications:** Can be used in final concentrations ranging from 0.2% to 1.5%.

**Safety:** Polydatin use, oral and topical, is considered safe and well-tolerated.

#### **Specifications**

Polygonum cuspidatum Sieb
Root
Fine whitish powder
GMO-free, gluten-free, allergen-free, irradiation-free, vegan and vegetarian-friendly
In a cool and dry place, do not freeze, keep away from light and heat
65914-17-2
3 years

# Nervonex™

## Nurturing Nerve Health with Nervonic Acid

#### **General Information**

**Premium Extract:** Nervonex™ is standardized to 90% nervonic acid derived from a plant source.

**Potent Compound:** Nervonic acid is an omega-9 fatty acid essential for the development of the nervous system.

Biological Role and Function: Nervonic acid serves as a vital structural component within biological membranes, with a prominent presence in nerve tissue. It upholds the integrity and optimal functioning of the nervous system, while simultaneously enhancing the fluidity and stability of cell membranes. It is a key component of the lipids that make up the myelin sheath, facilitating myelin biosynthesis and the rapid and efficient conduction of nerve signals. While research into nervonic acid's specific effects is ongoing, its importance as a structural component in nerve tissue suggests that it plays a significant role in maintaining nervous system health and function.

**Gentle Extraction:** Nervonex<sup>™</sup> is extracted using a gentle method, preserving its natural properties.



**Anti-inflammation:** Nervonic acid exhibits anti-inflammatory potential by modulating diverse molecular pathways and suppressing the expression of inflammatory markers.

**Neuroprotection:** Nervonic acid exhibits promising neuroprotective properties, safeguarding nerve cells and promoting heightened antioxidant defenses by increasing glutathione levels.

**Cognitive Function:** Nervonic acid's contribution to stable cell membranes, the myelin sheath, and efficient nerve signal transmission may benefit cognitive performance.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** Alone or in combination with other synergistic ingredients, at a daily dosage ranging from 30 to 200 mg per day.

**Safety:** Nervonic acid is naturally present in breast milk and plant oils. It is generally regarded as safe for human consumption.

#### **Specifications**

Source Macaranga adenantha fruit oil			
Appearance	White crystal powder or flakes		
Other GMO-free, gluten-free, allergen-free, pre free, vegan and vegetarian-friendly			
Residual solvents	Acetone		
Storage	In a cool and dry place, do not freeze, keep away from light and heat		
Shelf-life	2 years		

# Calcionex™

# A Natural Source of Calcium from Algae for Stronger Bones



#### **General Information**

**Premium Extract:** Calcionex<sup>™</sup> provides natural and bioavailable calcium (calcium carbonate) standardized to a minimum of 30%.

**Potent nutrients:** Calcionex<sup>™</sup> harnesses the natural power of red algae, a calcified structure from the cold sea waters that delivers a synergistic blend of vital nutrients including minerals and vitamins.

**Biological Activity:** Calcium, an essential mineral, plays a pivotal role in numerous bodily functions, especially in maintaining healthy bones, teeth, heart rhythm, blood pressure, blood clotting, and hormonal balance.

**Eco-Conscious Calcium Source:** Calcionex $^{\text{TM}}$  is sourced sustainably and ethically.

#### **Key Benefits**

**Dietary Calcium Needs:** many individuals fall short of their daily calcium requirements, necessitating calcium-fortified foods and supplements.

**Bone Health:** may prevent bone mineral loss and enhance bone structure, specifically in menopausal and post-menopausal women and individuals in need of extra bone health support.

**Joint Health:** may offer benefits for reducing osteoarthritis-related pain and joint stiffness.

**Teeth Health:** may offer a promising alternative for managing oral conditions related to enamel demineralization.

#### Recommended Use, Dosage, and Safety

**Dietary Supplements:** with a focus on bone and joint health, the daily dosage of Calcionex™ ranges from 100 up to 3000 mg. It can be used either independently or in combination with other nutrients that support bone health. The typical recommended daily calcium intake for adults is 800 mg, as per EU Regulation 1169/2011, aligning closely with the EFSA guideline of 750 to 1000 mg/day.

**Safety:** Red algae-derived calcium-rich extract supplementation is generally considered safe when used as directed and within recommended dosage limits.

#### **Specifications**

Source	Lithothamnium calcareum (Pallas), a red algae (seaweed) known as maerl or coralline algae	
Parts used	Stem, consisting of the limestone skeleton	
Origin	Uncultivated red algae	
Appearance	Grey powder	
Other	GMO-free, gluten-free, allergen-free, preservative- free, vegan and vegetarian-friendly	
Storage	Keep in a cool, dry place, protect from freezing, and avoid exposure to light and heat	
Shelf-life	3 years	

# HydroLano™

# Ultimate Solution for Skin Hydration

#### **General Information**

**Premium Product:** HydroLano™ is a high-purity anhydrous lanolin with high water-absorbent properties and a gentle smell.

**High Water Absorption Capacity:** HydroLano™ can absorb up to 20% of water upon direct incorporation and up to 65% of water upon gradual/partial incorporation

**Gentle smell:** HydroLano $^{\text{\tiny{TM}}}$  has a milder scent in comparison to traditional lanolin products that may have a strong odor.

**Sustainable product:** HydroLyno™ is a natural and biodegradable product obtained without causing harm to sheep, making it an environmentally friendly and sustainable choice.



**Deep Moisturization:** HydroLano<sup>™</sup>, may form a protective barrier on the skin, preventing water loss and keeping it hydrated and supple.

**Skin Softening:** It may help soften rough and dry skin, making it a valuable ingredient in creams, lotions, and lip balms.

Barrier Function: HydroLano™ may act as a protective agent against environmental factors, such as wind and cold, helping to maintain the skin's natural barrier.

Wound Healing: It may aid in the healing of minor cuts, scratches, and chapped skin.

**Lip Care:** HydroLano $^{\text{TM}}$  may moisturize and protect the delicate skin of the lips in lip care products.



#### Recommended Use, Dosage, and Safety

**HydroLano™** is recommended for use in skincare and cosmetic products.

The typical final concentration of anhydrous lanolin ranges from 2% up to 20%.

**Safety:** Topically applied anhydrous lanolin is generally considered safe for most individuals.

#### **Specifications**

INCI name	Lanolin
Alternative Names	wool wax, wool grease, anhydrous lanolin, lanolinum anhydricum
Appearance	Solid yellow paste
Color	Yellow
Odor	Characteristic
Water absorption capacity (%)	200 min
CAS No.:	8006-54-0
Other	Gluten-free, non-GMO, Non-irradiated
Shelf-life	3 years when stored unopened, in a cool, dark place, and protected from extreme temperatures and direct sunlight

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