

WELCOME TO THE BIO-BASED PRODUCTS EXHIBITION



Association
Chimie du
VÉGÉTAL



We would like to thank our ACDV members for the presentation of their bio-based products !



Association Chimie du Végétal – ACDV is the French professional organisation dedicated to **Plant-Based chemistry** growth across industries and markets. ACDV brings together the key players of the sector and therefore acts as the French voice of Plant-Based Chemistry in Europe.

Our 65 members represent **the whole value chain of plant-based chemistry**.

- From innovative startups to major biotech companies,
- From “upstream industry” (agro-industrial companies and chemical manufacturers) to “downstream” industry,
- As well as Competitive Clusters and Professional Organisations.

ACDV creates a flourishing environment for bio-based products growth, thus contributing to an **economic and ecological transition**.

OUR CORE MISSIONS

- Support and accelerate the development in industry of sustainable chemistry based on the use of crops resources.
- Represent and promote bio-based chemistry towards all involved stakeholders: industrials, French and European authorities, media, NGOs.

Through collaborative projects and a network of experts, ACDV is able to:

- Demonstrate and promote the added-value of bio-based product for users and consumers.
- Generate and enhance knowledge on bio-based chemistry and its connection to current challenges.
- Identify financial, economic and regulatory constraints to the deployment of bio-based products and advocate in order to establish the relevant frameworks for their development sensitize public authorities and private operators to these issues.

Follow us!



@ChimieVegetal



Association Chimie
du Végétal

www.chimieduvegetal.com

Contact us:

Le Diamant A, 14 rue de la République
92800 Puteaux • France

contact@chimieduvegetal.com

Tel: +33 (0)1 46 53 10 93



**ABNET Vert du Vert concentré
Proflash Ecolo**

L'Abnet Vert du Vert concentré et le Proflash Ecolo sont des nettoyants dégraissants multi-surfaces adaptés aux métaux, plastique, textile, bois, cuir, verre...

Ils permettent une large gamme d'applications telles que l'entretien industriel et domestique, la mécanique, le transport etc...

Advantages in terms of sustainability

L'Abnet Vert du Vert et le Proflash Ecolo sont composés de tensioactifs d'origine végétale et sont formulés sans EDTA, phosphates, ammonium quaternaires et composés organiques volatiles (COV). Leur formule est totalement biodégradable en 14 jours.

Leur polyvalence permet de nettoyer de nombreuses surfaces et remplace ainsi plusieurs produits de nettoyage. L'Abnet Vert du Vert concentré limite le stockage et le gaspillage de produit en adaptant la dilution à l'utilisation. L'Abnet Vert du vert et le Proflash Ecolo minimisent l'impact environnemental lié à la production de différents produits de nettoyage, de leur emballage ainsi que de leur transport. La version prêt-à-l'emploi du Proflash Ecolo permet une utilisation instantanée du

produit pour bénéficier de l'efficacité de l'Abnet Vert du Vert sans préparation.

Benefits of our innovation

- Produit tout-en-un
- Efficacité et polyvalence
- Facilité d'utilisation
- Limitation du gaspillage et du stockage
- 100 % biodégradable en 14 jours selon la norme OCDE 302-B

Find out more: www.abnet.fr



➤ HELIOTERPEN FILM

HELIOTERPEN FILM is a sticker adjuvant of plant origin, based on terpene oligomers extracted from pine. It contains 96% bio-based ingredients.

💡 Advantages in terms of sustainability

- HELIOTERPEN FILM is an adjuvant in crop protection. Formulated with pine derivatives, HELIOTERPEN FILM improves the effectiveness of insecticide and fungicide against leaf diseases on cereals, in field vegetable crops, fruit crops and trees and shrubs.
- Designed and manufactured in France, HELIOTERPEN FILM is based on PINE TERPENS TECHNOLOGY which exploits the intrinsic properties of pine derivatives for the crop protection. This unique technology specific to ACTION PIN is based on a natural and renewable resource, the Pine tree.
- Usable in Organic Agriculture, HELIOTERPEN FILM is ECOCERT INTRANTS certified.

- Its highly bio-based formulation offers a unique function of protecting the active ingredient with which it is associated: HELIOTERPEN FILM, when spraying on the plant, creates a mesh on the surface of the drop which protects the active substance by slowing down the desiccation of the drops. The associated insecticide or fungicide is then more effective and longer.

The use of HELIOTERPEN FILM allows to reduce the use of doses of phytosanitary products in accordance with Ecophyto challenges. It therefore meets the commitments of sustainable agriculture.

Find out more: www.helioterpen.fr
Follow us: [Linkedin: Action Pin](#)



➤ ACTIPUR Range (7 products)

ACTIPUR is a new range of ACTION PIN which aims to prevent and fight epidemics while minimizing the impact on humans and the environment, according to the principle of reasoned disinfection with formulas based on lactic acid, an active substance biobased.

💡 Advantages in terms of sustainability

- Reasoned disinfection ensures the health safety of spaces and surfaces that require it while preserving the health of users and respecting the environment. This is what the ACTIPUR range offers.
- ACTIPUR is a range of 7 products intended for the cleaning and disinfection of all contact points at risk of germ transmission and therefore disease or infection, for all sectors of activity (early childhood, retirement homes and healthcare establishments, hotels, restaurants, offices, shops, urban cleaning, common parts of buildings, etc.).
- ACTIPUR range offer a broad spectrum of disinfection with bactericidal, yeastical, fungicidal and virucidal efficacy against all enveloped viruses including the Coronavirus.

- The products contain **more than 98.6% bio-based ingredients**, are all **ECOCERT certified** and are not classified as dangerous for the environment. All packagings are recyclable and sprayers are eco-designed.
- ACTIPUR range is based on the unique triple combination offered by the ACTION PIN laboratory:
- Enzymes with natural biodegradation properties of organic materials,
- Pine derivatives, with a fragrance of natural origin, which also enhance the effectiveness of enzymes,
- Lactic acid, 100% bio-based active substance, with a favorable ecotoxicological profile.

Find out more: www.helioterpen.fr
Follow us: [Linkedin: Action Pin](#)



Carboxylic acids

7 bio-based carboxylic acids, from sugar beet by-products, used in food and feed, flavors and fragrances, lubricants, materials science and life sciences.

Advantages in terms of sustainability

- AFYREN manufactures 100% bio-based products which are interesting alternatives for manufacturers looking for sustainable ingredients with antibacterial, olfactory and conservation performance.
- This production is carried out thanks to its innovative fermentation technology, based on natural and non-GMO microorganisms and patented worldwide. This zero-waste «all-in-one» technology can be transposed on a global scale and makes it possible to recover different types of biomass that do not compete with the food chain.
- AFYREN products have a 81% reduced carbon footprint compared to their petro-based equivalent (according to ISO 14040-14044 standard) and meet the requirements of the most stringent standards and regulations in its markets (COSMOS, ECOCERT, ECODETERGENT, EU1334 / 2008, USDA biopreferred, ISO9235 definition 2.19, ISO 16620, ISO16128-1...)
- AFYREN NEOXY, AFYREN's first plant, is under construction in Carling, in the Grand Est region (production capacity of 16,000 tonnes / year).
- AFYREN was selected in the French Tech 120 in 2020 and 2021 and received the "Efficient Solution" label from the Solar Impulse foundation.



Algae & plant biobased paint

The raw material of Algo's paint is the plant and natural algae 98% biobased. It meets the highest environmental standards and has the highest certifications such as the European Ecolabel.

A product of bioeconomy, using local and renewable resources

- Algo Paint frees itself from the chemistry of oil by valuing natural and local resources, including mainly the algae of the Breton coast.
- Algae do not encroach on land reserves intended to feed humans and do not require fresh water.
- The range ALGO releases less than 1g/liter of VOCs (volatile organic compounds). The European Ecolabel certification, the Life Cycle Assessment of the product (FDES) along with the labelling A+ guarantee the real innovation and features of ALGO.
- Without fertilizers and pesticides, algae is incorporated as a co-product in our paints.
- We contribute to local economy, employment and local dynamism through the incorporation of local and renewable raw materials.

A healthy and quality paint

Algo offers interesting application properties: with a yield of 12m²/litre facilitated by a great penetration of the supports and a leachability in matte and satin finish.

The penetration of the supports is reinforced to offer excellent resistance to aging.

A recognized innovation

Algo paint is a European Ecolabel certified paint, and has obtained multiple recognitions since the creation of the project.



Distributor partnership

www.id-paris.com

www.theolaur.com



Find out more: www.afyren.com
Follow us: [Twitter: @AFyren](https://twitter.com/AFyren)

Linkedin: [Algo Paint](#)
Facebook: [peinture.algo](#)
Instagram: [algopeinture](#)



Courtesy of Vuarnet

ARKEMA
RILSAN®
CLEAR

➤ Rilsan® Clear polyamides

Rilsan® Clear polyamides are Advanced Bio-Circular amorphous polymers providing an exceptional combination of properties such as incredible lightness, high levels of transparency, excellent chemical and mechanical resistance, ease of processing, making them the ideal choice for optical applications, allowing eco-conception with great design freedom.

💡 Advantages in terms of sustainability

- Rilsan® Clear materials are the most bio-based materials of all transparent plastics existing on the market, with up to 60% of carbons coming from renewable sources.
- They are derived from renewable feedstock: castor beans. They are not «just» bio-based materials. They are truly advanced - hence durable - polymers that are derived from a sustainably farmed feedstock.
- Arkema is committed to a fully transparent and sustainable supply chain through the "Pragati" Initiative, which contributes to deep societal impact, uplifting thousands of Indian castor farmers and their families, improving their income and agricultural practices.
- Rilsan® Clear materials are recyclable. Launched in 2019 and reinforced in 2021 with the acquisition of Agiplast, the Virtucycle® recycling program aims at addressing the challenges of resource scarcity and end-of-life for high performance polymer products.

- Since 2021, Arkema has implemented an annual Scholarship program for students of the Gujarat region and castor community. During this event, students are encouraged to use their imaginations to paint pictures, make models or write essays to describe the sustainable world they envision for the future as part of an art competition. The high schools of the winners receiving some cash donations and the students themselves winning some electronic devices used to aid in their education.

💡 Labels & Awards

- In 2023 Arkema has completed the start-up of its new factory in Singapore dedicated to renewable castor feedstock, confirming its strong commitment to this bio-based chemistry.
- In 2021, Bloomberg and the American Chemistry Council (ACC) honored Arkema for its work, in their 'Global 50 Leaders' and 'Societal Contribution' category respectively.

Find out more on : www.hpp.arkema.com
Follow us on LinkedIn:
Arkema High Performance Polymers



Courtesy of Mizuno

ARKEMA
PEBAX®
RNEW

➤ Pebax® Rnew® thermoplastic elastomers

Pebax® Rnew® thermoplastic elastomers are Advanced Bio-Circular polymers providing exceptional performance, highly beneficial to sporting equipment, in particular for running: incredible lightness, superior energy return, excellent retention of properties even in extreme environments.

💡 Advantages in terms of sustainability

- Pebax® Rnew® thermoplastic elastomers were the first of their kind on the market. Our product range comprises materials with 30 to 95% carbon coming from renewable resources.
- They are derived from renewable feedstock: castor beans. They are not «just» bio-based materials. They are truly advanced - hence durable - polymers that are derived from a sustainably farmed feedstock.
- Arkema is committed to a fully transparent and sustainable supply chain through the "Pragati" Initiative, which contributes to deep societal impact, uplifting thousands of Indian castor farmers and their families, improving their income and agricultural practices.
- Pebax® Rnew® materials are recyclable. Launched in 2019 and reinforced in 2021 with the acquisition of Agiplast, the Virtucycle® recycling program aims at addressing the challenges of resource scarcity and end-of-life for high

performance polymer products.

- Since 2021, Arkema has implemented an annual Scholarship program for students of the Gujarat region and castor community. During this event, students are encouraged to use their imaginations to paint pictures, make models or write essays to describe the sustainable world they envision for the future as part of an art competition. The high schools of the winners receiving some cash donations and the students themselves winning some electronic devices used to aid in their education.

💡 Labels & Awards

- In 2023 Arkema has completed the start-up of its new factory in Singapore dedicated to renewable castor feedstock, confirming its strong commitment to this bio-based chemistry.
- In 2021, Bloomberg and the American Chemistry Council (ACC) honored Arkema for its work, in their 'Global 50 Leaders' and 'Societal Contribution' category respectively.

Find out more: www.extremematerials-arkema.com
Follow us: **LinkedIn: Arkema**



Courtesy of Scarpa

ARKEMA
PEBAX®
RNEW

➤ Pebax® Rnew® thermoplastic elastomers

Pebax® Rnew® thermoplastic elastomers are Advanced Bio-Circular polymers providing exceptional performance, highly beneficial to sporting equipment, in particular for winter sports: incredible lightness, superior toughness & flexibility and stable performance even at extreme temperatures as low as -40°C. Depending on the model, it can be used in the shell, cuff and tongue of the ski boot.

💡 Advantages in terms of sustainability

- Pebax® Rnew® thermoplastic elastomers were the first of their kind on the market. Our product range comprises materials with 30 to 95% carbon coming from renewable resources.
- They are derived from renewable feedstock: castor beans. They are not «just» bio-based materials. They are truly advanced - hence durable - polymers that are derived from a sustainably farmed feedstock.
- Arkema is committed to a fully transparent and sustainable supply chain through the "Pragati" Initiative, which contributes to deep societal impact, uplifting thousands of Indian castor farmers and their families, improving their income and agricultural practices.
- Pebax® Rnew® materials are recyclable. Launched in 2019 and reinforced in 2021 with the acquisition of Agiplast, the Virtucycle® recycling program aims at addressing the challenges of resource scarcity and end-of-life for high performance polymer products.

- Since 2021, Arkema has implemented an annual Scholarship program for students of the Gujarat region and castor community. During this event, students are encouraged to use their imaginations to paint pictures, make models or write essays to describe the sustainable world they envision for the future as part of an art competition. The high schools of the winners receiving some cash donations and the students themselves winning some electronic devices used to aid in their education.

💡 Labels & Awards

- In 2023 Arkema has completed the start-up of its new factory in Singapore dedicated to renewable castor feedstock, confirming its strong commitment to this bio-based chemistry.
- In 2021, Bloomberg and the American Chemistry Council (ACC) honored Arkema for its work, in their 'Global 50 Leaders' and 'Societal Contribution' category respectively.

Find out more: www.extremematerials-arkema.com
Follow us: [Linkedin: Arkema](#)



ARKEMA
SYNAQUA
4804

➤ SYNAQUA® 4804

SYNAQUA® 4804 is a waterborne binder that helps formulators produce top-quality gloss paint with application characteristics very close to those of solvent-based coatings.

💡 Advantages in terms of sustainability

- SYNAQUA® 4804 is formulated without alkylphenolethoxylates, and is ammonia, solvent and plasticiser free. Paint formulations made with this product do not require coalescing agents or anti-skin additives.
- SYNAQUA® 4804 is produced in Europe and in the USA to be closer to our customers.

💡 The benefits of our innovation:

Vegetable ingredients such as fatty acids and oils from seeds or wood are part of the building blocks used to produce traditional alkyds for decorative coatings.

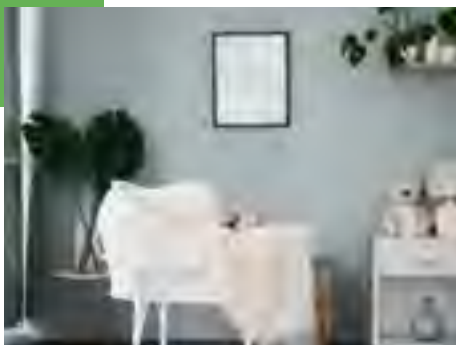
- Leveraging expertise in alkyd chemistry, Arkema has developed a full range of waterborne alternatives made from renewable raw materials capable of replacing solventborne products in many demanding decorative applications.

- Developed with 42% ^(*) renewable raw materials, SYNAQUA® 4804 alkyd emulsion technology allows the formulation of solvent-free waterborne paint with application performances that are very similar to those of traditional solvent-based paint and lacquer, in particular in terms of gloss and film resistance. It also ensures adhesion onto old alkyd paint and can be used indoors and outdoors in both primers and in topcoats on most supports, including wood and metal, due to its stability with anti-corrosion pigments.

- SYNAQUA® 4804 received Ringier Technology Innovation Award, which recognizes companies that contribute to improvements in the paint and coating industry in China.

(*) Measured by an accredited laboratory according to ASTM-D6866-12.

Find out more: www.arkemacoatingresins.com/en
Follow us: [Linkedin: Arkema Coating Materials](#)



SYNAQUA® 4856

SYNAQUA® 4856 is a waterborne binder for coatings based on more than 97% biobased raw materials and offers an excellent compromise between performance and with environmental friendliness requirements.

Advantages in terms of sustainability

- SYNAQUA® 4856 is a resin designed for use in waterborne low emission formulations such as interior high-quality wall primers or wall paints. The basic raw materials are co-products from pulp & paper industry and coming from responsible foresting.
- SYNAQUA® 4856 is formulated without alkylphenolethoxylates, and is ammonia, solvent and plasticiser free. Paint formulations using this product do not need coalescing agents nor anti-skin additives.

The benefits of our innovation:

Vegetable ingredients such as fatty acids and oils from seeds or wood are part of the building blocks used to produce traditional alkyds from decorative coatings.

- Leveraging expertise in alkyd chemistry, Arkema has developed a full range of

waterborne alternatives, made from renewable raw materials, capable of replacing solvent-borne products in many demanding decorative applications.

- SYNAQUA® 4856 offers the right balance for interior low emission matte to gloss wall paints:
 - High hardness
 - Good whiteness
 - Good application behaviour
 - Good drying
 - Low emissions
 - Suitable for EU Ecolabel paint formulations
 - More than 97 % of biosourced carbon on total carbon (*)

Produced in Europe and mostly based on biobased raw materials from Europe, this resin is patented.

(*) Measured by an accredited laboratory according to ASTM-D6866-12.

Find out more: www.arkemacoatingresins.com/en
Follow us: [Linkedin: Arkema Coating Materials](#)



Oleris®

Oleris® products are 100% bio-oleochemicals of renewable origin processed only from sustainable castor oil, with unique odd-chain carbon derivatives in C7 and C11, completed by a mixture of natural C18 fatty acid esters.

Advantages in terms of sustainability

- Oleris® n-heptanoic acid is the only bio-based C7 fatty acid existing on the market, with 100% of carbons coming from renewable sources, highly valorised as a high purity building block in the production of high performance lubricants, with optimized viscosity and high thermal and oxidative stability.
- Certified palm-free, COSMOS approved, GMO-free and with a 100% degree of Natural Origin (ISO16128:2016-Annex C), Oleris® C7 and C11 are highly appreciated in the synthesis of vegetable-based and natural cosmetics. Their high purity, the absence of heavy metals and their total linearity are especially valuable in the flavour and fragrance industry.
- In construction, Oleris® Esterol A & F contribute to improve the ecological profile of the formulations, due to their high biodegradability, their absence of Polycyclic Aromatic Hydrocarbons and no Hazards classification.
- Arkema is committed to a fully transparent and sustainable supply chain through the

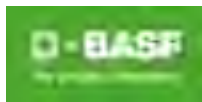
"Pragati" Initiative, which contributes to deep societal impact, uplifting thousands of Indian castor farmers and their families, improving their income and agricultural practices.

- Oleris® Advanced Bio-Materials are carbon neutral (ISO 14040).
- Since 2021, Arkema has implemented an annual Scholarship program for students of the Gujarat region and castor community. During this event, students are encouraged to use their imaginations to paint pictures, make models or write essays to describe the sustainable world they envision for the future as part of an art competition. The high schools of the winners receiving some cash donations and the students themselves winning some electronic devices used to aid in their education.

Labels & Awards

In 2023 Arkema has completed the start-up of its new factory in Singapore dedicated to renewable castor feedstock, confirming its strong commitment to this bio-based chemistry

Follow us on LinkedIn:
[Arkema High Performance Polymers](#)
Find out more on : www.hpp.arkema.com



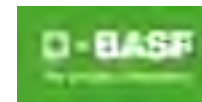
> ecovio® fruit and vegetable bag

Fruit and vegetable bags made of biodegradable partially biobased polymer by BASF (> 50% biobased).

⚙ Advantages in terms of sustainability:

- The multiple uses of ecovio® compostable bags, for shopping and collecting food waste, offer many environmental/ecological benefits:
 - ecovio® compostable bags help consumers ensure cleaner and safer selective collection of food waste. Consequently, the volume of separately collected organic waste increases.
 - This increasing volume, coupled with better public acceptance and collection rate of food waste, results in a reduction of the ecological footprint.
 - The recycling of organic wastes is more resource efficient than landfilling or incineration.
- Compostable shopping bags offer a reduced carbon footprint, which reduces greenhouse gas emissions and fights against climate changes by integration into the natural carbon cycle through the use of renewable raw materials & carbon sequestration through composting.
- In France, regulations prohibit disposable plastic bags for single use since July 1, 2016. Since 1st of January 2017, there is a widespread use of compostable bags in the fruit and vegetable shelves.

Find out more: www.basf.com
Follow us: [Linkedin: BASF](#)



> From ecovio® to coffee capsules

Coffee capsule made of ecovio® biodegradable and biobased (>60%) BASF biopolymer for injection molding or thermoforming applications.

⚙ Ecovio®'s main technical advantages for coffee capsules

- Fast processing cycle times on standard plastic processing machines
- Good thermal resistance
- Rigid material with very good behavior at impact

⚙ Advantages in terms of sustainability

- Fully compostable according to international standards, eg EN 13432. ecovio® for coffee capsules can be industrially composted with coffee grounds, offering a more resource-efficient solution than landfilling or incineration.
- Organic waste composting reduces the production of greenhouse gases. In addition, compost can prevent erosion and be used to improve soil fertility because it contains useful phosphates.
- The high ecovio® renewable raw material content reduces the overall carbon footprint of a product.

Find out more: www.basf.com
Follow us: [Linkedin: BASF](#)



D - BASF

Arganyl® PW LS 9830

100% biobased cosmetic ingredient, from argan tree leaves.
A comprehensive protection against environmental stress.

Advantages in terms of innovation

- ARGANYL®, argan leaf extract, has demonstrated its efficiency to fight against UVA, RCS (reactive carbonyl species) and MMPs (matrix metalloproteinases).
- ARGANYL® limits inflammation by reducing the release of IL-8 (interleukin-8) induced by indoor pollutants.

Advantages in terms of sustainability

- ARGANYL PW LS 9830 have been assessed as compliant to the standard COSMOS.
- ARGANYL™ is obtained through a responsible approach with local partnership with Targanine cooperatives.



Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



D - BASF

PeptAlde® 4.0

Natural peptides, revealed by Artificial Intelligence, that protect scalp, hair and skin against silent inflammation

- Fighting long-term damages on scalp and skin such as sensitivity, dryness or lack of skin firmness.
- Discovered by Artificial Intelligence.
- Derived from rice proteins, for a natural and preventive solution for healthy looking hair and skin.

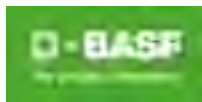
Advantages in terms of innovation

- PeptAlde® 4.0 was developed in a collaboration between BASF and Nuritas thanks to Artificial Intelligence. Nuritas designed and trained algorithms using libraries on biological networks and active molecules to build highly-accurate predictors of biological activity.
- PeptAlde® 4.0 provides a unique health functionality from sustainable peptides through a controlled enzymatic hydrolysis process based and delivers measurable benefits for skin and scalp/hair.

Advantages in terms of sustainability

- PeptAlde® 4.0 is produced from organic rice proteins (*Oryza sativa*) and helps prevent dry skin, relieves discomfort and losses of firmness.
- The raw material at the origin of PeptAlde® 4.0 conforms to COSMOS standard of natural and organic cosmetics and is at 99.6% from natural origin.

Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



A new ingredient based on the organic-certified marine algae *fucus vesiculosus* that improves eye contour appearance within the first week of application

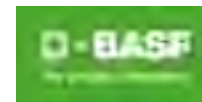
Advantages in terms of innovation

- Seanactiv™, is obtained by unique process enriching the extract in sulphated polysaccharide fucoidan, to refresh and revitalize the eye contour. This sulphated polysaccharide is characterized by fucose monomers and has long been known for its beneficial properties in food, health and beauty.
- Seanactiv™ harnesses the power of *fucus vesiculosus* fucoidan to limit visible signs of aging and fatigue around the eyes. This new ingredient helps reduce the appearance of dark circles, crow's feet wrinkles and under-eye dullness within just one week of application.

Advantages in terms of sustainability

- Soluble in water, Seanactiv™ is 99.8 percent from natural origin and complies with the COSMOS standard for natural and organic cosmetics.

Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



A multi-functional rejuvenating solution against ageing 100% biobased, from flax seed oligosaccharides for a firmer and better hydrated skin.

Advantages in terms of innovation

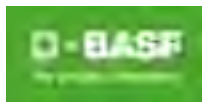
- The BASF Care Creations team and Reims University, in partnership with their Technology Transfer Society SATT Nord, have worked together to design Oligolin® in order to restructure globally the skin, by acting on key targets, from the epidermis to the dermis, for a firmer and better hydrated skin.
- Oligolin®, a hydrolyzed flax seed extract concentrated in oligosaccharides, has been proven to modulate the key parameters promoting skin tissue regeneration and restructuring, and on the skin microbiome (selective prebiotic effect).

Advantages in terms of sustainability

- The ancestral and sustainable flax crop, is used for centuries for its oil and the manufacture of linen, and for its traditional benefits on wound healing.
- Flax cultivation has positive effects on eco-system diversity and offers a welcome environmental pause for soil quality, biodiversity and landscapes.
- Oligolin® is manufactured from flax seeds cultivated in France and according to the COSMOS standard.



Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



> Rambutan Range

With Rambutan program, we ensure sustainable supply chain management practices to design new “greener” beauty concepts whose goal is to meet global beauty market requests and consumer’s expectations.

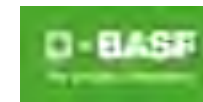
💡 Advantages in terms of innovation

- The plant identified is Rambutan, also called *Nephelium lappaceum*, a well-known tree in Asia, that grows in the humid tropics.
- We developed a range of bioactives based on the Rambutan tree (Java variety) and fruits by-products (leaf, peel, seed) for the cosmetic industry.

💡 Advantages in terms of sustainability

- With our new Rambutan program, we ensure sustainable supply chain management practices to design new “greener” beauty concepts whose goal is to meet global beauty market requests and consumer’s expectations.
- By building a real and consistent project on Rambutan, we aim to contribute to the development of a sustainable supply chain with a local producer in Vietnam.
- Our local partner’s production fields are the first Rambutan gardens to be organically certified in Vietnam

Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



> Cetiol® Ultimate

The natural-origin based volatile emollient

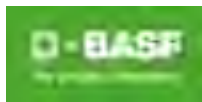
💡 Advantages in terms of innovation

- Fast spreading sup 2500 mm²/10mn & light powdery after-feel
- It provides the perfect solution for modern & elegant textures
- Multifunctional ingredient for all personal care segments
- Good pigment wetting which explains improved coverage and color shade stability in liquid foundation
- Limit UV filters recrystallization in suncare

💡 Advantages in terms of sustainability

- 100% renewable-based & compliant with ISO 16128
- Approved by COSMOS & Natrue
- Readily biodegradable
- Good alternative to volatile silicone

Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



Hydagen® Clean

Natural Texturizing Polymer

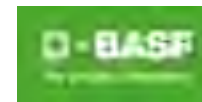
Advantages in terms of innovation

- Colorless & translucent gels from various viscosity : fluid to soft solid
- Easy to handle with fast dissolution in water
- Suitable for "skin microbiome friendly" formulations
- High quality standard with a low microbial specification
- Immediate cooling effect on the skin & improved pick-up

Advantages in terms of sustainability

- 100% derived from renewable feedstock & compliant with ISO 16128
- Approved by COSMOS
- Readily biodegradable
- Cold processable rheology modifier
- Good alternative to synthetic polymers

Find out more: www.carecreations.basf.com
Follow us: [Linkedin: BASF](#)



e'Sense Products

Products with fossil feedstock allocated for the manufacturing of this product replaced in the production site by renewable raw materials with the "Biomass Balance Approach".

Advantages in terms of sustainability

- High performance with sustainable benefits using renewable raw materials.
- We provide our customers with the highest standard of biomass feedstock sustainability and CO₂ savings. Our biomass feedstock is partially based on waste, e.g. kitchen waste and agricultural waste.
- The feedstock must be certified and compliant with the REDcert² (Renewable Energy Directive of the EU).
- Protection of areas with high biodiversity and land with high carbon stocks. We ensure social and environmental production of the biomass.
- This is possible as we are only using 2 feedstocks (biogas and bio-naphtha) for our Biomass Balance products.
- We ensure traceability of our feedstock (through the certificates of our suppliers) and therefore offer it for the whole value chain.



Find out more: www.basf.com
Follow us: [Linkedin: BASF](#)



ENVIRONMENT WOOD RANGE Professional market

The first biobased range for wood protection and decoration for professionals.
8 interior and/or exterior wood care high performance products made from renewable natural materials.

A bioeconomy range

- Use of renewable natural materials: water, mineral pigments and bio-based resin formulated with vegetable seeds such as rape, soybean...

Advantages in terms of innovation

- High quality products for professional users, combining high performance and health & environment protection. They satisfy the requirements of long lasting protection and simplicity.

Advantages in terms of sustainability

- A pioneer range respecting health and the environment.
- Formulated from renewable materials with up to 82% of natural, mineral and bio-based ingredients.

- 3 bio-based products measured by NF EN 16640 certification which is recognized by public tenders.
- 100% water based and mineral pigments range.
- Low V.O.C emissions (volatile organic compounds).
- Life Cycle Assessment of the products (F.D.E.S).

Labels and awards

- The European standard EN 16640 measures bio-based carbon content as a fraction of total carbon content



Evanesto®

Evanesto®, the enzymatic additive that allows PLA (a bio-based plastic) to become 100% biodegradable, even in a domestic composter.

Advantages in terms of innovation & sustainability

- This unique technology, covered by 18 patents filed in 4 international patent families, is based on the use of an enzyme to accelerate the compostability and biodegradability of PLA. In order to be used in the plastics processing industry without requiring equipment modifications, this technology has been developed as an additive.
- Evanesto® allows flexible and rigid products to be compostable even at room temperature and therefore in domestic conditions. For the first time, it is possible to consider a responsible end-of-life for PLA-based plastic packaging, even at home, thus achieving zero plastic waste.

Labels & Awards



- Evanesto® labelled "Solar Impulse Solution" since January 2021
- Carbiolice winner of the "10 000 start-up to change the world 2021"
- Carbiolice labelled Greentech Innovation by the Ministry of Ecological Transition in May 2021

Partnership

Carbios, TBWA, Novozymes



Find out more:
www.blanchon.com

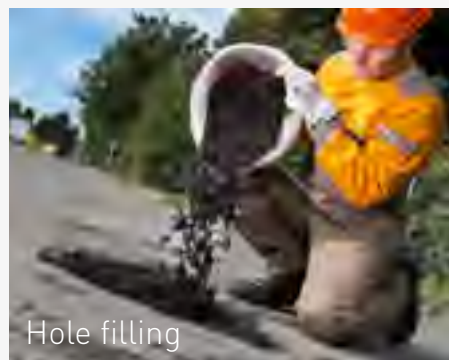
Find out more: www.carbiolice.com
Follow us: [Linkedin: Carbiolice](#)
Contact: sophie.macedo@carbiolice.com



Colquick is a high-performance, water-reactive asphalt mix made with a biobased binder. It is recommended for pavement repairs that are required to withstand heavy and intensive traffic.

Colquick is water-reactive, easy to use and as resistant as hot-mix asphalt, making it the ideal solution for repairing pavements that undergo intensive heavy traffic: motorways, roundabouts, bus lanes and stops, industrial estates, etc.

- filling in potholes, localized reprofiling, drilling;
- sealing off lampposts, buffers, etc.;
- repairing trenches.



Hole filling

- Packaged in 25 kg buckets
- Can be stored and used for up to 12 months
- Fast and easy to use
- Can be used in sub-zero temperature
- Heavy-traffic resistant, does not rut, does not creep
- Can be compacted manually or mechanically
- Once compacted, traffic can resume immediately
- Easy to ship and transport

Labels & Awards

Colquick® has been awarded the "TÜV OK Biobased" label, which guarantees that the total carbon content of the binder used in Colquick asphalt is 40-60% bio-based.



Find out more:
www.colas.com



Vegacol is a clear mix made with a binder that is over 80% plant-based. The innovative binder used to make the Vegacol mix is the fruit of Colas research.

Vegacol is an aesthetically pleasing clear asphalt mix with a carbon footprint that is 70-90% lower than traditional clear asphalt.

It achieves this by using a predominantly plant-based binder – that stores biogenic carbon in its plant-based components, and by using a lower manufacturing temperature.

Vegacol does not require surface treatment to retain the aggregate's natural color.

It produces aesthetically pleasing pavements, mainly for light-traffic pathways (pedestrian paths, cycling paths, etc.). Vegacol is suitable for service traffic and occasional light vehicles.

Vegacol is compatible with local aggregates that are adapted to the site's needs, allowing it to seamlessly fit into the local environment and to uphold the site's heritage: squares, architectural sites, alleyways, Natura 2000 sites, etc



Advantages in terms of innovation & sustainability

- Binder mainly made from renewable plant sources
- Suitable for sites with specific environmental or aesthetic requirements
- Enhances the aggregate's natural color. Allows traffic to resume immediately
- Allows traffic to resume immediately
- Manufactured at low temperatures
- Increases quality of living by curbing the urban heat island effect

Labels & Awards

The Vegacol binder carries the "OK biobased" 4-star label, confirming biogenic carbon content above 80%.



Find out more:
www.colas.com



TRANSYL97

Penetrant biobased oil formulation with 4 strong actions:
cleaning/lubricating/unblocking/protecting

Characteristics

- Excellent degreasing and cleaner capacity: grease, bituminous residues, sludge, dirt
- Excellent desemulgating power = oil/water separation power
- Excellent dewatering power: corrosion resumption blocked (ideal for marine ambiance, wintering, ...)

- Carbonated vehicle from French biotech
- Easily biodegradable in accordance with OCDE301F

Labels & Awards and or certifications



Benefits of our innovation

- Active contents are from vegetable industrial technology with a superior efficiency than petroleum-based products
- Formulation with aerosol of 125ml and 400ml for an easily use (for B2B/B2C users)
- Very low smell for a universal utilization
- 97% biobased in accordance with ISO EN16640 (validated by an independent laboratory)

Find out more:
www.colas.com



Secoia®1400

Ecological Coating polymers

- Bio-based raw material (>95%)
- Low VOC Water-based emulsion
- Raw materials are from circular economy
- Enable the production of ecological interior wall paint with high performances.

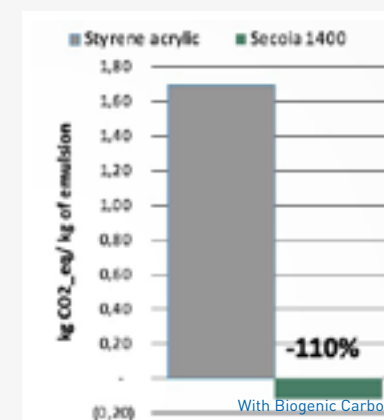
Switching to sustainability

Ecoat defines itself as a "switcher" offering services to its industry to engage and ease ecological transition:

- Paint formulation using eco-design approach and biobased ingredients
- Life cycle analysis
- Marketing and product positioning support

Sustainability's advantages

- Paint formulation with less than 0,1 gr/l of VOC (10 times lower than Ecolabel A+ requirements)
- Manufacturing process using biomass energy and thermal recycling enabling 70% reduction in production Carbon footprint
- Investment using circular economy
- Negative Carbon footprint compared to fossil polymers (CO₂ absorption through photosynthesis).



Find out more: www.ecoat.fr
Follow us: [Linkedin: ecoat](#)



Protein-rich Green-ultimate® adhesives for wood-based products

Green-ultimate® resins are up to 100% bio-based adhesives made from protein-rich rapeseed and sunflower by-products.

The benefits of our innovation

- Green Ultimate is the world's first adhesive solution to offer an efficient and environmentally friendly alternative to traditional products for the wood sector.
- Reduced environmental impact: Manufacturing Green Ultimate produces 60% less fossil carbon than a UF (urea-formaldehyde) resin. It is made from rapeseed and sunflower seeds that are sourced locally to minimize the impact of transportation on the carbon footprint.
- No formaldehyde: When you choose a plant-based solution, you are creating a healthier living space. With isocyanate and formaldehyde-free Green Ultimate, these composite wood panels produce the same level of emissions as solid wood (0.01 ppm), which is ten times lower than the EU standard (E1).

- Sustained technical performance: The composite wood panels produced with Green Ultimate deliver technical and water-resistance properties that are on par with panels made with a petrol-based resin.
- Partnership: first commercial MDF wood-based panels are available under the brand Next®, manufactured by "Panneaux de Corréze".



Find out more:
www.evertree-technologies.com



Cereals in our everyday lives

Intercéréales, an information group in the cereals sector, presents a multitude of everyday products produced from starch (wheat and corn).

Intercéréales, a private non-profit association, is the interprofessional organisation representing cereals in France. These comprise amaranth, barley, buckwheat, canary grass, chia, corn (maize), durum wheat, meslin, millet, milling wheat, oats, quinoa, rice, rye, sorghum, spelt, triticale and tritordeum, and related cereal products.

Created on the initiative of the professional organisations representing the cereals sector, we bring together all the major players from across the industry: production, collection/marketing and first-line processing.

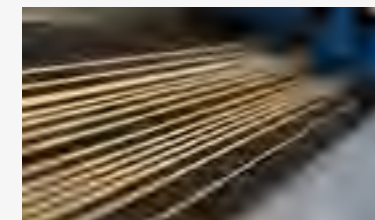
Intercéréales is a forum for exchange between these organisations, which work together to develop the cereals sector in France, and to internationally promote French excellence in the sector and the high quality of France's cereals production and products.

A truly collective tool at the service of the sector and its members

Intercéréales' objective is to develop the cereals industry in France, for the benefit of all the sector's different participants. Its principal work strands are:

- Research and development to improve the competitiveness of farms, to help them adapt to market needs, environmental imperatives, and climate challenges.
- Promotion of the excellence of the sector's savoir-faire, and of French cereals and cereal products, both in France and abroad (EU and non-EU countries).

- Implementation of a range of projects across the sector to identify and promote actions of sector-wide importance (quality, best practice, competitiveness, sustainability, etc.).



Find out more:
www.intercereales.com



BIOBASED FUNCTIONAL INGREDIENTS

Biobased, sustainable & high-performance ingredients with infinite applications ranging from animal nutrition and personal care formulations to biopolymer production. Ingredient portfolio include several Amino Acids, 1,3-Propanediol, Butyric acid and Glycolic acid.

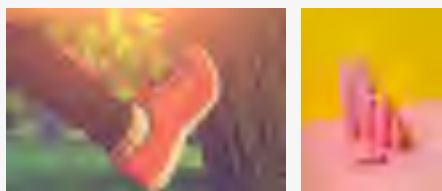
Advantages in terms of innovation

- Biobased nature, since all ingredients are produced by fermentation of vegetal-origin feedstocks.
- Low environmental footprint, due to the efficiency of precision fermentation processes which enable to maximize the quantity of ingredient manufactured with a given quantity of feedstock.
- Made in France, with two production plants being located in France (respectively Amiens and Carling)
- Best-in-class performance
- METabolic EXplorer (METEX) proposes solutions and products for animal nutrition market that aim to reply to the new sustainability challenge of livestock industry: a better resource usage, the reduction the climate change impact of animal production, the decrease of antimicrobial use and the animal welfare improvement.

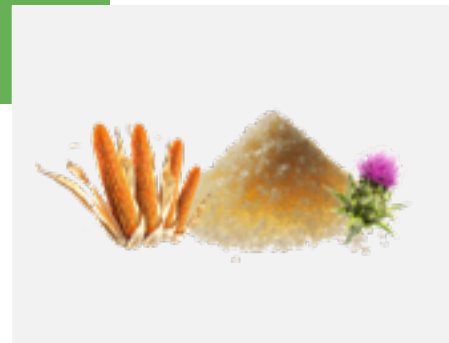
- METEX also provides value chain partners a toolkit of ingredients to build on new formulations, polymers or derivatives, with enhanced properties and sustainability profile to address growing expectations from the end consumers.

Labels & Awards and or certifications

METEX ingredients satisfy the requirements and certification needs of their multiple end-markets (ISO14001, ISO9001, ISO22000, Halal, Kosher, ECOCERT ECODÉTERGENT, etc.).



Find out more:
www.metabolic-explorer.com
 Follow us: LinkedIn:
<https://www.linkedin.com/company/metabolic-explorer>



MATER-BI

MATER-BI is a large biobased family of fully biodegradable and compostable polymers produced through patented technologies that use processed starches, fermented sugars and vegetable oils.

Characteristics

- Opaque or transparent
- Food contact
- Additives free
- Injection, lamination, expansion and extrusion (8µ to 1 mm)
- MATER-BI waste bags are resistant and water tight according to EN 13592

The benefits of our innovation

MATER-BI is designed and developed by NOVAMONT to provide unique solutions with low environmental challenges while promoting sustainable practices.

Applications

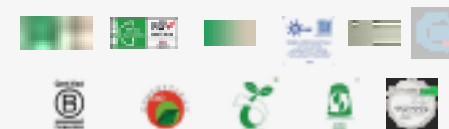
Agriculture, foodservice, packaging, collection and management of food waste...

Advantages in terms of sustainability

- Fully biodegradable and compostable: MATER-BI helps optimize the collection and management of waste, return food nutrients to soil, reduce environmental impact and develop virtuous production systems with significant advantages throughout the production-consumption cycle.
- Bio-based: up to 70% biobased, MATER-BI is GMO free (ISCC certification), uses vegetal resources cultivated in Europe with an impact near to zero on food production.

Labels & Awards and certifications

N13432, EN17033, EN14995, EN13592, ASTM D6400, ISO 17088, NF T 51-800



Find out more:
www.novamont.com



➤ Nycobase® SNG, STM and SMP



Nycobase® SNG, STM and SMP are biosourced base fluids dedicated to the formulation of lubricants that combine an excellent environmental profile with a high level of technical performance.

💡 Advantages in terms of innovation & sustainability

- Nycobase® SNG, STM and SMP are synthetic esters used as base fluids for the formulation of lubricating oils. These esters are composed of fatty acids coming from European vegetable sources such as rapeseed and sunflower, and display high amounts of carbon of renewable origin (89 to 95%).
- These fluids are specifically designed to provide a high level of technical performance in hydraulic oils or gear oils, combined with an excellent environmental profile thanks to their biodegradability and innocuity to aquatic species.
- They are therefore particularly recommended for the formulation of lubricants used in environmentally sensitive applications: marine equipment (rudders, propellers, thrusters on

vessels), as well as equipment located in water catchment areas - in other words, applications where release of lubricants to the environment may have a strong impact. Nycobase® SNG, STM and SMP have various viscosity grades to cover these various applications, respectively ISO VG 46, 100 and 150.

- They contain a high amount of carbon of renewable origin (rapeseed and sunflower as raw materials). Their carbon footprint has been calculated and is strongly reduced compared to petroleum based lubricating oils.
- These products may be used to formulate lubricants complying with the requirements of the European Ecolabel, as well as the US EPA's Vessel Incidental Discharge Act, formerly known as Vessel General Permit.

Find out more:
www.nyco-group.com/products/nycobase-4
 Follow us: LinkedIn:
 NYCO, specialty lubricants and synthetic esters



➤ Jolee® 7750



Jolee® 7750 is an eco-designed emollient with silicon-like sensorial properties, while being 100% bio-based and biodegradable. This very light ester is easily absorbed and provides a nice silky afterfeel on the skin. Its multifunctionality makes it perfect for skin care, hair care and color cosmetics.

💡 Advantages in terms of innovation

- Light and fast absorbing emollient
- Easy spread with velvety touch
- High wetting power for pigments
- Suitable for all applications like skin, hair and color care

💡 Advantages in terms of sustainability

- 100% bio-based (ISO-Norm 16128)
- Sustainable and responsibly sourced raw materials (RSPO MB, use of a distillery by-product)
- Readily biodegradable
- Low viscosity silicone alternative

💡 Certifications

- Approved by Cosmos, Ecocert & Natrue



Find out more:
www.oleonhealthandbeauty.com

RADIANOL 4710



RADIANOL 4710 is a 100% bio-based propylene glycol made from vegetable glycerin, a by-product from the production of biodiesel. Specifications and quality of this vegetable propylene glycol are identical to those of PG originated from crude oil, making of RADIANOL 4710 an excellent substitute for eco-formulations.

Advantages in terms of innovation

- An innovative process to produce a 100% bio-based vegetable propylene glycol, reducing energy consumption by ~50%

Advantages in terms of sustainability

- 100% bio-based (ISO-Norm 16128)
- **~50% reduction in carbon footprint compared to fossil-based polypropylene glycol***
- Sustainable raw materials, made from byproducts
- GMO free

*Environmental sustainability assessment of renewables-based propylene glycol at full industrial scale production" J Chem Technol Biotechnol (2019)

SPECIFICATIONS : EP/USP	
CHARACTERISTICS	VALUES
Appearance	clear, transparent liquid
viscosity	< 20 cP at 25°C
Propylene glycol	> 99.5 %
Water content	< 0.10 %
Free water	< 0.10 %
Residue on ignition	< 70 ppm
PH	< 7.0
Substrate	< 100 ppm
Heavy metals	< 1 ppm
Specific gravity at 25°C	1.035 ± 0.010 g/cm ³
Acidity	< 0.01 mmol/L
Water content	< 0.1 %



Find out more:
www.oleon.com

SOURCÉA



Your walls will be in harmony with nature thanks to our new paint SOURCÉA. Its unique formula has more than 54% of biobased carbon, with a 97% biobased resin.

The benefits of our innovation

- SOURCÉA is a two-in-one biobased paint (primer and top-coat) specially designed for wall and ceilings. Its velvety matt finish combines easy cleaning and warm atmosphere.
- More than 54% of biobased carbon according to NF EN 16640 standard.
- Our aqueous biobased paint meets professional painters expectations :
 - Ease of application.
 - No sagging or splattering.
 - Excellent hiding power and adhesion.
- Ecolabel certification : brings together a very low environmental impact, and global paint quality.
- SOURCÉA offers a very low VOC content : < 1 g/L.
- Rated A+ thanks to its very low emissions for indoor air quality.

We no longer consider Ecology, Consumer and Environmental protection as a goal over the next few years. They are now integrated in our way of thinking, creating and producing.

Find out more:
www.onip.com



SEIGNEURIE® by PPG – EVOLUTEX LOW CARBON - Velvet

Evolutex Bas Carbone is the major velvet waterborne paint from the Seigneurie© brand using vegetal-biobased alkyd resin. This paint brings all expected performances for premium results with an optimized carbon footprint.

The benefits of our innovation

- This paint provides the required aspect (levelling, structure and gloss level) of French market trends :
 - Very good levelling
 - Fine structure
 - Smooth gloss level – low velvet
 - High and durable whiteness
 - High opacity
 - Good filling
 - No traces after application
- Evolutex Bas Carbone Velours is using bio-based alkyd resin from residues of the paper industry. The forests used to get this raw material are sustainably managed, thus no reckless deforestation is done.
- Using anti-mould additives, this paint can be used either in rooms or bathrooms.
- Very low VOC content : < 1 g/L
- Certified NF Environment for white and all bases.
- Indoor Air Quality : rated as A+
- Individual EPD : -20% of carbon footprint compared to former classical Evolutex Velours thanks to the new enhanced formulation (A1 scope)

Find out more:
www.ripolin.fr



DGRAISS3000

Le DGRAISS3000 est un nettoyant dégraissant.

Characteristics

- Ready to use. Water-based. Non-hazardous class. Food grade classified. Classified as EXCELL+. From renewable sources.

Benefits of our innovation

- Safe for users and the environment. Raw materials from renewable sources. Easy to use as it is ready to use with a sprayer. Made in France.

Advantages in terms of sustainability

- From renewable sources, 100% biodegradable, available in Bag In Box to avoid the use of plastic packaging.

Labels & Awards and or certifications



Find out more:
prodirox.com



➤ FLUIDIFEEL™ EASY

Fluidifeel™ Easy is a green and natural O/W emulsifier for fast, sensorial and fluid formulations. 100% from vegetal origin, it brings an enjoyable naked-skin sensation and soft after-feel.

💡 A Bioeconomy product

Product made in France.

Responsible sourcing of raw materials:

- Sugar comes from local sourcing (Europe) inducing an economic development of our partners.
- Fatty alcohols, from palm origin, are RSPO Mass Balance certified*, thus contributing to the production of certified sustainable palm oil, while respecting local populations and biodiversity.

💡 Advantages in terms of innovation

- Seppic meets the challenge of stabilizing fluid formulations to simplify the formulator's job.

- FLUIDIFEEL™ EASY is able to stabilize sprays to lotions, up to 60% of oils of different types, pigments, sun filters and active ingredients. Liquid and cold processable, the development of new formulas is easier and quicker (60% time saved compared to a hot emulsion).

💡 Advantages in terms of sustainability

- Use of bio-based raw materials
- Approved by COSMOS & NATRUE
- Sustainably designed according to the 12 green chemistry pillars
- Cold processable, it allows to save energy by 95% and decreases the environmental impact during production (compared to a hot emulsion).

* supplied under MassBalance certification
BVC-RSPO-1-1972708497

Find out more: www.seppic.com/en/fluidifeel-easy
Follow us: [Linkedin: Seppic](#)



➤ HYDRACHRYSUM™

Hydrachrysum™ tackles dry skin conditions by breaking Inflamm'dryness™ vicious circle. Bio-inspired by the *Helichrysum stoechas*; the Everlasting maritime plant inspired us on her way to adapt to its arid ecosystem.

💡 A Bioeconomy product

- Hydrachrysum™ has been developed using our **Celtosome™** ecodesign technology. This patented culture of plant cells preserves natural resources. It is performed under a sterile environment avoiding contamination or potential pollution.
- This cell lysate is made in Brittany (France) where the plant is originally located.

💡 Advantages in terms of innovation

- Hydrachrysum™ offers a unique molecular richness made up of hydrophilic & lipophilic molecules derived from the dedifferentiated plant cells and specific ones secreted in the medium.
- It breaks the **Inflamm'dryness™** vicious circle, newly discovered phenomenon linking dehydration and inflammation

and allow to visualize hydration thanks to new biological markers.

Advantages in terms of sustainability

The **Celtosome™** biotechnology with an added step allows:

- Preservation of ecosystem (no need to harvest, sustainable development)
- Zero waste of raw materials and during the process
- Saving energy consumption (lysate)

💡 Labels & Awards

- Cosmos and NaTrue approved
- Halal certified
- Scientifically proven with *in-vitro*, *ex-vivo* and *in-vivo* data at 1%

Find out more: www.seppic.com/en/hydrachrysum



AgRHO® S-Boost™

Solvay's biostimulant helps crops cope with dry conditions. **AgRHO® S-Boost™** is derived from **guar**, a natural agro-polymer extracted from a legume plant. It is then chemically modified before being applied on the seed.

Advantages in terms of sustainability

AgRHO® S-Boost™ is an efficient solution for sustainable agriculture:

- A very unique set of properties: it's eco-friendly, bio-based, biodegradable and non-toxic for plants and people while reducing water, fertilizer and pesticide use.
- Assists in combating the effects of environmental challenges such as abiotic and hydric stress.
- Fortifies the quality of the root and synergizes with soil microorganisms to improve water and nutriment uptake.
- Helps farmers secure early stage crop development, improve abiotic stress resistance and optimize their overall crop yield.

Partnership

- AgRHO® S-Boost™ is a relatively new product, launched commercially in 2017 in partnership with Limagrain, a large French seed company.

Labels & Awards

- In 2019, it was awarded the World Alliance for Efficient Solution label from the Solar Impulse Foundation, recognizing its multiple benefits in terms of sustainable development.



Find out more:
www.solvay.com



Jaguar® C162



Dermalcare® LIA MB

Dermalcare® LIA MB showcases an outstanding green profile. This emollient is produced from the waste of renewable feedstocks, sugarcane on the one hand and sustainable palm Kernel (RSPO MB) on the other. It is 100% plant-based, readily biodegradable, non-ecotoxic, and COSMOS-certified.

Advantages in terms of innovation

- An excellent alternative to non-volatile silicones.
- Delivers less build-up compared to silicone in multiple applications.
- Provides weightless conditioning with a light signature and modern touch.
- Enables the formulation of clear shampoos.
- Is suitable for all hair types.

Advantages in terms of sustainability

- A circular beauty ingredient produced from the waste of renewable feedstocks
- COSMOS-validated, RSPO MB-certified and compatible with EU Ecolabel [2021/1870]
- Readily biodegradable and has a net negative carbon footprint

Labels & Awards:

- An undamaged skin microbiome has a crucial impact on skin health. Dermalcare® LIA MB has successfully obtained the «Microbiome-friendly» seal of quality, making it a skin-friendly ingredient that helps maintain the balance of consumers' skin.



Find out more:
www.solvay.com



➤ Rhovanil® Natural



The food industry is looking to meet increasing consumer demand for natural ingredients and healthier products. With Rhovanil® Natural, Solvay provides a unique solution that enables manufacturers to easily incorporate natural vanillin in their recipes.

💡 Advantages in terms of sustainability

This molecule, the only industrially produced vanillin recognized as “natural”:

- Produced from a natural raw material, ferulic acid obtained from non-GMO rice bran oil, and through a manufacturing process recognized by EU authorities as “traditional” – fermentation – Rhovanil® Natural CW is considered a natural product.
- Provide transparent and reassuring information for consumers whose awareness is constantly on the rise when it comes to safety, traceability and healthfulness, in food products

💡 Labels & Awards

- Rhovanil® Natural CW is the only natural vanillin that meets both these European 1334/2008 and US Food and Drug Administration (FDA) 21CFR101.22 regulations regarding natural labeling, a key benefit for food international players.



Find out more:
www.solvay.com



➤ Sipomer®



Solvay is set to pave the way for the continued expansion of non-toxic coatings in our homes and workplaces by making the switch to eco-friendly coatings with the use of water.

💡 Advantages in terms of sustainability

Waterborne coatings are eco-friendly and greener because water is used as a diluent to disperse a resin instead of organic solvents.

- Products emitting low to zero Volatile Organic Compounds (VOCs)
- Odourless
- Less air polluting, as regulatory restrictions, along with customer demand, call for healthier and cleaner coatings
- Paints and coatings for better air quality

Find out more:
www.solvay.com



Augeo® is an innovative line of solvents developed from glycerin, a renewable source, being a high performance bio-based alternative to petrochemical solvents. Augeo® is composed of versatile molecules, with high solubility power and low odor.

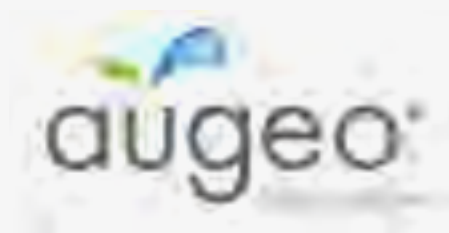
💡 Advantages in terms of innovation

The Augeo® line of solvents was developed for cleaning products and fragrances is based on glycerin:

- A colorless and odorless substance well known for its use as a humectant (a moisture preserver) in the food industry
- Highly versatile

💡 Advantages in terms of sustainability

- Produced in a sustainable way, using a product derived from the cultivation of soybeans in Brazil. Augeo® is therefore a real alternative to traditional petrochemicals.
- Low carbon footprint



Find out more:
www.solvay.com



Bioplast 105 is an advanced biopolymer compound for rigid applications that flows easily and is particularly suitable for stretched tape and fibre spinning.

It features a better impact resistance than 100% PLA and works well as an additive to adjust rigidity in flexible films.

Bioplast 105 has a bio-based carbon share of 67% according to ISO 16620-2 or ASTM D6866.

💡 The benefits of our innovation

- As with all Biotec products, Bioplast 105 is completely biodegradable. Depending on the thickness, this product is compostable according to EN13432 at industrial composting facilities.
- Bioplast 105 is a versatile plant-based biopolymer with many applications (including some food applications) :
 - Fibre spinning items
 - Semi-finished products
 - Thermoformed products (cold applications <50 °C)
 - 3D printing
 - Blend partner in combination with other Bioplast materials

- Bioplast 105 is designed for extrusion thermoforming but can also be processed on conventional equipment for sheet film extrusion (thermoforming) and cast film production.
- The absence of plasticiser allows the material to be easily processed to manufacture stable products of consistent quality with an excellent shelf life. Products created with Bioplast 105 can be coloured with compostable masterbatches and are sealable (heat sealing, RF, ultra-sonic). Additionally, they are printable. As a blend partner, it can also give additional rigidity to all flexible films.

Find out more:
www.sphere.eu



➤ Bioplast GS 2189

Bioplast GS 2189 is a compound containing mineral fillers for rigid applications that flows easily, is particularly suitable for processing via injection moulding. This grade is heat stable up to 50 °C.

Bioplast GS has a bio-based carbon share of 69% according to ISO 16620-2 or ASTM D6866.

💡 The benefits of our innovation

Bioplast GS 2189 is a versatile plant-based biopolymer with many applications :

- Injection moulded articles
- Thermoformed products
- Semi-finished products
- Blend partner in combination with other Bioplast materials
- As with all Biotec products, Bioplast GS 2189 is completely biodegradable. Depending on its thickness, this product is compostable according to EN 13432 at industrial composting facilities.
- Bioplast GS 2189 was designed for use in injection moulding.
- This grade is printable, can be coloured with compostable masterbatches, and is sealable (heat sealing, RF, ultra-sonic).

Find out more:
www.sphere.eu



➤ The bio-based range

ALFAPAC is a range of garbage bin liners, freezer bags and cling film made from a renewable raw material, sugar cane. It is a range that allows a significant reduction in CO₂ emissions compared with oil-based products.

💡 About manufacturing with sugar cane-based vegetal plastic

- Thanks to its heavy foliage, sugar cane captures enough CO₂ when growing to compensate for all the CO₂ emitted during the manufacturing process, transportation, product use and end-of-life cycle.
- Most sugar cane earmarked for the production of ethanol is grown in the regions of southern and central Brazil, usually on former degraded pastureland. The sugar cane crops used for the manufacture of vegetal polyethylene have no impact on native forests.
- The mechanical properties of vegetal polyethylene are strictly identical those of fossil-sourced plastic.
- 100 % recyclable.

- Green PE represents only 0.02% of farming land area in Brazil (source: Braskem).
- Bin bags and freezer bags are certified «Origine France Garantie» (French Origin Guaranteed).



Find out more:
www.sphere.eu



Compostable bags

With its range of compostable biosourced bags for sorting food waste, ALFAPAC is committed to making its environmental contribution to the sorting of biowaste at source by private individuals.

About manufacturing with bio-sourced materials (potato starch)

With its range of compostable bio-sourced bags for the sorting of food waste, ALFAPAC is committed to making its environmental contribution to the sorting of bio-waste at source for private individuals.

- These bio-compostable bags are distinguished by their origin and their end of life: they are made from bio-sourced materials (potato starch) and are biodegradable and compostable.
- These bio-compostable bags are totally biodegradable in a compost that meets the temperature and humidity conditions for its natural decomposition. The latter requires a period of 6 to 12 months or more depending on the type of composting (industrial or domestic) or methanisation and the quality of the compost management.

- Compostable bags for organic waste: bag to be thrown into the individual or collective compost directly with the waste: Certified OK compost HOME by TÜV AUSTRIA.
- Bags with handles: very practical for closing and carrying the bag.
- 10L: small size adapted to the collection of putrescible waste, compatible with bio-buckets (also exists in format 25L).
- Made in France and certified Origine France Garantie.



Find out more:
www.sphere.eu



Fruit and vegetable bags

The fruit and vegetable bags "Végéos" made by SPHERE, are produced with a resin made by BIOTEC. "Végéos" bags comply with European environmental legislation and are certified «OK Compost Home». "Végéos" fruit and vegetable bags already switched to over 50% biobased since the 1st January 2020.

The benefits of our innovation

- These bags are manufactured using resins made by BIOTEC obtained from non-comestible potato starch. BIOPLAST is guaranteed:
 - GMO-free
 - Plasticizer-free
 - Odour-free
- Compatible with the extrusion process for ultra-fine film with a thickness of between 10 and 50 microns.
- "Végéos" bags fit for food contact.
- "Végéos" bags are strong and hard-wearing and can carry several kilos of food.
- "Végéos" bags are transparent and make visible goods inside.

- "Végéos" bags can be used for the selective collection of bio-waste. They are "Ok Compost Home" certified.
- "Végéos" bags strength is equivalent to bags made of traditional polyethylene.

Find out more:
www.sphere.eu



ESTOGREEN A325

Patented additive mainly based on castor oil chemistry with 87% of green origin suitable with a lot of applications like bioplastic, thermoplastic, thermoset, elastomer, lubricant, coating, detergent...

The benefits of our innovation

- Biodegradable at 100% after 28 days.
- Manufacturing in France, in the Indre area.
- A technology based on oligomer chemistry. This is a monomer repeated several times. It is possible to adjust the parameters of the additive (monomer number, chain length, viscosity...) in function of your target.
- In Biopolymer application, ESTOGREEN A325 has several functionalities: processing aid, plasticizer, coupling agent, dispersing agent... Regarding the processing aid functionality, ESTOGREEN A325 allows to decrease the viscosity of the compound during the compounding and transformation step, with high shear. It also improves the mechanical properties.
- Thanks to the compliance to the European Food Contact 10/2011, this additive can be considered for packaging application.
- If you are looking for an alternative to petroleum-based chemistry and palm oil origin, ESTOGREEN A325 is a good candidate.



Find out more:
www.stearinerie-dubois.com



Stepan

Bio-based surfactants

BIO-BASED SURFACTANTS IN DETERGENCE AND PERSONAL CARE

The benefits of our innovation

Corn > Lactic Acid > Stepan Mild L3 (surfactant) > Cosmetic cream

- Lauryl lactyl Lactate is a surfactant originating from 100 % natural source. Corn is used to make lactic acid which is reacted with lauryl alcohol to produce this surfactant. It is readily biodegradable.
- The molecule is unique and has multifunctional properties as a viscosity builder, foam booster and powerful emulsifier and solubilizer for active substances (salicylic acid and triclosan). It is used to formulate cosmetic products including leave-on creams and conditioning shampoos.

Rapeseed > Fatty acid > Stepanex EUG (surfactant) > Fabric Softeners or Hair Conditioners

- Fabric conditioning is an important consumer need for textiles. As it is a wide dispersive high volume application, we believe that it is important to provide a plant-based solution.

- Thus, Stepanex EUG is an ester quat based on rapeseed. It is from a local source and is an alternative to Palm oil. Stepanex EUG is readily biodegradable and is mild for the environment and human use as proven by its non-classification under GHS regulatory rules.

Our commitment

At Stepan, we believe that chemistry can provide solutions that benefit the environment, promote human well-being, and meet the needs of a growing population. Our sustainability program focuses on four key areas: partnering with customers, commitment to our employees and the communities we work within, reducing our environmental impact, and sustained growth. Besides, most Stepan manufacturing sites are RSPO-certified and can provide sustainable palm oil-based surfactants. Thus, molecules based on renewable plant origin contribute to our sustainability program.

Find out more:
www.stepan.com



Syntilor

**NATURE PROTECT
RANGE, DIY market**

The first bio-based range for wood protection and decoration.

A complete range of interior and exterior wood care high performance products made from renewable natural materials.

A bioeconomy range

- Use of renewable natural materials : water, mineral pigments and bio-based resin formulated with vegetable seeds such as rape, soybean...

Advantages in terms of innovation

- 100 products references combining high performance and health & environment protection.
- High quality products that satisfy the requirements of long lasting protection and easy implementation.

Advantages in terms of sustainability

- A complete range respecting health and environment.
- Formulated from renewable materials with up to 95% of natural, mineral and bio-based ingredients.

- 100% water based and mineral pigments range.
- Low V.O.C emissions (volatile organic compounds).
- Clean and respectful factories.

Labels and awards

- The European standard EN 16640 measures bio-based carbon content as a fraction of total carbon content



Find out more:
www.syntilor.com



**Terres
Univia**
l'interprofession des huiles et protéines végétales

Linseed

Linseed is a niche crop (around 20 000 ha in France). The seed contains about 35% oil and 65% protein-rich cake. We differentiate linseed from flax which is famous for the resistance of its fibers (used for biomaterials, insulation or textile). The linseed oil (rich in acid -linolenic, C 18:3) is well-known for applications in chemistry since the 19th century.

Among the main applications

- Paintings (as binder) and coatings, printing inks, plasticizers, lubricants, soaps, treatment products for wood or floor tiles ... One of the oldest (since 1860) and the most famous application is linoleum, a floor covering made in particular from solidified linseed oil (linoxyn)

Main benefits of linseed

- Diversification crop allowing longer rotations for farmers
- Needs few inputs (good environmental balance)
- Linseed oil is a drying oil, meaning it can polymerize into a solid form (polymer-forming properties).
- Protective power especially for wood (moisture barrier, protection against fungi, insects, dust due to its antistatic properties)
- Bactericidal power (in linoleum)

Find out more:
www.terresunivia.fr



➤ Rapeseed

Rapeseed is the main French oilseed crop (around 1.5 Mha, 3,3 Mton of seeds). It has many non-food applications. The seed contains about 40% oil and 60% protein-rich meal. The oil is mainly used for the production of biodiesel (around 2,8 million m3 of fatty acid methyl ester (FAME) produced from rapeseed incorporated in France in 2022). The transesterification process co-produces glycerin (100 kg from 1 ton of oil) which is a very interesting product especially for cosmetic applications. The use of glycerin in cosmetics is widespread.

Another variety of rapeseed, called erucic rapeseed, has a particular composition in fatty acids (around 50% of erucic acid, C 22:1). This inedible variety is prized for very various applications: slip agents, lubricants, biocontrol products, ...

💡 Main benefits of rapeseed

- Widespread crop with integrated industry from upstream to downstream
- Good environmental balance (At least 50% less GHG emissions for rapeseed biodiesel compared to fossil fuel for example)
- Very good technical properties of esters
- The split of erucic acid is quite easy
- Certification of sustainability, no link with deforestation

Find out more:
www.terresunivia.fr



➤ Sunflower

Sunflower is the second main French oilseed crop (around 600 000 ha, 1,3 Mton of seeds). The seed contains about 40% oil and 60% protein-rich meal. We differentiate two varieties with very different compositions: classic sunflower with an oil rich in acid linoleic (67% of C18:2) and (very) high oleic sunflower (80 to 90% of oleic acid C18:1).

High oleic sunflower is the most attractive for oleochemistry.

💡 Among its applications

- Production of alkyd resins for **paintings** and **coatings**, production of **lubricants**, **printing inks**, **corrosion inhibitors**, ... High oleic sunflower oil is also used to synthesize intermediate products (such as azelaic acid or pelargonic acid) by oxidative cleavage for various applications: **flavors**, **perfumes** or even as **herbicide**. Sunflower is also used for **biodiesel** production (with low GHG balance).

💡 Main benefits of sunflower

- Widespread crop with integrated industry
- Very good environmental balance (low water consumption and nitrogen inputs which involves low GHG emissions)
- Wide range of chemical applications
- Low pollutant emissions (VOCs) for paintings and coatings
- Certification of sustainability, no link with deforestation
- Certification of sustainability, no link with deforestation

Find out more:
www.terresunivia.fr



BioLife products are produced at Oudalle's plant (France, Normandy), the 1st French plant that has been certified ISCC Plus last September 2016. The products are commercially available worldwide at large scale.

🔍 The benefits of our innovation

- BioLife products are pure renewable and biodegradable isoparaffins. They are manufactured from renewable HVO (Hydrotreated vegetable oil) feedstocks based on vegetable oils.
- BioLife products show the following environmental benefits compared to their equivalent molecules obtained from fossil feedstocks:
 - Renewable bio-sourced feedstock,
 - Lower carbon footprint
 - Lower energy consumption
 - Classified readily biodegradable
- Thanks to our HDA (Hydro de-aromatization) technology coupled with narrow cut distillations, BioLife products are tailored for targeted applications with narrow boiling range and offer pure solutions "aromatic free" with less than 0.005% total aromatic content.

The products are very innovative and can be considered as a new class of products with outstanding profiles. The set of performances allow these products to fit with a wide range of applications such as inks, paints & coatings, cleaning, degreasing, personal care, home care, heat transfer fluids, lubricants.

Find out more:
www.totalspecialfluids.com



Naé is a range of waterborne paints based on renewable and biobased components. The paints are composed of a vegetable resin with 98% of biosourced carbon.

🔍 The benefits of our innovation

- Good hardness of the dry film.
- High hiding and covering power.
- These paints are part of a sustainable habitat objective, making each use a deco-responsible act. Thanks to very low VOC emissions after 24 hours of drying, they also help to preserve the quality of indoor air.
- Certified NF environment in white and shades for its respect of the environment.
- Certified Excell Green Zone.
- ISO 16000 : range rated A+.
- The range is composed of a primer and three different finishing paints : flat, eggshell and satin.
- Very low VOC content : < 1 g/L.
- Individual EPD (Environmental Product Declaration) : Compliant with the HQE Sustainable Habitat approach.

Ecology is not at the expense of technicality and plant chemistry is the future of painting. Naé is the perfect illustration, combining technical requirements, environmental qualities and decorative trends.



Find out more:
www.unikalo.com



> Starch

Starch is a carbohydrate extracted from agricultural raw materials: maize, wheat, potato, peas, cassava...

Starch is used in a wide range of products: food, cosmetics, pharmacy ... Starch is renewable and biodegradable: it is a perfect component in many industrial applications such as plastics, detergents, glue, adhesives... The detergent industry uses starch products for the production of biodegradable, non-toxic and skin friendly detergents.

💡 The benefits of our innovation

- Starch is over all used for its unique properties. Here are some examples:
 - Binding, in plaster tiles,
 - Adhesive, for sticking labels on packaging in contact with foodstuffs,
 - Fluidifiers of mining sludge from the mining industry,
 - Flocculants for sewage treatment or drinking water treatment.
- Starch products are also used in fermentation – for the production of amino acids, organic acids, enzymes and yeast, by the chemical industry – for the production of surfactants, polyurethanes, resins, and in biodegradable plastics.

Situated within the very heart of the added value chain, between the primary agricultural and the agro food, feed and industrial sectors, the starch industry processes wheat, maize, potatoes and peas to extract starch, proteins, fibers and lipids (germs/oils). The **whole raw material** is used to exploit the entire plant potential (starch, protein, oil, fibers...), so as **no waste** is left behind.

Starch industry is continuously innovating to meet changing customer and consumer needs for new applications and uses, developing the functionalities of the starch products and also replacing fossil-based ingredients with renewable and biodegradable starch-based ones.

Find out more:
www.usipa.fr



> Glucose syrup

Glucose syrups are derived from starch which is extracted from agricultural raw materials, mainly maize and wheat in Europe.

Glucose syrups are a key ingredient in food products, as well as in pharmaceuticals, industrial applications and industrial fermentations. Glucose syrups have a wide range of uses in the food industry, ranging from traditional applications as well as innovative applications in various sectors such as confectionery, pastries, biscuits, ice creams.

💡 The benefits of our innovation

- Glucose syrups can adapt, as with the starch from which they result, into a considerable variety of products, each developing specific properties. These properties can be transposed to industrial application for construction as example.
- Their natural polymeric structure allows their use as a component of water-soluble resins and as an extender for water-soluble resins.
- Glucose syrup and derived products represent plant-based solutions for concrete admixtures, plasterboard and mineral wool.

Situated within the very heart of the added value chain, between the primary agricultural and the agro food, feed and industrial sectors, the starch industry processes wheat, maize, potatoes and peas to extract starch, proteins, fibers and lipids (germs/oils). The **whole raw material** is used to exploit the entire plant potential (starch, protein, oil, fibers...), so as **no waste** is left behind.

Starch industry is continuously innovating to meet changing customer and consumer needs for new applications and uses, developing the functionalities of the starch products and also replacing fossil-based ingredients with renewable and biodegradable starch-based ones.

Find out more:
www.usipa.fr

**For more information
about bio-based products:**

www.chimieduvegetal.com



www.chimieduvegetal.com

Follow us!



@ChimieVegetal

@Association Chimie du Vegetal

Graphic design: www.agence-duo.com