

dsm-firmenich unveils the Sharing Innovation 2024 collection of perfumery ingredients

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Pink Pepper Madagascar EO 911612 ______ 4

dsm-firmenich unveils the Sharing Innovation 2024 collection of perfumery ingredients

This range of perfumery ingredients demonstrates our rich history of breakthrough scientific innovations and natural extraction expertise, as well as initiatives that are making a global impact and ensuring environmental sustainability.

Two naturals from a certified origin emphasize the synergy between natural extraction expertise and global collaborations.

This year we are honoring 10 years since the launch of Clearwood® with a newly released to the market Captive ingredient made from Biotechnology.

Completing the line-up, the synthetics are designed to fuel anticipation and prompt action. Two musk compositions, exclusively developed for this collection, serve as solutions aimed at resolving upcoming regulatory challenges.







Pink Pepper Madagascar EO 911612

Spicy Schinus terebinthifolia

Natural Ingredient

CAS: 0949495-68-5 REACH: 01-2120737161-64





I believe that a fragrance containing pink pepper surpasses one without it. Just a drop accentuates the top notes, enhancing the citrus and spicy elements, lending a sense of verticality and freshness to the composition, without overpowering with a strong peppery finish."

Cyril MESTRE, Technical Perfumer



Olfactive description

The essential oil is spicy, citrusy, fresh, sparkling with slightly woody facets.

Perfumery usage

Used in Body Care and Home Care to bring a spicy and citrus top note effect.

Process

Distillation

Essential Oils or volatile fractions are obtained by distillation of the biomass with water, or steam.

After distillation, the essential oil is physically separated from water by decantation.

Pink Pepper Madagascar EO 911612

Crop season







Ingredient sourced from certified geographical (country of) origin.

Origin

Pink Pepper is mainly sourced from Brazil, Madagascar and Reunion. Pink Pepper processed for the F&F industry is generally the sorting gap of the berries used for food industry. Two botanical species exist, Shinus molle mostly used in the Flavor industry while Shinus terebenthifolius is used in Perfumery. After harvest, farmers sort the bunches by removing the leaves and keeping only the red berries, followed by drying, sorting and packaging.

Did you know?

Extracted part: dried berries. Yield: 4-6% 20kgs approximately of berries for 1kg of Essential Oil.



Pink Pepper Madagascar EO 911612

The Pink Pepper from Madagascar balances the perfume by adding a richer texture and more pronounced volume. It enhances the fresh and sparkling notes, stimulating the senses, while also imparting an ambery and warm tone to the composition. Its subtle yet significant influence notably enriches the olfactory experience.

For a fine fragrance at 12%

209521

With 0,1% Pink Pepper Madagascar EO

Hedione®	200
■ Bergalol™	100
Cedarwood Virginia USA EO	
Patchouli Indonesia EO	100
Sylvamber™	80
Bergalin	60
Ambrox® DL coeur 10 DIPG	50
Benzoin Siam RES 50 TEC	50
Phenylhexanol	
Éthyl Vanillin	
Bergamot Incol MD	30
lralia®	
Triethylcitrate	29
Coumarin	20
Mousse Cristal	10
Raspberry Ketone	10
211 10 DIPG	10,0
Carrot Seed EO	5
Labdanum Abs 50 DIPG	5
Norlimbanol®	5
Orris CTE @10%	5
Clary Sage Abs	2
Tonka Bean Brazil Abs	2
Vetiveryl Acetate	2
Pink Pepper Madagascar EO	
5	1000

For a shower gel at 1%

209517

With 0,5% Pink Pepper Madagascar EO

•	Hedione®	250
•••	Sylvamber™	150
	Bergalol™	100
	Triethylcitrate	
•••	Bergalin	
•••	Clearwood®	50
	Ethyl Vanillin	50
•••	Phenylhexanol	
•••	Ambrox® DL 10 DIPG	30
	Cedarwood Virginia USA EO	30
	Coumarin	
•••	Iralia®	30
	Lemon Oil Sfuma	30
	Raspberry Ketone	20
	Mousse Cristal	
-	Z11™ 10 DIPG	
	Irone Alpha 10 DIPG	
	Norlimbanol®	
	Pink Pepper Madagascar EO	
		1000

Ingredients created or manufactured by dsm-firmenich

In the 'without' version, Pink Pepper Madagascar EO is replaced by Triethylcitrate.







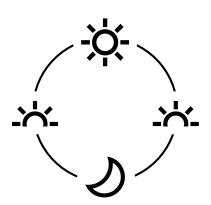
Natural Ingredient

Unraveling the scent spectrum of jasmine grandiflorum throughout the day

The scent of jasmine changes beautifully from morning to night, releasing a spectrum of volatile molecules that capture the essence of various moments: from the fresh morning dew to the radiant warmth of sunrise, the intensity of midday sun, and the gentle dusk of sunset.

At dsm-firmenich, we have meticulously studied every aspect of this remarkable flower, observing it in all its states and employing supercritical fluid extraction to capture its essence entirely. The result is our Jasmine Flower India SFE Absolute, authentically encapsulating the scent of the flower in its natural habitat.

Presented within these pages is a profile of jasmine that is rich, intricate, and truly grandiose.





Jasmine Flower India SFE Abs 952114

Floral, white flower Jasminum grandiflorum





I find this quality truly magnificent. Thanks to the SFE process, which effectively preserves the flower's olfactory components, we achieve an extract remarkably similar to the flower itself. It is intensely floral and petal-like, with an airy quality and subtle hints of banana fruitiness, along with jammy red fruit undertones. In comparison to traditional absolutes, it's notably less animalic and herbaceous.

Cyril Mestre, Technical Perfumer



Olfactive description

Floral, white flower, fruity. With elegantly curved leaves and petals of delicate white porcelain, the fragility of this flower contrasts with the astonishing power of its scent.

Perfumery usage

This Jasmine SFE Abs enriches floral top and middle notes, contributing to a complex and refined perfume structure. Perfumers can capture the scent of a fresh jasmine field in the morning, with a petally, floral, wet, and vegetal effect, accompanied by subtle fruity and creamy undertones.

Process

properties.

Supercritical Fluid Extraction (SFE)

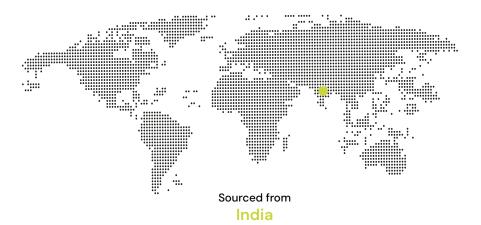
We have mastered the expertise of extraction from lab trials all the ways to industrial production. Supercritical CO2 Extraction is a technology in which carbon dioxide, put beyond its critical point (73 bars and 30°C), becomes a supercritical fluid with special

The extraction carried out at a low temperature preserves the natural profile identity of the raw material.

Jasmine Flower India SFE Abs 952114

Crop season







Ingredient sourced from certified geographical (country of) origin.



Responsibly sourced ingredient from known origin & recognized for its rated sustainable practices of production.

dsm-firmenich's joint-venture: cultivating Indian floral excellence

Since 2014, dsm-firmenich has established a joint-venture with Jasmine Concrete Export Private Limited, leader in Indian floral extracts & a member of the Naturals Together® program. Jasmine Concrete EPL has developed with a dedicated local team a unique direct sourcing network with jasmine farmers in Tamil Nadu through long term contracts, advanced payments, provision of seedlings and technical assistance. dsm-firmenich also works with them on sustainable agriculture improvements, especially in terms of the development of organic practices and ingenious irrigation.





Jasmine Flower India SFE Abs

Demo formula for an Eau de Toilette

Jasmine, with its creamy tuberose notes, enhances floral compositions with a sensuous femininity. Its airy petal effect elevates fragrances, evoking the image of a confident and accomplished woman, adding depth and allure to any blend. Its presence creates a luxurious, captivating aura, making it an essential element in creating a sophisticated olfactory experience.

For a fine fragrance at 12%

209522

With 0,5% Jasmine Flower India SFE Abs

-	Hedione® HC	200
	Florol®	100
	Sylvamber™	100
	Bergalol™	80
	Triethylcitrate	53
	Ambrox® DL 10 DIPG	50
	Benzyl Acetate Extra II	50
	Benzyl Salicylate	50
	Helvetolide®	50
	Hydroxycitronellal Synth P Fab	50
	Dreamwood® Base	30
	Geraniol Pure RC	30
	Bergamot CP Reco FCR Decol	20
	Patchouli Indonesia EO	20
	Vanilla Planifolia Mada Infusion	20
	CIS Jasmone	10
	Clove Bud EO	10
	Ethyl Praline	10
	Exaltenone	10
	Hexyl Tiglate	10
	Jasminlactone	10
	Mousse Cristal	10
	Muscenone® Delta	10
	Rose Wardia®	10
	Osmanthus Abs @10%	2
	Jasmine Flower India SFE Abs @10% -	5
		1000

••• Ingredients created or manufactured by dsm-firmenich

In the «without» version, Jasmine Flower India SFE Abs is replaced by Triethylcitrate.



Unlocking Nature's Essence: The Unique Advantages of SFE Extraction



With SFE:

Zero water used means zero water wasted

- CO₂ extraction does not use water at any during the process or during clean-up.
- Without leftover water in the final product, disposal is much cleaner and simpler, less energy consumption during this phase compared to other processes.
- Products with leftover water are also difficult to upcycle, store, keep safe and avoid microbe contamination.

Solvent products are not reusable, need to be treated as a special waste because of solvent contamination

- No traces of solvents residues in the final product, leftovers clean and good for environment.
- Energy is saved from energy it takes to concentrate and evaporate solvents.
- Exhausted RM after extraction are put as non-solvent leftover RMs, requiring less resources and energy.





Dihydroestragole RC

938476

Renewable Ingredient

CAS: 0000104-45-0

Aromatic





A very interesting allergen free, 100% renewable alternative to estragole and anethole. Olfactively, softer than both with aspects of tarragon and star anise with a rich ouzo/pastis undertone. Much easier to use and more cost effective than most competitive alternatives, Dihydroestragol is easily used in lavender, aromatic, fougere or gourmand accords."

Dominic MORGENTHALER, Technical Perfumer



Olfactive description

Aromatic, tarragon, star anise with a licorice undertone.

Perfumery usage

Great allergen-free alternative to Estragole and Anethole, being more impactful and having more volume. Very useful to bring freshness without being aggressive.

Process

Chemical Synthesis

Chemical synthesis corresponds to the construction of complex chemical compounds from simpler ones. Our R&D follows the principles of Green chemistry whenever possible.

Did you know?

Dihydroestragole RC

938476

Dihydroestragole infuses compositions with a delicate licorice freshness. At just at low dosage, its allure captivates. It intertwines harmoniously with honey, dried fruits, and vanilla, tempering their sweetness.

For an eau de toilette for Men at 12% $\,$

00261G

With 0,5% Dihydroestragol RC

■ Sylvamber™ _ Hedione® -Ethyl Vanillin _ Benzoin Siam Res 50 DIPG _____ Heliotropin ___ Vanillin Perf _ Ginger EO ___ __ 22,5 Violet BC _ Dipropylene Glycol 5 Dreamwood® Base 7,5 Dreamwood® Base ___ Fruit sec _ Tonka Bean Brazil Abs ___ Coranol ____ Cinnamic Aldehyde _____ __ 2,5 Koumalactone® ______ 2,5 Dihydroeugenol _ Cistus Spain Abs SIS _ Damascone Beta Fab _ Labdanum Spain Abs _ Dihydroestragole RC ____ 1000

For an eau de toilette for Women at 12%

00536D

With 1% Dihydroestragol RC

	Hedione®	550
•	Mimosal™	75
	Anisaldehyde Special Redist	55
	Lilial Base	50
	Phenylethyl Alcohol	50
	Heliotropin	45
	Foliaver	35
	Anisyl Acetate	25
	Sylvamber™	25
•	Calone®	20
	Iralia® Total	15
	Dipropylene Glycol	5
•••	Habanolide®	10
•••	Romandolide®	10
•••	Honey Provence Firabs	7,5
	Ambrox® Super	5
	Dorysane @ 1% DPG	
	Feuillage Vert	
	Pelargodienal @ 10% DPG	1,5
	Pelargodienol @ 10% DPG	1
•••	Dihydroestragole RC	
		1000

Ingredients created or manufactured by dsm-firmenich

In the «without» version, Dihydroestragol RC is replaced by Dipropylene Glycol.





Sustainable palette transformation for a reduced carbon impact

The perfumery industry has long relied on fossil fuels as main carbon source in new ingredient discovery and production. However, with the growing concern over climate change, dsm-firmenich recognizes the imperative for a transformation, within our businesses as well as into our products, in order to positively impact our Planet, Nature and People.

As part of our commitment, we have identified renewable carbon as a key lever in the decarbonization strategy, helping us achieve our ambitions towards carbon emissions reduction.

At dsm-firmenich, we plan to leverage green chemistry principles and renewable carbon sources to convert our palette of ingredients from petrochemistry to low carbon footprint ingredients. With our DRT back-end integration, we have direct access to renewable, upcycled biomass feedstock from pine wood, and we are investing in cutting-edge innovation on other sources such as recaptured carbon.

Today, dsm-firmenich is proud to maintain a leadership position as the number one producer of renewable ingredients in the industry. We continue to accelerate our innovation programs to radically adapt our palettes and protect our planet for future generations.





Velvet Musk 184295 B

Synthetic Base

Musk





This base replicates the dry, powdery, slightly musty facets of Musk Tetralin while matching its performance and having the added benefit of being highly biodegradable."

Dominic MORGENTHALER, Technical Perfumer



Olfactive description

Musky, sweet, earthy, fruity (berry), floral-violet, powdery.

Perfumery usage

A clean and diffusive musk, broadly used in all segments.

Process

Composition

Well balanced association of ingredients, some of which are captives, blended together to create an inspiring specialty.

The composition may be a unique technical solution to create natural reconstitutions. They are the result of a close collaboration between dsm-firmenich perfumers.

Velvet Musk

184295 B

Velvet Musk, a subtle yet powerful addition to fragrances, enhances depth and richness without overwhelming. Its velvety texture softens sharp notes like Dynascone® and Neobutenone® Alpha, creating a balanced composition. In perfumery, it's prized for its ability to harmonize with other musks, adding a touch of sophistication to every scent.

For an eau de toilette at 12%

00074P

With 10% velvet musk 184295 B

	Sylvamber™	350
	Hedione®	
	Sclareolate®	50
	Dreamwood Base®	30
	Dihydromyrcenol	25
	Ambrox® Super	
	Calone®	20
	Lemon Oil Sfuma	20
	Methyl Pamplemousse	20
•	Coranol	10
	Lilyflore®	10
	Vetiver Haiti EO	
•••	Damascenone 10% DPG	
	Basil EO 10% DPG	
	Ethyl Vanillin	5
	Florex®	5
•	Iralia®	5
	Mousse Cristal	5
•	Violettyne 10 HED 10% DPG	5
	Williams Ester	
	Z11™ HD	5
	Salicynile®	
	Prunella®	3.5
	Geranium Egypt EO	
•••	Neobutenone® Alpha 10% DPG	
	Koumalactone®	
	Velvet Musk B	

For a shower gel at 1%

00254H

With 5% velvet musk 184295 B

	Hedione®	250
	Bergamote	150
	Dihydromyrcenol	100
	Heliopropanal	80
	Sylvamber™	75
	Coranol	35
	Violet BC	35
	Salicynile®	
	Florol®	20
	Habanolide®	20
	Romandolide®	20
	Ambrox® Super	15
	Cascalone®	
	Sclareolate®	15
	Nutmeg EO	12,5
	Phenylethyl Alcohol	12,5
	Precyclemone B	12,5
	Tea Black Sri Lanka SFE	10
	Cardamom Guatemala EO	7,5
	Coumarin	7,5
	Benzyl Acetate Extra II	
	Corps Rhubarbe @ 1% DPG	5
	Dynascone®	
•	Polysantol®	5
•	CIS-3-Hexenyl Methyl Carbonate	2,5
	Firsantol®	2,5
	Lilyflore®	
•	Neobutenone® Alpha	2,5
•	Oakmoss RES Firbest @ 1% DPG	2,5
	Velvet Musk	
		1000

Ingredients created or manufactured by dsm-firmenich

In the «without» version, velvet musk is replaced by Dipropylene Glycol







Cashmere Musk 184300

Synthetic Base

Musk





This composition allows for a cost effective 1 to 1 substitution of a hard to replace; multifaceted ingredient with no limitations on dosage/application and like Velvet Musk, has the added benefit being highly biodegradable."

Dominic MORGENTHALER, Technical Perfumer



Olfactive description

Woody, musky, ambery, spicy

Perfumery usage

Widely used in Fine Fragrance applications as brings warm, woody and amber notes but also very important in consumer fragrances.

Process

Composition

Well balanced association of ingredients, some of which are captives, blended together to create an inspiring specialty.

The composition may be a unique technical solution to create natural reconstitutions. They are the result of a close collaboration between dsm-firmenich perfumers.

Cashmere Musk

184300

The addition of Cashmere Musk significantly tempers the sharpness of the Dihydroestragole top note. It adds a balanced fullness when combined with other musks, enriching the overall blend. This ingredient also supports and enhances the vetiver in the base, ensuring a harmonious finish. Cashmere Musk brings volume and radiance to the entire composition.

For an eau de toilette for Men at 12%

00182P

With 5% of Cashmere musk 184300

Sylvamber™	500
Hedione HC®	150
Vetiver Haiti SFE	100
DPG	. 50
Sclareolate®	40
Coranol	25
Dihydroestragole RC	. 25
Ambrox® Super	. 20
Helvetolide®	. 10
Romandolide®	. 10
Doremox® 10%	. 5
Physeol	. 5
Plicatone 10%	. 5
Furaneol® 1%	2,5
Norlimbanol® Dextro	2,5
Cashmere Musk	50
	1000

For an eau de toilette for Women at 12%

00201C

With 5% of Cashmere musk 184300

•••	Sylvamber™	450
	Cedarwood Virginia USA EO Super	. 125
	Vetyrisia®	
	Coranol	
	Hedione® HC	. 50
	Cedrenol	. 25
	Habanolide®	. 20
	Vanilla Tahitensis SFE Abs 10%	. 20
	Damascenia 10%	. 12,5
	Doremox® 1%	. 12,5
	Pepper Sichuan SFE	. 12,5
	Labdanum Abs 10%	
	Cascalone®	. 7,5
	Clove BUD SFE	. 7,5
	Cypress Spain EO	. 7,5
	Sage Spain EO 10%	. 7,5
	Cinnamon Bark SFE	. 5
	Civettone	. 5
	Ginger SFE 10%	. 5
	Ylang EO	. 5
	Cardamom Guatemala EO	. 2,5
	Cistus Oil	. 2,5
	Cumin EO 10%	. 2,5
	Firsantol®	
	Osmanthus Abs	. 2,5
	Cashmere Musk	. 50
		1000

Ingredients created or manufactured by dsm-firmenich

In the «without» version, Cashmere musk is replaced by Dipropylene Glycol





Regulatory solutions

Preparing the palette for the future

As part of the European Green Deal implementation and its objectives to phase out chemicals with hazard classifications within the fragrance industry, we are faced with challenges by authorities directed at the ingredients used to create fragrances. As a consequence, through downstream regulation, more and more key ingredients may be banned or restricted in cosmetic and home care applications in the EU and countries with similar legislative structures from 2027.

We at dsm-firmenich are fueling anticipation and inspiring action with future forward solutions that have been designed to guarantee sustainable perfumery creation.





Clearwood® Prisma

970959

Biotechnology

CAS: 0005986-55-0

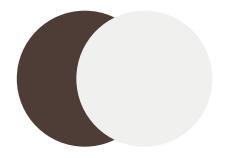
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Woody

Did you know?

Patchouli has historically been a material of choice for the Prisma technology.

With CLEARWOOD®, we enter a new dimension. Launched in 2014, it was the first ever White Biotech Ingredient to enter the perfumery industry.





After working for many years to improve the Prisma process, it is a real pleasure to be able to use that knowledge to welcome CLEARWOOD® to the Prisma family."

Christophe BRYOIS, Pilot Plant Manager



Olfactive description

CLEARWOOD® delivers all the rewards of modern ingredient design. Beaming with light, it offers the creamy warmth of amber and a dark woody character reminiscent of patchouli.

CLEARWOOD® PRISMA is a concentrated version of CLEARWOOD® offering an even more intense woody-patchouli character with enhanced oakmoss and ambery facets. It's 100% natutal (ISO 9235), 100% renewable and ready biodegradable.

Perfumery usage

CLEARWOOD® PRISMA is a truly inspiring ingredient made possible by the genius of science, and rendered unforgettable by the perfumers' intuition. More delicate and feminine, it blends particularly well with floral bouquets.

Process

Biotechnology

Biotech makes use of biochemical processes to solve problems and make useful products. It typically involves using microorganisms, like bacteria, algae, or fungi to manufacture these products through natural processes, such as fermentation.

Clearwood® Prisma

970959

Clearwood® Prisma, at low dosage, adds a sheer touch, harmonizing with a nuanced patchouli background. Compared to Clearwood® and Patchouli Indonesia, it reigns with sheer brilliance, keeping the citrusy sparkling notes and the spicy ones, while its counterparts, though voluminous, seem to veil the citrus and spice in their embrace. Clearwood® Prisma gives a new chypre-like vibe.

For an eau de toilette at 12%

00259AD

With 0.2% of Clearwood® Prisma 970959

	Hedione®	200
-	Bergamote	100
-	S	
-	Habanolide®	
	Sclareolate®	
	Hedione® HC	
	Phenylethyl Alcohol	
	Sylvamber™	50
	Heliopropanal	
	Salicynile®	30
	Dreamwood® Base	25
	Cyclomethylene Citronellol	20
	Benzyl Acetate	17,5
	Terpineol Normal	15
	Vetiver Haiti SFE	15
	Grapefruit Base	12,5
	Tamarine Base	12,5
	Ambrox® Super	10
	Cascalone®	10
	Dipropylene Glycol	8
	Jasminlactone	5
	Williams Ester	2,5
	Z11™ HD	2,5
	Osmanthus Abs	1
	Indocolore® @ 10% DPG	0,5
	Oakmoss Res Firbest 0.1% DPG	0,5
	Vanilla Planifolia Mada SFE	0,5
	Clearwood® Prisma	2
		1000

For an eau de toilette at 12%

00448F 00448H

with 0.1% of Clearwood® Prisma with 0.5% Clearwood® Prisma

	Hedione®	275	375
	Habanolide®		250
	Helvetolide®		125
	Sylvamber™		100
	Dreamwood® Base		25
	Muscenone® Delta		15
	Ambrox® Super		10
	Cedarwood Virginia USA EO Rect		10
	Elemi Philippines SFE P2F		10
	Iralia®		10
	Sclareolate®		10
	Cardamom Guatemala EO		7.5
-	Cistus Abs Vulcain	, -	7,5
	Polysantol®	, -	7,5
	Clove BUD SFE		2,5
	Cypriol EO Heart	, -	2,5
	Dihydroestragole RC		2.5
	Firsantol®	_ 2.5	2.5
	Ginger Clear SFE		2,5
	Olibanum SFE	_ 2,5	2,5
	Vanilla Bourbon SFE Abs	_ 2,5	2,5
	Z11™ HD	_ 2,5	2,5
	Tonka Bean Brazil Abs	_ 2	2
	Ylang EO	_ 2	2
	Cinnamon Bark SFE	_ 1	1
	Civette Synth	_ 1	1
	Rum SFE	_ 1	1
•	Damascenone	_ 0,5	0,5
•••	Clearwood® Prisma 10%	_ 10	
•	Clearwood® Prisma 50%	_	10
		1000	1000

Ingredients created or manufactured by dsm-firmenich Available demos with Patchouli and Clearwood®.



Biotechnology

a transformational science critical for a sustainable future

Biotechnology is one of the greenest technologies that exists today.

Conscious consumers are searching for positive and sustainable solutions. Biotechnology is answering these needs and providing the market with consistent product quality.

The olfactive profiles are extremely sharp, controlled and perfectly monitored.

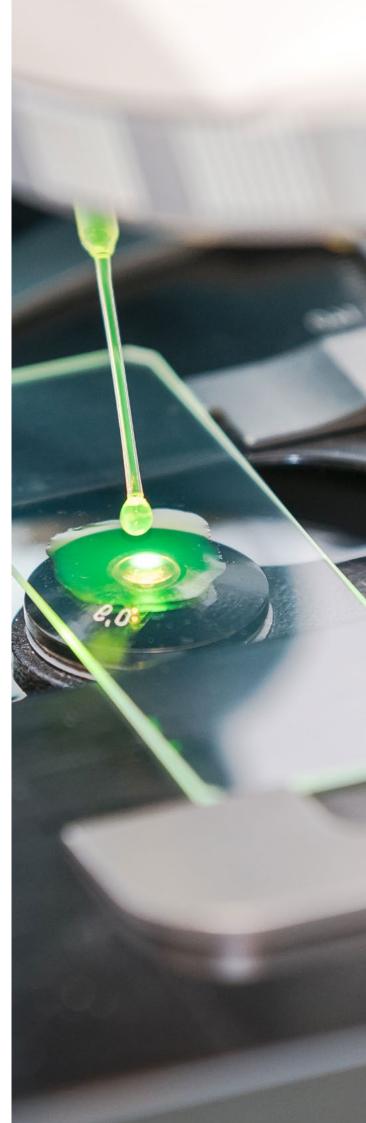


Renewable feedstock

Production of 100% carbon renewable ingredients

Supply reliability and price stability

Consistency in product quality



We bring progress to life