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UNVEILING THE SHARING INNOVATION COLLECTION 2023

This year's launch comprises six natural and synthetic ingredients that have each been carefully selected by our experts to bring sustainable and regulatory solutions to fragrance formulas worldwide.

Introducing Upcycled **CARDAMOM GREEN POD GUATEMALA SFE** created from Firmenich's Supercritical Fluid Extraction (SFE) and **AMBRETTE FIRABS**, a unique signature and accessible substitute for Ambrette Absolute that has just been released to the public. This selection underlines Firmenich's longstanding partnership with NELIXIA, the number one producer of Cardamom in the world offering 100% traceable products.

LILYFLORE® and the previously captive **MIMOSAL™**, both key players in the floral fragrance market, delight perfumer palettes with their versatile and modern muguet facets. The powerful and complex **DOREMIX®** is a great replacer of Rose Oxide while the captivating ylang-ylang quality of **CYCLOPIDENE** functions as a performing alternative to Methylparacresol.

Predominately biodegradable and scoring high on Green Chemistry, this collection highlights Firmenich's leadership and core strength in sustainability. From the richly spicy to delicately floral, Sharing Innovation 2023 offers new pathways to perfumer palettes for advanced and conscious creations.



DISCOVER OUR INGREDIENTS



@nelixia.ingredients



NATURALS COLLECTION

AMBRETTE FIRABS 908844

CARDAMOM GREEN POD GUATEMALA SFE 920370

SYNTHETICS COLLECTION

LILYFLORE® 955210

MIMOSAL™ 960100

DOREMOX® 939668

CYCLOPIDENE 937160





Naturals collection

AMBRETTE FIRABS

908844

MUSKY FLORAL

“I use Ambrette Firabs in my compositions for its richness and sophistication. The fresh floral top notes with pear hints evolve into powdery and iridescent notes with a slight musky and heartwarming scent. It differs from Ambrette absolute due to its more vertical, airy and fruity character.”

Fabrice PELLEGRIN, Principal Perfumer

FIRABS TECHNOLOGY

Firabs products are the result of a harmonious synergy between our perfumers, natural specialists, and our scientists. These ingredients come from a coextraction between naturals and synthetics, many of which are captives. The natural part will either be the named ingredient or a blend containing the named ingredient, and the synthetics part can be either a blend or a single molecule.

OLFACTIVE DESCRIPTION

Gourmand, musky, woody, ambery, and powdery.

Inspired by the original «natural and fresh» characteristics of the material (like a flower on its stem), Firabs ingredients bring olfactive memory and unique signature, and they are rich, contemporary and cost effective.

Ambrette Firabs behaves like natural Ambrette, imparting the natural feeling and evaporation profile to the formula.

PERFUMERY USAGE

Ambrette Firabs gives a clean effect but also provides richness and sophistication to compositions. Easy-to-use, it brings an incredible luxury signature to the fragrance and is an accessible substitute for Ambrette Absolute.



AMBRETTE FIRABS

908844

DID YOU KNOW ?

The natural part of this Ingredient is *Hibiscus abelmoschus* (Ambrette).

SOURCED FROM

Ecuador, Peru



TENACITY

Lasts 1 week on a
smelling strip






















FOR AN EAU DE TOILETTE AT 12%

209493

With 0,5% Ambrette Firabs

Ambrette Firabs gives an incredible luxury signature thanks to its fresh, mineral and iris notes. In addition, the ambery accord provides richness and sensuality to the entire composition.

	Hedione®	250
	Cedarwood Virginia EO Rect	100
	Habanolide®	80
	Lemon Italy Decol	60
	Clearwood®	50
	Coranol	50
	Dihydromyrcenol	50
	Helvetolide®	50
	Sclareolate®	50
	Sylvamber	50
	Triethylcitrate	25
	Bergamot Incol	20
	Coumarin	20
	Norlimbanol® Dextro	20
	Phenylhexanol	20
	Ambrox® Super	10
	Firsantol®	10
	Lavender Diva Pays EO	10
	Petitgrain EO	10
	Physeol	10
	Rhubofix®	10
	Vanilla Planifolia Mada Infu P2F	10
	Z11™ 10 DIPG	10
	Star Anise EO	5
	Vetiver Haiti EO	5
	Vetyrisia®	5
	Calone®	2
	Mousse Cristal	2
	Tonka Bean Brazil ABS	1
	Ambrette Firabs	5

1000

In the «without» version, Ambrette Firabs is replaced by Triethylcitrate.

Ingredients created or manufactured by Firmenich 



@nelixia.ingredients

Firmenich

CARDAMOM GREEN POD

GUATEMALA SFE 920370

CAS : 0008000-66-6
FEMA NUMBER : 2241



UPCYCLING

UPCYCLING*
To avoid waste, we purchase "rejected" seeds not suitable for sale at the spice market. These pods remain just as interesting for their olfactive qualities.

SPICY

“Cardamom SFE is widely used in formulations for its very fresh aromatic, clean and vibrant top notes of eucalyptus that evolve into a deeper spicy tone with hints of floral and herbal tea-like facets. This complexity gives a lot of personality to compositions, and a sweeter and spicier profile, extra rich and enveloping.”
Cyril MESTRE, Technical Perfumer



SUPERCritical FLUID EXTRACTION
An advanced and sustainable extraction technology, safe for workers and the environment. Solvent-free and zero water used makes SFE a highly clean and efficient method.

OLFACTIVE DESCRIPTION

Clean, pure and easy-to-use profile. It is a radiant top note, original, green, herbal, aromatic but also fresh and spicy.

PERFUMERY USAGE

A true to nature ingredient thanks to the Supercritical Fluid Extraction method used, Cardamom Green Pod Guatemala SFE imparts fresh, spicy, and woody notes. It also prolongs the long-lasting fragrance experience.



CARDAMOM GREEN POD GUATEMALA SFE

920370

DID YOU KNOW ?

Guatemala is the biggest producer of cardamom in the world and offers the highest quality beans. Communities are at the heart of crop production, as more than 350,000 Guatemalan families cultivate this spice.

Firmenich’s partner at source, NELIXIA, purchases and distills entire crops. They are dedicated to sustainable production, offering 100% traceable products, supporting communities at source and actively tackling environment challenges.

SOURCED FROM

Guatemala



TENACITY

➞ Lasts 1 day on a smelling strip

FOR AN EAU DE TOILETTE AT 12% 209492

With 0,5% Cardamom Green Pod Guatemala SFE

This Cardamom imparts fresh, vibrating, and aromatic notes. It fills the composition with a sophisticated floral rosy note and intensifies the vanilla and powdery notes that subtly feminizes the composition.

 Hedione®	250
Triethylcitrate	145
 Dartanol®	110
Ethylene Brassylate	100
 Cedarwood Virginia EO Super	100
 Sylvamber	100
 Polysantol®	40
 Helvetolide®	30
 Matsunol	30
Ethyl Vanillin	20
 Rose Wardia®	20
Amyris EO MD	10
 Benzoin Siam RES 50 TEC	10
 Dreamwood® Base	10
 Muguissimo®	10
 Ambrox® Super	5
 Pink Pepper SFE	2
 Tonka Bean Brazil ABS	2
 Vanilla Tahitensis SFE TEC	1
 Cardamom Green Pod Guatemala SFE	5
	1000

In the «without» version, Cardamom Green Pod Guatemala SFE is replaced by Triethylcitrate.

Ingredients created or manufactured by Firmenich 



NELIXIA

LEADING PARTNER FOR NATURALS IN LATIN AMERICA



Firmenich has worked with Nelixia, a member of our Naturals Together™ program, since their creation.

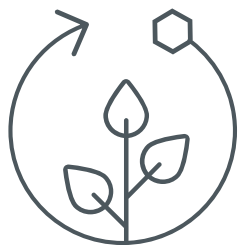
Nelixia's philosophy is to always produce in a sustainable way, offering 100% traceable products while respecting the producing communities and the environment. Nelixia actively supports the sustainable livelihoods of communities, working hand-in-hand with small-holder farmers and NGOs at source. Their oils are carbon neutral, they operate with renewable energy, and Nelixia is the world leader of Cardamom oil, Peru balsam and Styrax extracts.

Through Nelixia, Firmenich has reached total traceability from farmers to final product, created community empowerment, through the creation of new local jobs, and finalized a stable production chain thanks to long-term partnerships and commitment to high volumes.

@nelixia.ingredients



FIRMENICH'S UPCYCLING DEFINITION



UPCYCLING

Firmenich classifies an ingredient as “upcycled” when it is obtained by valorizing:

LEFTOVERS FROM RAW MATERIALS

Leftover part of something is the part that has not been used or eaten when the other parts have been

BY-PRODUCTS OR WASTE

Issued from transformation processes from the Fragrance & Flavors industry, food or other industries

PLASTIC WASTE

Upcycled into high-value chemicals

UPCYCLED MATERIAL CAN COME FROM:

Natural, renewable or synthetic origins

Firmenich’s calculation is done based on Carbon Atoms, in analogy to the RC Calculation.

$$\%UPCYCLING = \frac{\text{Number of carbon atoms from upcycled sources in the finished product}}{\text{Number of carbon atoms in the finished product}}$$



Synthetics collection

In a world of constant evolution, the fragrance industry is subject to a rapidly changing regulatory environment including the development of the European Green Deal and its downstream impacts on consumer product regulations. Faced with the potential disappearance of important ingredients, used in the creation of fragrances, we strive to identify new alternatives to meet the needs of our perfumers and clients, optimizing the products of the future.

LILYFLORE®

955210

CAS : 0285977-85-7

REACH NUMBER : 01-0000018289-60

ECOINGREDIENT COMPASS™

GREEN SCORE  50-70%

FLORAL MUGUET

“Lilyflore® is a an amazing muguet note. It smells much stronger in application and in a perfume than on the blotter. It is easy to use and has great volume.”

Haresh TOTLANI, Master Perfumer

OLFACTIVE DESCRIPTION

Lilyflore® is a beautiful muguet note. With excessive volume, it is designed to surprise as a delicate white floral, muguet bouquet.

PERFUMERY USAGE

This ingredient brings incredible volume and structure to fragrances. Although it appears light on the blotter, it is very performant in compositions and leaves room for incredible strength. Its beamingly pure performance acts as a moist fresh note. Non sensitizing and extremely stable, the dynamics of its profile offer, in all applications, endless sources of creativity.



LILYFLORE®
955210

TENACITY

Lasts 1 month on a
smelling strip



APPLICATIONS

RECOMMENDED APPLICATIONS	STABILITY	SUBSTANTIVITY & REMARKS			
Fine Fragrances	●●●●	Top, Heart and Base Note			
Shampoo	●●●	Wet	●●●	Dry	●●●
Shower Gel	●●●	Bloom	●●●		
Soap	●●●●	Foam	●●●	Dry hand	●●●
Detergent	●●●●	Wet	●●●●	Dry	●●●●
Softener	●●●●	Wet	●●●●	Dry	●●●●
APC	●●●				
Candle	●●●	Cold wax	●●●	Burning	●●●

FOR AN EAU DE TOILETTE AT 12%
209064
With 0,5% Lilyflore®

Lilyflore® simply brings out a beautiful white flower bouquet by enhancing muguet facets. It adds a fresh morning dew effect and a subtle rosy note.

Phenylethyl Alcohol	270
Benzyl Acetate	120
Citronellol	100
Fe Hedione®	95
Dipropylene Glycol	70
Fe Carbinol Muguet	50
Hydroxycitronellal	50
Citronellyl Acetate	40
Ethyl Linalol	40
Geraniol Pur	30
Jasmal	30
Phenylacetaldehydedimethylacetal	25
Bergamote CP Decol	15
CIS Jasmone	15
Fe CIS-3-Hexenol	15
Cyclosal	10
Ylang EO III	10
Undecalactone Gamma @10%	4
Styrallyl Acetate	2
Mousse Cristal @10%	2
Eugenol	1
Indol	1
Fe Lilyflore®	5
	1000

FOR A SHOWER GEL AT 1%
209062
With 0,5% Lilyflore®

Lilyflore® expands the Tiare (*Gardenia Tahitensis*) floral effect in this solar composition. With long lastingness and roundness, it gives a third dimension to this dreamy floral fragrance.

Benzyl Salicylate	300
Dipropylene Glycol	250
Benzyl Acetate	100
Fe Hedione®	100
Fe Habanolide®	50
Linalol	50
CIS-3-Hexenyl Salicylate	50
Phenylethyl Salicylate	50
Vanillin	20
Decalactone Gamma	10
Heliopropanal	10
Ylang EO III	5
Fe Lilyflore®	5
	1000

In the "Without" versions, Lilyflore® is replaced by DiPG.

Ingredients created or manufactured by Firmenich Fe

MIMOSAL™

960100

CAS : 1226911-69-8

REACH NUMBER : 01-2120749743-46

ECOINGREDIENT COMPASS™

BIODEGRADABILITY



ULTIMATELY

GREEN SCORE



50-70%

FLORAL MUGUET



The discovery of a pearl like Mimosal™ is the most exciting part of our job and motivates us to continue to search for more..."

Maud REITER, VP Discovery Chemistry & Development

OLFACTIVE DESCRIPTION

Intense green muguet aldehydic note with a soft anisic facet and fresh cyclamen undertones.

PERFUMERY USAGE

Mimosal™ is highly performing and offers an impressive long-lasting effect. It brings a fresh and soft muguet signature to floral accords.



MIMOSAL™

960100

TENACITY

Lasts 2 weeks on a
smelling strip



APPLICATIONS

RECOMMENDED APPLICATIONS	STABILITY	SUBSTANTIVITY & REMARKS			
Fine Fragrances	●●●●	Heart and Base Note			
Shampoo	●●●●	Wet	●●●	Dry	●●●
Shower Gel	●●●	Bloom	●●●		
Soap	●●●	Foam	●●●	Dry hand	●●●
Detergent	●●●	Wet	●●●	Dry	●
Softener	●●●●	Wet	●●●●	Dry	●●●
APC	●●				
Candle	●●●●	Cold wax	●●●●	Burning	●●●●



FOR AN EAU DE TOILETTE AT 12%

209489

With 0,5% Mimosal™

Mimosal™ intensifies the fragrance's powdery and mimosa note and provides an overall luxury effect.

Fr Hedione®	125
Fr Habanolide®	100
Hydroxycitronellal	100
Hexylcinnamic Aldehyde	90
Vanillin	90
Nonalactone Gamma	80
Benzyl Acetate Extra	60
Fr Anthamber	50
Benzyl Salicylate	50
Fr Coranol	40
Phenylethyl Alcohol Pure	30
Fr CIS-3-Hexenyl Salicylate	30
Phenylethyl Acetate	20
Methyl Anthranilate	20
Fr Salicynile®	20
Vertofix Cœur	20
Ylang EO III	20
Anisyl Acetate	10
Cedarwood Virginia EO	10
Fr Cetalox®	10
Undecalactone Gamma	10
Fr Jasmolactone Delta @10%	5
Ethyl Methylphenylglycidate	5
Fr Mimosal™	5
	1000

FOR A SHOWER GEL AT 1%

209488

With 0,5% Mimosal™

Mimosal™ amazingly boosts the composition. With a fresh, clean and dynamic wave, it gives a soft petal-like and watery fruity touch.

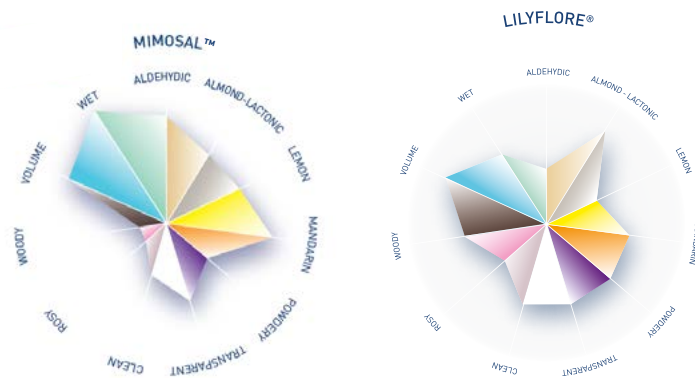
Fr Hedione®	115
Phenoxyethyl Isobutyrate	110
Benzyl Acetate	100
Phenylethyl Alcohol	100
Benzyl Propionate	100
Ethyl Vanillin	60
Amyl Salicylate	60
CIS-3-Hexenyl Salicylate	60
Methylnaphthylkeyone Crist	50
Fr Prunella®	50
Terpineol Alpha Nat	50
Tetralinol Pur	50
Cyclosal	30
Nonalactone Gamma	20
Undecalactone Gamma	20
Fr Firsantol®	10
Ylang EO III	10
Fr Mimosal™	5
	1000

In the "Without" versions, Mimosal™ is replaced by
Triethylcitrate.

Ingredients created or manufactured by Firmenich Fr

PART OF THE FIRMENICH BEYOND MUGUET COLLECTION

To portray the olfactive profile of each lily-of-the-valley type molecule, we have defined 11 criteria that transform into artistic visual olfactive representation.
The result is amazing, you can see what you smell!



BEYOND MUGUET

MIMOSAL™ and LILYFLORE® are both impacting florals part of the BEYOND MUGUET collection, Firmenich’s portfolio of original and performing muguet ingredients.

BEYOND MUGUET is an unrivalled collection of fresh and transparent floral notes. Alive with a thousand sensations, this explorative work embodies a brand-new creative approach to develop universal floral lily-of-the-valley type notes.

Some of the other inspiring compositions and ingredients include HIVERNAL® NEO, MAYOL®, FLOROL®, and MUGUIS-SIMO®.

This groundbreaking program continuously empowers ingredient launches and formulations, designed by the genius of our scientists and sublimated by the talent of perfumers.

DOREMOX®

939668

CAS : 0149713-23-5

REACH NUMBER : 01-2120060872-55

ECOINGREDIENT COMPASS™

BIODEGRADABILITY  PARTIALLY

GREEN SCORE  70-100%

FLORAL GREEN

“Doremox® brings a very natural “essential oil” like facet to rose and geranium accords. It has the power to enhance the performance of any fragrance.”

François-Raphaël BALESTRA, Master Perfumer & Director New Ingredients Discovery

“Doremox® is a great alternative to Rose Oxide, giving exceptional bloom and signature to any floral-fruity composition. Blended with Hedione® HC, Doremox® enhances the naturality of green tea accords.”

Vladimir LARDIN, Perfumer

OLFACTIVE DESCRIPTION

Rose, geranium and green note reminiscent of Rose Oxide. Powerful and performant, it is more complex than Rose Oxide and more refined than Diphenyl Oxide.

PERFUMERY USAGE

Doremox® combines well with many floral perfumes as well as with aromatic, herbal, citrus and fruity notes. It can be used as Rose Oxide enhancer or substitute. It gives fresh diffusive effects when used at levels around 1%.



DOREMOX®

939668

APPLICATIONS

RECOMMENDED APPLICATIONS	STABILITY	SUBSTANTIVITY & REMARKS			
Fine Fragrances	●●●●	Top Note			
Shampoo	●●●●	Wet	●●●●	Dry	●●●●
Shower Gel	●●●	Bloom	●●●		
Soap	●●●●	Foam	●●●●	Dry hand	●●●●
Detergent	●●●●	Wet	●●●	Dry	●●●
Softener	●●●●	Wet	●●●●	Dry	●●●●
APC	●●				
Candle	●●●	Cold wax	●●●	Burning	●●

TENACITY

Lasts 2 days on a
smelling strip



FOR A SHAMPOO AT 1%

209490
With 0,5% Doremox®

Doremox® brings naturalness, magnifying head notes with a subtle dewy effect, while adding a watery and fruity tonality. It intensifies the overall composition.

Dipropylene Glycol	342
Geranyl Acetate Extra	250
Citronellyl Acetate	180
Fe Habanolide®	150
Florol	20
CIS-3-Hexenyl Acetate	12
Applinate	10
Linalol	10
Fe Trivertal	7
Fe Damasconone	4
Vanillin	4
Fe Romascone @10%	3
Fe Damascone Delta	2
Fe Doremox®	6
	1000

In the "Without" version, Doremox® is replaced by DiPG.

Ingredients created or manufactured by Firmenich Fe



CYCLOPIDENE

937160

CAS : 0040203-73-4

REACH NUMBER : 01-2120065587-45

ECOINGREDIENT COMPASS™

BIODEGRADABILITY



READILY

GREEN SCORE



50-70%

FLORAL WHITE FLOWER

“Cyclopide blends exceptionally well with natural tuberose and adds addictive creaminess to any vanilla composition.”
Vladimir LARDIN, Perfumer

“Although it is a single molecule, Cyclopide provides the complexity of an accord. It is an easy solution to bring a natural ylang-ylang signature to fragrances.”
François-Raphaël BALESTRA, Master Perfumer & Director New Ingredients Discovery

“Cyclopide is an ingredient with a powerful Ylang-Ylang note. It contains the medicinal part of Methyl Benzoate and some of the animalic parts of Methylparacresol, without having any of the regulatory limitations of these 2 ingredients. I also use it to replace Ylang-Ylang EO, at a 10x reduced level.”
Wessel-Jan KOS, Master Perfumer

OLFACTIVE DESCRIPTION

A powerful floral note reminiscent of ylang-ylang and tuberose.

PERFUMERY USAGE

Cyclopide gives diffusion and lift. It can be used as substitute or enhancer of Methylparacresol, Methyl Benzoate or Methyl Salicylate.



CYCLOPIDENE

937160

APPLICATIONS

RECOMMENDED APPLICATIONS	STABILITY	SUBSTANTIVITY & REMARKS			
Fine Fragrances	●●●●	Top and Heart Note			
Shampoo	●●●	Wet	●●●●	Dry	●●●●
Shower Gel	●●●	Bloom	●●●		
Soap	●●●	Foam	●●●●	Dry hand	●●
Detergent	●●●	Wet	●●●	Dry	●
Softener	●●●●	Wet	●●●●	Dry	●
APC	●●●				
Candle	●●●	Cold wax	●●	Burning	●●

TENACITY

Lasts 2 days on a smelling strip



FOR AN EAU DE TOILETTE AT 12% 209491

With 0,5% Cyclopidene

Cyclopidene boosts the sunny side of the fragrance. It provides incredible warmth to the floral accord, with ambery and solar notes. It also brings density and volume to the bottom notes and gives intensity to the overall fragrance.

	Hedione®	218
	Anthamber	200
	Coranol	90
	Dihydromyrcenol	90
	Exaltolide® Total	90
	Ethylvanilline	60
	Nonalactone Gamma	50
	Heliotropin	40
	Sclareolate®	40
	Cedarwood Virginia EO	28
	Anisaldehyde	20
	Dreamwood® Base	10
	Iralia® Total	10
	Mimosal™	10
	Mousse Cristal	10
	Muscenone® Delta	8
	Ambrox® Super	4
	Decalactone Delta	4
	Eugenol @10%	4
	Menthe Piperita EO Cascade @10%	4
	Irone Alpha	2
	Jasmolactone Delta	2
	Cascalone®	1
	Cyclopidene	5
		1000

In the "Without" version, Cyclopidene is replaced by Triethylcitrate.

Ingredients created or manufactured by Firmenich



BIODEGRADABILITY




Ingredients that are biodegradable:

- **Readily** ($\geq 60\%$ within 28 days AND from 10 to 60% within 10 days)
- **Ultimately** ($\geq 60\%$ within 60 days)
- **Partially** (20 to 60% within 60 days)

GREEN CHEMISTRY PRINCIPLE 10.

Biodegradation is assessed in lab tests following OECD guidelines.

Diluted ingredient: value of the pure ingredient.

-  Readily biodegradable
-  Ultimately biodegradable
-  Partially biodegradable

GREEN SCORE

Green Chemistry is an approach to chemistry designed to maximize efficiency and minimize hazardous effects on human health and the environment. Green Score is an algorithm with three parameters, leveraging Green Chemistry principles:

- **Atom economy (Molecules) / Yield (Naturals)**

GREEN CHEMISTRY PRINCIPLE 2, 8.

- **Hazardous reagents**



GREEN CHEMISTRY PRINCIPLE 3, 4, 5, 12.

- **Catalysis (Molecules) / Energy Consumption (Naturals)**

GREEN CHEMISTRY PRINCIPLE 6, 9.

Methodology: Firmenich calculation.

Diluted ingredient: value of pure ingredient.

-  $>70\%$ Green Score
-  50-70% Green Score



RENEWABLE CARBON

Ingredients that **contain more than 50% carbon from renewable sources.**

GREEN CHEMISTRY PRINCIPLE 7.

ISO 16128

Diluted ingredient: value of the dilution.

-  100% RC
-  $>50\%$ RC

ECOINGREDIENT COMPASS™





STAY TUNED
www.firmenich.com/ingredients

