



Firmenich
for good, naturally

S U M M A R Y



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The **SHARING INNOVATION** collection is designed by **FIRMENICH** every year to share carefully selected signature ingredients with the perfumers of the world, to promote creativity and enhance perfumery culture. This year, we are releasing two of our most renowned captives to add their uniqueness to every perfumer's palette, as well as a new natural specialty featuring our latest breakthrough, white biotechnology captive innovation.

In addition to these captives, the collection unveils our savoir-faire in naturals and high-quality extraction technologies, through Supercritical Fluid Extraction translations into true-to-nature ingredients.

Lastly, we are proud to launch our EcoIngredient Compass, a program that evaluates the green chemistry principles of the ingredients in our portfolio.



CONTRIBUTORS



We want to thank every Firmenich team member who supported the development of this year's Sharing Innovation, especially: Cyril Mestre, for his beautiful olfactive creations.

François-Raphaël Balestra, Fabrice Pellegrin, Adlen Moumen, Gabriela Chelariu, Ane Ayo, Wessel-Jan Kos and Albane Furet for their inspiring insights and help with our olfactive descriptions.

CASCALONE®

920000

CAS : 0950919-28-5

ECOINGREDIENT COMPASS

GREEN CHEMISTRY SCORE  50% - 70%

WATERY

"Cascalone® is like a mountain waterfall: pure, refreshing and powerful!"

François-Raphaël Balestra

"Cascalone® is the perfect ingredient to mimic the true aquatic universe. Its waxy impact gives a mouth feel perception with a coating effect. The strength of Cascalone® combined with the freshness of Calone® is the best balance iode and aldehyde for marine fragrances."

Albane Furet

"First time I smelled Cascalone®, it conjured up instantly a memory: hiking the Seven Sacred Pools of Oheo on the island of Maui. Cascalone® creates the feeling of being surrounded by waterfalls in lush and pristine settings like Hawaii. The distinct fresh water aspect of Cascalone® makes it quite unique by imparting dewiness, lushness, extreme freshness without the saltiness of typical marine notes. I have been using it since whenever I want to add a natural freshness to my creations."

Gabriela Chelariu

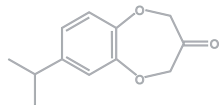
OLFACTIVE DESCRIPTION

CASCALONE® is a fresh, aquatic ingredient, with watery, fruity undertones. A sweet, watery version of Calone® with a transparent floral signature.

PERFUMERY USAGE

CASCALONE® is used to bring a natural and clean freshwater signature from top to base note.





**FOR A MEN EAU DE TOILETTE AT 10%
209424**

Renews the freshness of typical masculine scents. An oceanic allusion less iodized than Calone®, an ice invigorating effect.

Bergamot Abergapt	50
Fr Cardamom Guatemala EO	5
Fr Cedarwood Alaska EO	2
Fr Cedarwood Oil Rect	100
Fr Cetalox®	30
Citronellol BJ	10
Fr Clearwood®	70
Coumarin	10
Dihydromyrcenol Pure	100
Dipropylene Glycol	63
Fr Galbex®	2
Fr Ginger Nigeria SFE	2
Fr Habanolide®	50
Fr Hedione®	200
Iso E Super	200
Lavender Diva Pays EO	2
Lemon Oil Sfuma	40
Fr Norlimbanol® Dextro	5
Fr Oakmoss Res Firbest	2
Fr Pepper Sichuan SFE	2
Product AC	50
Fr Cascalone®	5
	1000

**FOR A WOMEN EAU DE TOILETTE AT 10%
209425**

Rejuvenates the top notes, brings a mineral fresh touch, and pushes any water fruit notes.

Anisaldehyde Special Redist	10
Benzyl Acetate Extra II	30
Benzyl Salicylate	160
Bergamote Incol DM	50
Fr Beyond Lilyflore®	20
Fr Cassis Base	2
Cis-3-Hexenyl Salicylate	20
Fr Coranol	60
Dipropylene Glycol	51
Geranyl Acetate Extra	5
Fr Hedione®	200
Heliotropin	5
Fr Helvetolide®	50
Hexyl Salicylate	50
Fr Honey Provence Firabs	1
Fr Jasmine Sambac India Abs	2
Nonalactone Gamma	20
Phenylethyl Alcohol Pure	120
Phenylethyl Salicylate	100
Fr Vanilla Planifolia Infusion	10
Vanillin Perf	30
Fr Cascalone®	4
	1000



STABILITY & PERFORMANCE

RECOMMENDED APPLICATIONS	STABILITY	CONCENTRATION AVG - MAX	SUBSTANTIVITY & REMARKS			
Fine Fragrances	●●●●	0,10% - 0,4%	Top, Heart and Base Note			
Shampoo	●●●	0,02% - 0,06%	Wet	●●●	Dry	●●●
Shower Gel	●●●	0,03% - 0,1%	Bloom	●●●		
Soap	●●●	0,02% - 0,07%	Foam	●●●	Dry hand	●●●
Detergent	●●●	0,02% - 0,06%	Wet	●●●	Dry	●●●●
Softener	●●●	0,05% - 0,09%	Wet	●●●	Dry	●●●●
APC	●●●	0,01% - 0,4%				
Candle	●●●	0,04% - 0,1%	Cold wax	●●●	Burning	●●●

TENACITY

Lasts 1 month on a smelling strip



In the without versions, CASCALONE® is replaced by DIPG

SALICYNILE®

981050

CAS: 0130786-09-3

ECOINGREDIENT COMPASS

BIODEGRADABILITY  PARTIALLY

GREEN CHEMISTRY SCORE  50% - 70%

FLORAL WHITE FLOWER

"I always use Salicynile® in functional fragrances as it never fails to deliver on its promises: strength, clean floralcy and stability."

François-Raphaël Balestra

"Salicynile® is like a concentrated salicylate note. I use 1% to replace about 10% of other salicylates. It has a solar feel in it and is much more stable than the traditional salicylates."

Wessel-Jan Kos

"In beauty care creations, Salicynile® blends particularly well in oriental vanillic perfumes where it brings fuller body with interesting jasmine and chocolate like nuances.

For home care creations, its chemical stability and good safety profile makes it a no-brainer, when it comes to substitute or sustain other salicylates."

Adlen Mouden

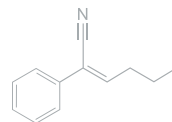
OLFACTIVE DESCRIPTION

The smell of a delicate bouquet of white flowers with fruity notes reminiscent of banana and pear. Nuances of solar flowers gives a sunny and radiant effect.

PERFUMERY USAGE

SALICYNILE® is used as a salicylate top note such as hexyl or amyl salicylate or as a versatile floral building block. It is much more stable than salicylates especially in Home Care applications and blends particularly well with all kind of floral or fougere accords.





**FOR A SHOWER GEL AT 1%
209423**

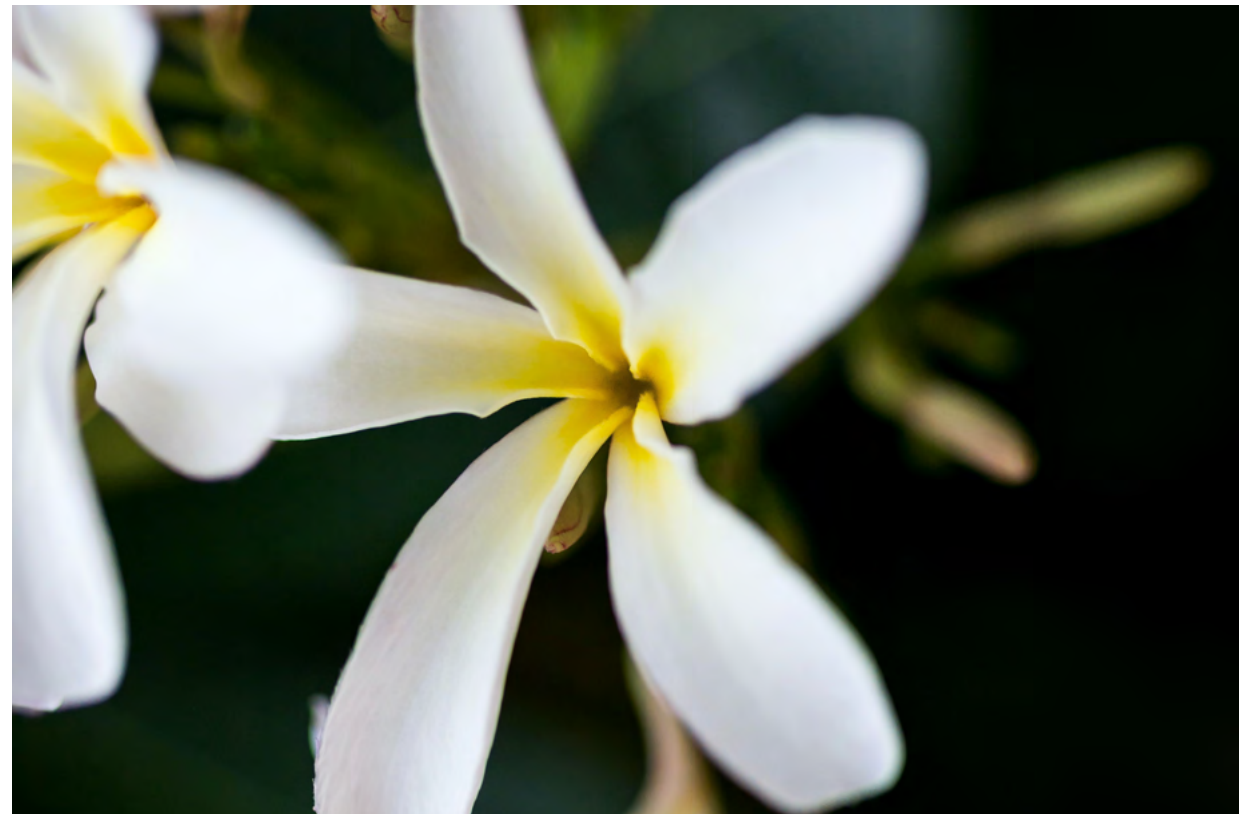
Adds a clean and fresh note, accentuates the fruity part and gives a smooth finish.

Fe Cascalone®	1
Fe Cedarwood Virginia EO	10
Citronellol BJ	29
Fe Coranol	33
Coumarin	1
Cypress EO	5
Fe Dartanol®	20
Dipropylene Glycol	182
Dorisyl	100
Eucalyptol	10
Fe Exaltolide® Total	50
Geraniol Pur	10
Fe Hedione®	300
Iso E Super	150
Juniper EO	2
Lemon Oil Sfuma	10
Fe Lorysia®	50
Nonalactone Gamma	1
Fe Sclareolate®	16
Fe Salicynile®	20
	1000

**FOR A LIQUID DETERGENT AT 1%
209406**

Nature is at the forefront of the fragrance : more crunchiness, juiciness and brightness. Also it enables to disguise the smell of home care bases.

Alcohol C 6 Purif	30
Amyl Propionate	5
Butyl Acetate	5
Fe Cis-3-Hexenol	20
Fe Damascenone	2
Dipropylene Glycol	343
Ethyl 2 Methylbutyrate	40
Ethyl Propionate	10
Fe Exaltolide® Total	50
Fe Fructalate®	10
Fe Hedione®	80
Hexyl Acetate	200
Hexyl Butyrate	10
Limonene 1 X Dist Fab	20
Fe Lorysia®	150
Trans 2 Hexenol	5
Fe Salicynile®	20
	1000



STABILITY & PERFORMANCE

RECOMMENDED APPLICATIONS	STABILITY	CONCENTRATION AVG - MAX	SUBSTANTIVITY & REMARKS		
Fine Fragrances	●●●●	traces - 0.4% - 2%	Top, Heart and Base Note		
Shampoo	●●●	0.01% - 1% - 3%	Wet	●●●●	Dry ●●●
Shower Gel	●●●	traces - 0.8% - 2%	Bloom	●●●	
Soap	●●●●	traces - 0.7% - 2%	Foam	●●●	Dry hand ●●●
Detergent	●●●●	0.01% - 1% - 6%	Wet	●●●	Dry ●●●
Softener	●●●●	traces - 0.8% - 2%	Wet	●●●●	Dry ●●●
APC	●●●	-			
Candle	●●●	-	Cold wax	●●●●	Burning ●●●●

TENACITY

Lasts 2 days on a smelling strip

In the without versions, SALICYNILE® is replaced by DIPG

SANDALWOOD OIL TYPE NAT

184268



DREAMWOOD™ BASE 184270, an alternative version that contains DREAMWOOD™. Sample on request.

WOODY SANDALWOOD

TENACITY

Lasts 1 month on a smelling strip



“Dreamwood™ adds an unexpected presence to the fragrance composition, bringing an aura of rich light, with the same codes we have in Mysore sandalwood essential oil. It’s an unbelievable asset for our palette. Thank you, white biotech!”

Fabrice Pellegrin

OLFACTIVE DESCRIPTION

SANDALWOOD OIL TYPE NAT takes its inspiration from the iconic Mysore Sandalwood, also known as the “royal tree” in the Mysore district of Karnataka, India.

A thousand sensations, among which soft creamy facets, warm and sweet balsamic notes. Its rich and dry woody undertones, slightly spiced-up, reminds us of the Indian treasure.

Created using DREAMWOOD™, our latest breakthrough white biotechnology captive ingredient, this natural specialty is designed for pure performance.

PERFUMERY USAGE

100% natural, it offers the rich effect of DREAMWOOD™, and delivers all the rewards of a modern ingredient.

Cost efficient, SANDALWOOD OIL TYPE NAT is an endless source of inspiration for fragrance compositions in all kinds of applications. A Firmenich captive ingredient, DREAMWOOD™ opens new creative territories and SANDALWOOD OIL TYPE NAT is one of the best examples.



SANDALWOOD OIL TYPE NAT

184268

FOR A MEN EAU DE TOILETTE AT 10%
209426

Strengthens the woody character of the fragrance, pushes oriental notes such as ambers and dry woods.

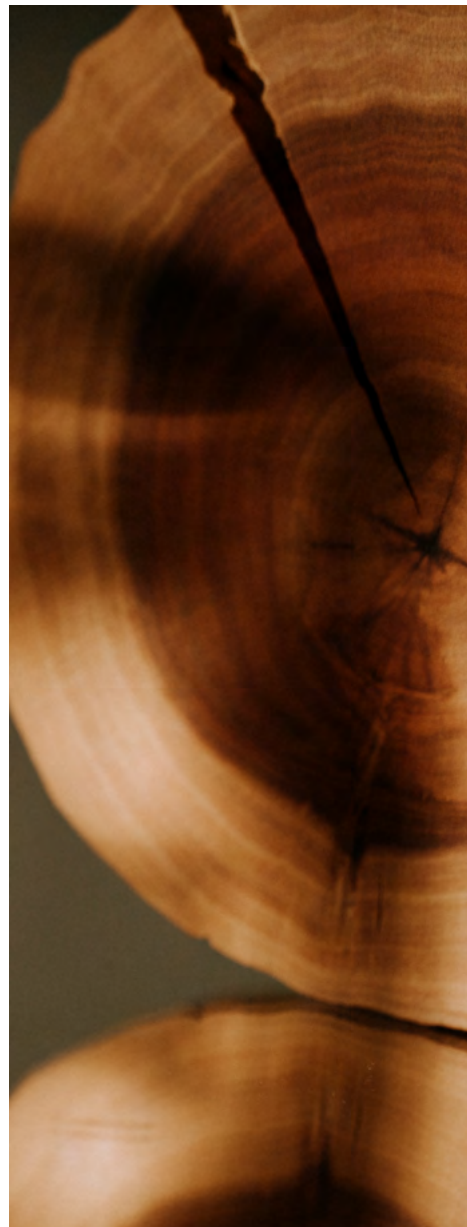
Fr Ambrox®	20
Fr Calone®	5
Fr Cardamom Guatemala EO	1
Fr Cedarwood Alaska EO	2
Fr Cedarwood Oil Rect	80
Citronellol BJ	20
Fr Clearwood®	150
Coumarin	10
Cypress EO	5
Dihydromyrcenol Pure	100
Dipropylene Glycol	84
Guaiacwood EO Rect	5
Fr Habanolide®	50
Fr Hedione®	155
Iso E Super	200
Lavender Diva Pays EO	10
Lemon Oil Sfuma	30
Mousse Cristal	5
Fr Neobutenone® Alpha	1
Fr Polysantol®	40
Styrallyl Acetate	5
Fr Tonka Bean Abs	2
Fr Vanilla Tahitensis Infusion	5
Fr Z11 via biotech	5
Fr Sandalwood Oil Type Nat	10
	1000

FOR A WOMEN EAU DE TOILETTE AT 10%
209427

Offers a mystical presence, warms up the composition and leaves a sophisticated and elegant touch.

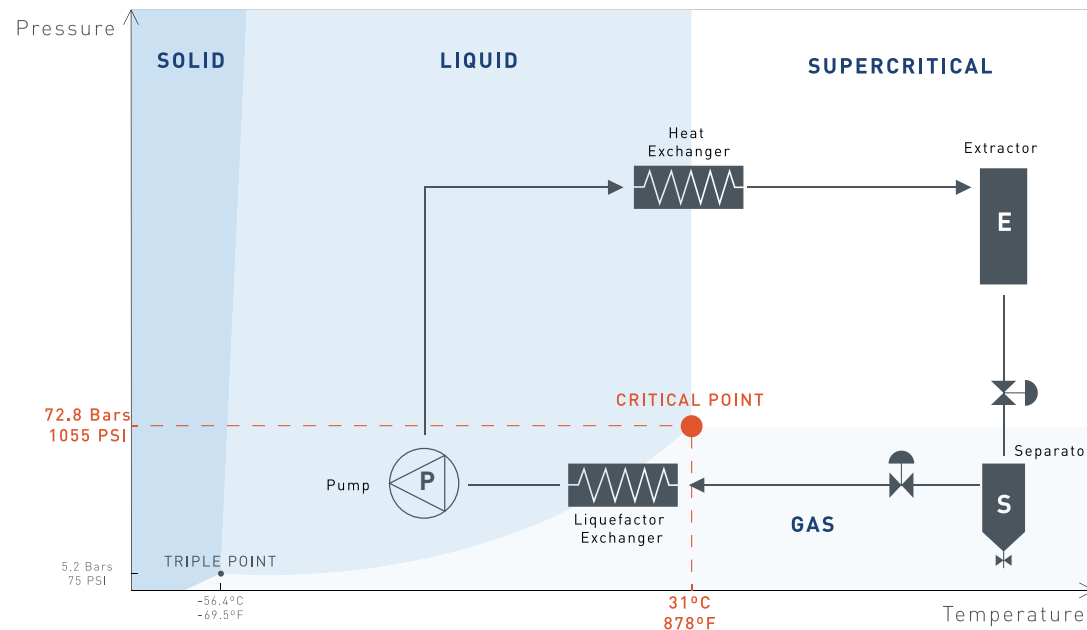
Ambrettolide	20
Fr Ambrox®	10
Benzyl Acetate Extra II	6
Benzyl Salicylate	100
Bergamot Dist White	40
Fr Beyond Lilyflore®	10
Fr Calone®	1
Fr Clearwood®	60
Corps Praline	1
Decalactone CP	2
Dipropylene Glycol	20
Fr Florol®	40
Fr Habanolide®	200
Fr Hedione®	250
Fr Helvetolide®	40
Mandarin Oil	20
Phenylethyl Phenylacetate	2
Fr Prunella®	60
Undecalactone Gamma	6
Vanillin Perf	80
Vetiveryl Acetate	6
Violette BC	6
Fr Wardia®	10
Fr Sandalwood Oil Type Nat	10
	1000

In the without versions, SANDALWOOD OIL TYPE NAT is replaced by DIPG



LEADER IN SUPERCRITICAL FLUID EXTRACTION

Clean, true-to-nature ingredients! Firmenich is the pioneer and leader in Supercritical Fluid Extraction (SFE), offering undisputed expertise and an unequalled range of exceptional SFE natural ingredients.



Firmenich, Pioneer & Leader in SFE

SFE is one of the most advanced, safe and sustainable extraction processes, based on CO2 properties in supercritical phase. Operated at ambient temperature, the process preserves the natural profile of the raw material and guarantees a clean, pure and high quality extract. The SFE extract delivers all the olfactive facets of the botanical ingredient and supports the story that the perfumer wants to convey with a rich, authentic realness.

The flexibility of the SFE process allows us to obtain a wide range of products with selected olfactive profiles, depending on the specificity of each raw material and the extraction conditions.

S F E
Supercritical Fluid Extraction

TEA JASMINE SFE

987004

CAS: 0068916-73-4

FLORAL GREEN

"It is a pleasant surprise to discover this product because it evokes memories of China. This ingredient is capable of expressing two opposites, Yin and Yang, through the freshness of green tea and the narcotic sensuality of jasmine petals. It brings richness, depth and naturalness through the vegetal side of tea leaves."

Fabrice Pellegrin

"The smell of TEA JASMINE SFE is close to the green tea in its natural environment. I use it to bring the texture of mate and herbaceous top notes to florals such as jasmine, mimosa or violet. It works extraordinary well in smoky and leathery compositions."

Ane Ayo

OLFACTIVE DESCRIPTION

Tea Jasmine SFE is a fresh floral green ingredient. The perfect balance between fresh green tea leaves and jasmine providing sweetness and softness. SFE process offers a clean multi-faceted profile, preserving the smell of the ingredients in their natural environment.

PERFUMERY USAGE

It blends harmoniously with citrus and sparkling notes, as well as with all types of woods, musks, and ambers. Tea Jasmine SFE can be used within feminine, genderless, or cologne-style scents.




TEA JASMINE SFE

987004

FOR A WOMEN EAU DE TOILETTE AT 10%
209429

Brings modernity and a new freshness, more herbal. A spring and bloomy embrace, and a crispier green tea accord. Also the fragrance gains in long-lastingness.

Anisaldehyde Special Redist	5
Bergamote Incol DM	30
 Beyond Lilyflore®	30
 Cedarwood Oil Rect	50
 Cis-3-Hexenol	2
Citronellol BJ	50
 Coranol	20
Coriander Seed EO	2
Coumarin	2
Dipropylene Glycol	25
 Firsantol®	20
 Florol®	150
Geraniol Pur	30
Geranyl Acetate Extra	30
 Habanolide®	70
 Hedione®	300
Heliotropin	10
 Helvetolide®	50
 Iralia®	20
Lemon Oil Sfuma	50
 Mate Abs	2
 Mimosa Tanneron Firabs	5
 Pepper Sichuan SFE	1
Petitgrain Italy EO	20
 Physeol	5
 Tonka Bean Abs	1
 Vanilla Tahitensis Infusion	10
 Tea Jasmine SFE	10
	1000

In the without version, TEA JASMINE SFE is replaced by DIPG



Sourcing Country: CHINA

CROP SEASON IN SOURCING COUNTRY

J F M A M J J A S O N D

TENACITY

Lasts 1 day
on a smelling strip



ELEMI SFE

939865

CAS: 0008023-89-0

SPICY

"If I had to define Elemi SFE in a few words, it would be electric, and bright. This ingredient is an interesting chameleon like ingredient because it fits in oriental perfumes as well as in florals. It allows other notes to stand out and to shine: citrus notes are more tenacious, the florals more crackling, the oriental, vanilla and amber notes are less heavy and less monochord."

Fabrice Pellegrin

"I love using it as a pepper to give a little sparkling effect to fragrances, and to accompany and stretch out the lemony undertone of incense top notes."

Ane Ayo

OLFACTIVE DESCRIPTION

Spicy, peppery, lemony. The fresh top note has a green facet while the bottom note evokes Frankincense and Pink peppercorn. SFE process offers a cleaner profile, more vertical than the essential oil, with longlastingness.

PERFUMERY USAGE

ELEMI SFE is used to add a fresh note to woody, spicy and zesty perfumes, mainly in masculine fragrances. The SFE process preserves all the facets and the natural profile identity to guarantee a high purity extract.



ELEMI SFE

939865

FOR A UNISEX EAU DE TOILETTE AT 10%
209428

Boosts cold spices, whilst adding fresh
and sparkling notes. Beautifies the
oriental accord with resinous balsamic
nuances in heart and base notes.

TENACITY

Lasts 1 days
on a smelling strip



AMBROX® SUPER	10
BENZOIN SIAM RES 40 DIPG	30
BERGAMOTE INCOL DM	10
CEDARWOOD OIL RECT	50
CLEARWOOD®	100
CORANOL	50
COUMARIN	20
DIPROPYLENE GLYCOL	48
ETHYL VANILLIN	40
HABANOLIDE®	100
HEDIONE®	250
IRALIA®	40
ISO E SUPER	100
LABDANUM ABS 50 DIPG	5
MANDARIN OIL SFUMA	10
OAKMOSS RES FIRBEST	2
PEPPER BLACK EO	5
ROMASCON	30
VANILLIN PERF	70
Z11 10 via biotech	20
ELEMI SFE	10
	1000

In the without version, ELEMI SFE is replaced by DIPG



Sourcing Country: PHILIPPINES

CROP SEASON IN SOURCING COUNTRY

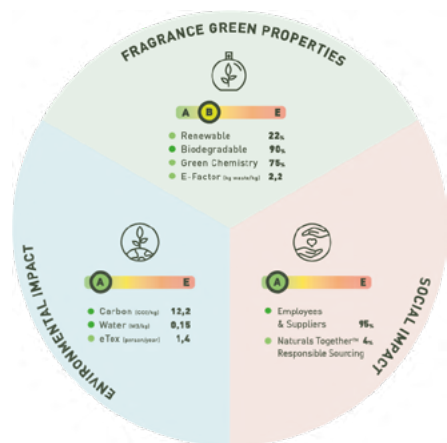
J F M A M J J A S O N D

ECOINGREDIENT COMPASS

Pioneering extraordinary ingredients sustainably is at the heart of our innovation approach. Positive impact is the cornerstone of how we apply science to imagine the future; transparency is our commitment.

Our **ECOINGREDIENT COMPASS** is designed to share the intrinsic values of Firmenich iconic molecule portfolio. Inspired by the **ECOSCENT COMPASS™**, it offers a clear evaluation of the green chemistry properties of our ingredients.

The **ECOINGREDIENT COMPASS** is to ingredients what **ECOSCENT COMPASS™** is to fragrance compositions.



ECOSCENT COMPASS

ECOINGREDIENT COMPASS



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%



> 50%



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



ULTIMATELY



PARTIALLY



GREEN CHEMISTRY SCORE:

A ratio that covers most of the remaining Green Chemistry Principles in addition to Renewable Carbon and Biodegradability.



>70%



50-70%

Regroups the measure of:

Carbon atom economy,

Green Chemistry principles 2 & 8

Importance of catalysis steps

Green Chemistry principles 9

Hazardousness, covering all aspects of manufacturing processes

Green Chemistry principles 3,4, 5 & 12

Developed by Firmenich.
Diluted ingredient: value of the pure ingredient.

DISCOVER OUR CATALOGUE FEATURING OUR ECO INGREDIENT COMPASS:
www.firmenich.com/ecoingredientcompass



STAY TUNED OR CONTACT US ON
www.firmenich.com/sharing-innovation

Firmenich
for good, naturally