

Firmenich



BEYOND MUGUET

INNOVATIVE CRAFTSMANSHIP IN FRAGRANCES AND FLAVORS SINCE 1895

A single name to present an **unrivalled** collection of fresh and transparent florals.

Alive with a thousand sensations, our “**Beyond Muguet**” explorative work embodies a **brand-new creative approach** to universal floral notes.

With its clean and crisp green character and highly unusual **cold effect**, the powerful HIVERNAL® NEO is the latest addition to our lineup of inspiring bestsellers, MAYOL®, FLOROL®, and LILYFLORE®.

This **groundbreaking** program also empowers our **most recent captive** ingredients, designed by the genius of **our scientists** and sublimated by **our perfumers’** talent.

**Firmenich**



*“The freshest product that exists but also the longest-lasting although freshness and long-lasting normally do not coexist.*

*A very monolithic and linear character.*

*Its modifying power is unequaled to bring a lot of brightness and a wet side to both feminine and masculine perfumes.”*

Harry Fremont, Perfumer

**For a Milky Shampoo at 1%**

	208982
Aldehyde Hexylcinnamic	80
Allyl Heptanoate	20
Ambrettolide	5
Benzyl Acetate	30
Fr Cassis Base	5
Cis-3-Hexenol 10%	20
Cis-3-Hexenyl Salicylate	10
Citronellol	35
Citronellyl Acetate 10%	25
Fr Damascenone Total 10%	25
Decalactone Gamma	10
Dihydromyrcenol	25
Dipropylene Glycol	8
Fr Florol®	100
Fr Galbex®	10
Geranyl Acetate	25
Fr Habanolide®	100
Fr Hedione®	150
Helional® (IFF)	30
Hexyl Acetate	5
Linalol	185
Fr Muscenone®	5
Phenoxyethyl Iso Butyrate	15
Phenylethyl Alcohol	30
Undecalactone Gamma	20
Zestover 10%	25
Fr Hivernal® Neo	2
Total	1000

A low level of HIVERNAL® NEO imparts green effect, naturality and lift to this fruity-floral accord.

In version B, HIVERNAL® NEO is replaced by DIPG.

**For an Eau de Toilette at 15%**

	209276
Fr Ambrox® Super	10
Fr Cardamom Guatemala EO	2
Fr Cedarwood Super Rect	100
Fr Cedroxyde®	30
Fr Clearwood®	190
Cyclosal	5
Fr Dartanol®	70
Dihydromyrcenol	30
Elemi EO	5
Ethyl Linalol	70
Fr Grapefruit Oil	10
Fr Hedione®	150
Fr Helvetolide®	30
Ionone Beta	10
Iso E Super® (IFF)	180
Lemon Oil Sfuma	30
Fr Muscenone®	6
Fr Norlimbanol®	50
Nutmeg Oil	3
Fr Rhubofix®	2
Triethylcitrate	11
Vetiver Haiti EO	5
Fr Hivernal® Neo	1
Total	1000

HIVERNAL® NEO brings freshness together with an incredible cold mineral effect to this spicy-aromatic accord.

In version B, HIVERNAL® NEO is replaced by TEC.

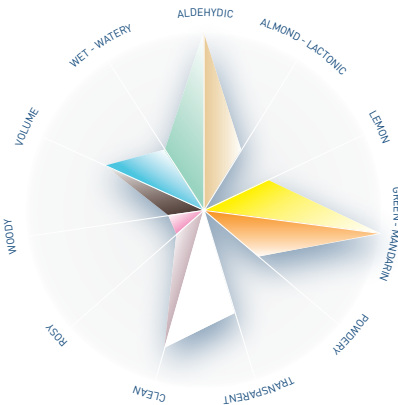
**For an Eau de Toilette at 15%**

	209331
Fr Ambrox® Super	25
Benzyl Acetate	7
Benzyl Salicylate	154
Bergamot Oil	47
Fr Cassis Base	11
Cis-3-Hexenyl Acetate	1
Citronellol	11
Crystal Moss 10% TEC	5
Fr Damascenone	1
Fr Florol®	95
Geraniol	11
Geranyl Acetate	10
Grapefruit Acetal	2,5
Fr Hedione® HC	221,8
Hydroxycitronellal	11
Indol	1
Iso E Super® (IFF)	140
Fr Jasmine Sambac Abs China 10% DIPG	5
Fr Jasmolactone	6
Linalol	70
Manzanate 10% TEC	2
Fr Mayol®	2,5
Methyl Anthranilate 10% DIPG	2,5
Fr Patchouli Heart SFE	14
Pear Ester	70
Phenyl Ethyl Alcohol	35
Fr Pink Pepper SFE	2,5
Triethylcitrate	6
Verdox™ (IFF)	20
Ylang Oil	1,2
Zestover 50% TEC	5
Fr Hivernal® Neo	4
Total	1000

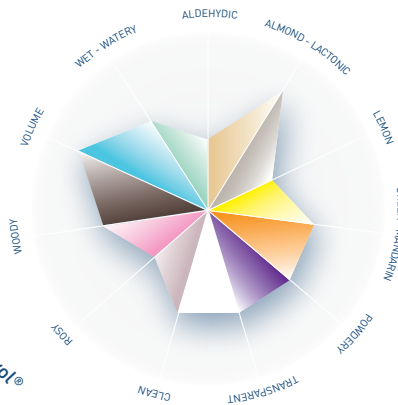
HIVERNAL® NEO boosts all the fresh facets of the accord: from pink pepper, to the floral heart. It also supports muguet notes, enhances naturality and brings a sparkling effect to the fruity notes.

In version B, HIVERNAL® NEO is replaced by TEC.

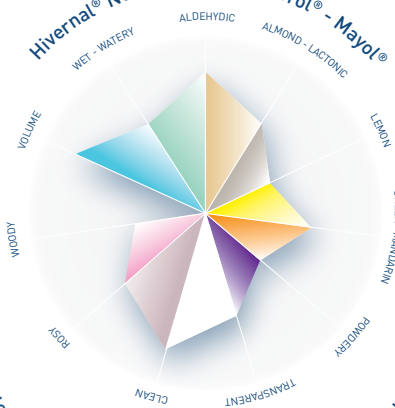
### HIVERNAL® NEO



### LILYFLORE®



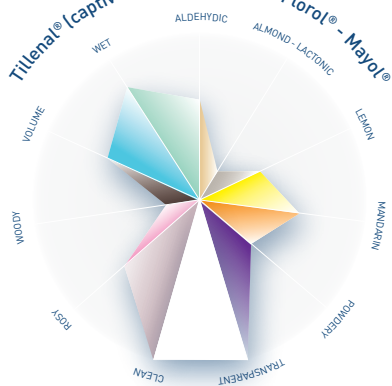
### BEYOND MUGUET I • Hivernal® Neo - Lilyflore® - Florot® - Mayol®



### BEYOND MUGUET II



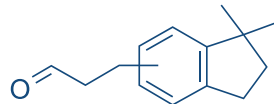
### BEYOND MUGUET III



\* BEYOND MUGUET I: Hivernal® Neo: 0.5% - Lilyflore®: 10% - Florot®: 70% - Mayol®: 15%

# HIVERNAL<sup>®</sup> NEO - 948605

FLORAL - MUGUET



## REFERENCES

<b>Firmenich Code</b>	948605
<b>CAS Number</b>	0300371-33-9
<b>Solvent</b>	None added
<b>Stabilizer</b>	0.2% of Tocopherol Alpha [E307]

## PHYSICO-CHEMICAL PROPERTIES

<b>Molecular weight</b>	202
<b>Flash Point</b>	>100°C
<b>Vapor Pressure</b>	-
<b>Log p (measured)</b>	3.44

RECOMMENDED APPLICATIONS	STABILITY	CONCENTRATION AVG - MAX	SUBSTANTIVITY & REMARKS		
<b>Fine Fragrance</b>	Excellent	0,03% - 0,5%	Top, heart and base note		
<b>Shampoo</b>	Good	0,09% - 0,5%	Wet: Excellent	Dry: Excellent	
<b>Shower Gel</b>	Good	0,04% - 0,2%	Bloom: Good		
<b>Soap</b>	Excellent	0,09% - 0,4%	Foam: Good	Dry hand: Good	
<b>Detergent</b>	Excellent	0,1% - 0,5%	Wet: Good	Dry: Good	
<b>Softener</b>	Excellent	0,2% - 0,6%	Wet: Excellent	Dry: Good	
<b>APC</b>	Good	0,06% - 0,2%			
<b>Candle</b>	Good	0,03% - 0,2%	Cold wax: Excellent	Burning: Good	

Tenacity: Lasts 3 weeks on a smelling strip.

Firmenich



OULD ASSAFI™

INNOVATIVE CRAFTSMANSHIP IN FRAGRANCES AND FLAVORS SINCE 1895



The region of Sylhet in Bangladesh, on the border with Assam, is the historical birthplace of Oud.

For several generations, our partner Jalali Agarwood has been **sustainably** extracting the finest *Aquilaria malaccensis* using **time-honored traditional** methods, supporting **social actions** and providing a **positive impact on the local community**.

Jalali Agarwood and Firmenich share the same vision of **responsibility**. Because they inherited thousands of mature trees, for every one cut down, Jalali Agarwood plants twenty that will be left untouched for the future generations.

*Aquilaria malaccensis* variety has been **first and newly registered by Firmenich** for use in Perfumery.



For an Eau de Toilette at 15%

	209310			
	B	C	D	E
Astrotone	230			
Cetalox®	120			
Cinnamon Ceylan EO	2			
Citronellol	20			
Clearwood®	50			
Cypriol Heart	50			
Damascenone	5			
Dartanol®	50			
Ethylvanillin	3			
Exaltolide®	50			
Geraniol	10			
Hedione®	40			
Iralia®	100			
Mint Piperita EO Cascade SX	2			
Olibanum Res 20% TEC	100			
Phenyl Ethyl Alcohol	40			
Raspberry Ketone	5			
Romandolide®	50			
Rose Centifolia Pays Abs 10%	2			
Rose Oxyde	2			
Rosinol	20			
Star Anise EO	2			
Wardia® BM	30			
<b>Oud Maleki</b>	-	<b>1</b>	-	-
<b>Oud Samrat</b>	-	-	<b>1</b>	-
<b>Oud Anokha</b>	-	-	-	<b>1</b>
Triethylcitrate	17	16	16	16
<b>Total</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>

A musky oud rose in which:

oud MALEKI magnifies powdery, musky and woody notes, reinforcing the rosy effect.

oud SAMRAT imparts complexity to ambery, woody-animalic facets with elegant natural oud long-lastingness.

oud ANOKHA brings richness to woody-animalic facets and an elegant natural oud long-lastingness.

In version C, TEC is replaced by oud MALEKI.

In version D, TEC is replaced by oud SAMRAT.

In version E, TEC is replaced by oud ANOKHA.

For an Eau de Toilette at 15%

	209308
Ambrox® Super	30
Benzoin Siam Res 50% DIPG	100
Cedarwood Super Rect	100
Cedroxyde®	30
Cinnamon Ceylan EO	5
Clearwood®	187
Hedione®	50
Helvetolide®	50
Iso E Super® (IFF)	200
Labdanum Abs 50% DIPG	50
Polysantol®	50
Triethylcitrate	8
Vanillin	20
Z11 MIP	100
<b>Oud Assafi™ 10% TEC</b>	<b>20</b>
<b>Total</b>	<b>1000</b>

oud ASSAFI™ magnifies the fragrance with richness and complexity. It elevates and boosts the spicy-woody notes of this oriental accord.

In version B, oud ASSAFI™ is replaced by TEC.

The most leathery and animalic oud profile, oud ASSAFI™ is elegantly woody and extremely ambery.

*“An exceptional quality of Oud, one of the finest and most precious natural ingredient. Its intensity majestically illuminates its animalic, woody and spicy facets.”*

Alberto Morillas, Master Perfumer







OULD ASSAFI™

969406

CAS Number: 0094350-09-1

Experience the magic in 3 captivating specialties designed with OUD ASSAFI™:

OULD MALEKI 283526

OULD SAMRAT 283527

OULD ANOKHA 283528



Firmenich



NORLIMBANOL® DEXTRO

INNOVATIVE CRAFTSMANSHIP IN FRAGRANCES AND FLAVORS SINCE 1895

Launched this year, this **key olfactive isomer** represented a true **creative breakthrough**.

Brimming with elegant **musky** notes, NORLIMBANOL® DEXTRO pairs the **creamy** warmth of **amber** with the traditional **iconic dry woody character** of NORLIMBANOL® family.

An inspiring addition to every perfumer's palette!

Firmenich

For a Shower gel at 1%

	209307
Aldehyde Hexylcinnamic	40
Fr Ambrox® Super 10%	10
Fr Benzoin Siam Res 50%	8
Cedarwood Oil Atlas	20
Fr Cedarwood Virginia EO	20
Citronellol	40
Fr Clearwood®	25
Fr Coranol	40
Crystal Moss	7
Fr Elemi EO	10
Fr Florol®	120
Grapefruit Acetal	15
Fr Hedione®	100
Hydroxycitronellal	15
Iso E Super® (IFF)	300
Lemon Oil Sfuma	10
Linalol	40
Orange Oil Brazil	25
Fr Rhubofix®	3
Fr Romandolide®	10
Fr Sclareolate®	110
Styralyl Acetate	10
Triethylcitrate	10
Fr Vetyrisia®	2
Fr <b>Norlimbanol® Dextro</b>	<b>10</b>
Total	<b>1000</b>

NORLIMBANOL® DEXTRO brings dry and fresh ambery effect to the citrus-woody notes.

In version B, NORLIMBANOL® DEXTRO is replaced by TEC.

For an Eau de Toilette at 15%

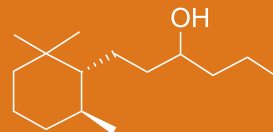
	209275
Fr Ambrox® Super	30
Fr Benzoin Siam Substitute	100
Bergamot EO	15
Black Pepper EO	5
Fr Cardamom Guatemala EO	5
Fr Cedarwood Alaska EO	3
Fr Cedarwood Super Rect	70
Cinnamon Ceylan EO	3
Fr Clearwood®	190
Fr Coranol	50
Coumarin	80
Fr Damascenone	3
Fr Fructalate®	5
Fr Hedione®	200
Hexyl Salicylate	30
Fr Iralia®	10
Fr Labdanum Abs 50%	10
Fr Muscone	5
Nutmeg EO	3
Fr Romandolide®	80
Fr Tonka Bean Abs	3
Triethylcitrate	40
Vanillin	30
Fr Z11 MIP	20
Fr <b>Norlimbanol® Dextro</b>	<b>10</b>
Total	<b>1000</b>

NORLIMBANOL® DEXTRO gives richness, power and volume to the top notes and spicy facets to the ambery drydown.

In version B, NORLIMBANOL® DEXTRO is replaced by TEC.

# NORLIMBANOL® DEXTRO - 967406

WOODY - AMBERY



## REFERENCES

<b>Firmenich Code</b>	967406
<b>CAS Number</b>	0070788-30-6
<b>Solvent</b>	None added
<b>Stabilizer</b>	None added

## PHYSICO-CHEMICAL PROPERTIES

<b>Molecular weight</b>	226
<b>Flash Point</b>	>100°C
<b>Vapor Pressure</b>	0.01 Pa at 20°C
<b>Log p (measured)</b>	5.52

RECOMMENDED APPLICATIONS	STABILITY	CONCENTRATION		SUBSTANTIVITY & REMARKS	
		AVG - MAX			
<b>Fine Fragrance</b>	Excellent	0,3% - 2%		Top, heart and base note	
<b>Shampoo</b>	Excellent	0,08% - 0,3%		Wet: Excellent	Dry: Good
<b>Shower Gel</b>	Excellent	0,3% - 1%		Bloom: Good	
<b>Soap</b>	Excellent	0,2% - 0,6%		Foam: Excellent	Dry hand: Good
<b>Detergent</b>	Excellent	0,1% - 0,8%		Wet: Excellent	Dry: Good
<b>Softener</b>	Excellent	0,3% - 1%		Wet: Excellent	Dry: Good
<b>APC</b>	Good	0,09% - 0,3%			
<b>Candle</b>	Excellent	0,6% - 3%		Cold wax: Excellent	Burning: Excellent

Tenacity: Lasts 2 weeks on a smelling strip.

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ROSE CENTIFOLIA PAYS ABS



INNOVATIVE CRAFTSMANSHIP IN FRAGRANCES AND FLAVORS SINCE 1895



Rose cultivation is an age-old tradition in the South of France. In Grasse, **Firmenich is among the largest purchasers** of Rose Centifolia, or Rose de Mai, one of the most treasured varieties.

In the 2000s Rose Centifolia was slowly disappearing from the Grasse landscape.

Firmenich played a central role in **the revival of Rose de Mai** in Grasse over the past five years. We are committed to keeping the **tradition of rose cultivation and extraction** alive through **long-term partnerships** with local farmers.

This ensures sustainable quantities and the ultimate quality of Rose Absolute for our creators and customers.



## ROSE CENTIFOLIA PAYS ABS 979686

Rare elixir, very sensual, deeply rich and floral, it evokes all the values of luxury.

ROSE CENTIFOLIA PAYS ABS imparts sensuality to the fragrance. It also brings a fresh, natural rosy note and improves the volume of the floral bouquet.

*“The rose that enchanted my childhood sublimates my perfumes today...”*

Fabrice Pellegrin, Perfumer

### For an Eau de Toilette at 15%

	209309
Ambror <sup>®</sup> Super	10
Carbinol Acetate DMB	50
Carbinol Muguet	20
Cedarwood Super Rect	80
Citronellol	40
Coranol	50
Damascenone	3
Florol <sup>®</sup>	100
Hedione <sup>®</sup> HC	60
Hexyl Salicylate	70
Hivernal <sup>®</sup> Neo	5
Hydroxycitronellal	20
Ionone Beta	30
Iso E Super <sup>®</sup> (IFFI)	100
Muscenone <sup>®</sup>	10
Osmanthus ABS 10%	10
Phenyl Ethyl Alcohol	70
Pink Pepper SFE	2
Polysantol <sup>®</sup>	50
Romandolide <sup>®</sup>	150
Rose Oxyde	10
Triethylcitrate	46
Undecalactone Gamma	10
<b>Rose Centifolia Pays ABS 10%</b>	<b>4</b>
<b>Total</b>	<b>1000</b>

ROSE CENTIFOLIA PAYS ABS imparts sensuality to the fragrance. It also brings a fresh, natural rosy note and improves the volume of the floral bouquet.

In version B, ROSE CENTIFOLIA PAYS ABS is replaced by TEC.





Hirnenich  
GRASSE

## HARVEST & PROCESS

Harvest takes place over 4–5 weeks in May. During the blooming season, flowers are handpicked early in the morning and brought daily in burlap bags to the Firmenich extraction site in Tourrettes (South of France).

The roses are extracted as soon as possible, ideally between one and two hours after harvest.



Firmenich



Z11 MIP  
Via White Biotech

INNOVATIVE CRAFTSMANSHIP IN FRAGRANCES AND FLAVORS SINCE 1895



Z11 is a molecule alive with a thousand sensations.

Its dryness, tenacity and sleek elegance call to mind a precious wood rimmed in shining metal... unforgiving in its strength and designed for **pure performance**.

Z11's true character emotionally empowers the signature of a perfume.

*"I remember smelling Z11 some years ago during trials for a formula which was to become one of my major successes.*

*I came across an extremely sensual, dry woody accord contrasting with a lemony apple top note, and my fragrance was born!*

*Today, I am pleased and proud to imagine that White Biotech secures a long and sustainable life to this unforgettable molecule."*

Olivier Cresp, Master Perfumer

#### 1960

Z11 was invented in the 60's  
The 11<sup>th</sup> molecule born out from Firmenich's works with Zurich university  
It opens a new line of woody ambery notes

#### 2014

First born from our White Biotech Platform, CLEARWOOD® is a breakthrough patchouli profile ingredient

#### 2016

First launch of AMBROX® SUPER via White Biotech – a new breakthrough in modern chemistry

This accord shows the astonishing effect of combining AMBROX® SUPER with Z11 10 MIP 10%.

The blending of half of AMBROX® SUPER with Z11 10 MIP 10% achieves equivalent performance while providing a significant cost saving.

In this accord, Z11 10 MIP 10% imparts powerful, rich and round ambery effect like AMBROX® SUPER can bring.

In version B, 0.5 % of Z11 10 MIP 10% replaces half of AMBROX® SUPER.

#### 2018

First launch of Z11 via White Biotech  
This new process combines the best of White Biotechnology and Green Chemistry, resulting in a renewable ingredient while ensuring stable quality, reliable supply and unlimited future availability.

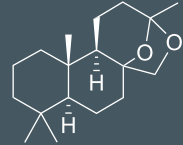
For an Eau de Toilette at 8%

		209344	
		B	
	Ambrettolide	6	
	Amyl Salicylate	7	
	Anethol	2	
FE	Calone® 10%	25	
FE	Clearwood®	5	
FE	Damascone Alpha 10%	7	
FE	Damascone Beta 10%	6	
	Dihydroionone Beta	3	
	Dihydromyrcenol	6	
	Ethylene Brassilate	30	
	Eugenol	5	
	Floralozone 10%	25	
FE	Florol®	6	
FE	Hedione®	380	
	Helional® (IFF)	23	
FE	Helvetolide®	10	
	Iso E Super (IFF)	190	
FE	Lemon Base	30	
FE	Lilyflore® 10%	5	
	Linalol	10	
	Linalyl Acetate	30	
	Methylnone Alpha	33	
FE	Norlimbanol®	30	
FE	Pink Pepper Eo	5	
	Safranal 10%	4	
	Dipropylene Glycol	107	107
FE	<b>Ambrox® Super</b>	<b>10</b>	<b>5</b>
FE	<b>Z11 10 MIP 10%</b>	<b>-</b>	<b>5</b>
	Total	1000	1000

Firmenich

# Z11 MIP Via White Biotech - 992964

WOODY - AMBERY



## REFERENCES

<b>Firmenich Code</b>	992964
<b>CAS Number (of the pure Ingredient)</b>	0057345-19-4
<b>Solvent</b>	90% MIP
<b>Stabilizer</b>	None added

## PHYSICO-CHEMICAL PROPERTIES

<b>Molecular weight</b>	-
<b>Flash Point</b>	>100°C
<b>Vapor Pressure</b>	-
<b>Log p (measured)</b>	4.59

RECOMMENDED APPLICATIONS	STABILITY	CONCENTRATION		SUBSTANTIVITY & REMARKS	
		AVG - MAX			
<b>Fine Fragrance</b>	Excellent	0,6% - 2%		Heart and base note	
<b>Shampoo</b>	Good	0,2% - 0,4%		Wet: Good	Dry: Fair
<b>Shower Gel</b>	Good	0,4% - 1%		Bloom: Good	
<b>Soap</b>	Good	0,3% - 0,8%		Foam: Good	Dry hand: Fair
<b>Detergent</b>	Excellent	0,02% - 0,06%		Wet: Excellent	Dry: Excellent
<b>Softener</b>	Excellent	0,07% - 0,3%		Wet: Excellent	Dry: Excellent
<b>APC</b>	Excellent	0,09% - 0,4%			
<b>Candle</b>	Excellent	0,6% - 2%		Cold wax: Excellent	Burning: Excellent

Tenacity: Lasts 1 month on a smelling strip.