Little Drop,
Big Effect
BASF
We create chemistry
Discover BASF
Aroma Ingredients
aroma-ingredients.basf.com

Little Drop, **Big Effect**

With just a touch of flavor or fragrance, an everyday item can be elevated to an extraordinary experience, captivating the senses and creating a memorable emotion. As one of the **world's leading manufacturers** of aroma ingredients, we strive to contribute to your success, both today and in the future. In everything we do, we ensure that each drop of our products is full of:

RELIABILITY

We are a trusted and reliable partner dedicated to providing you with outstanding service.

- Rely on our global production network comprising world-scale plants in Germany, Malaysia, and as of 2026 in China
- Benefit from our diversified production set-up combined with local warehouses and dedicated teams
- Trust the highest standards, maintained with continuous quality control and compliance measures as well as a broad range of certifications

SUSTAINABILITY

We are committed to creating fragrance and flavor ingredients that enable you to reach your sustainability goals.

- Gain transparency on the carbon footprints of our products and keep your CO_2 emissions from sourcing at bay with our sustainable offers
- Take the next step in reducing CO_2 emissions by switching from the conventional large volume fragrances to a reduced product carbon footprint version (rPCF)
- Reduce your impact on the environment with our products, all of which are biodegradable
- Increase the circularity share of your portfolio with our Biomass Balance products (BMBcert®)

RELIABILITY **SUSTAINABILITY**

INNOVATION

We innovate for the market, striving to create the ingredients of your future palette.

- Be curious and explore our new-to-the-world ingredients, developed with our exceptional strength in chemistry and our strong innovation partnerships
- Be creative with our fragrance ingredients that are safe by design and offer sustainability advantages, improved price performance ratios as well as unique olfactory profiles

INNOVATION

EXPERTISE

We deliver unmatched expertise and dedicated support to meet your needs, backed by years of experience and a diverse team of talented professionals from around the world.

- Be supported by our global network of experts in Product Stewardship, Research and Development, Engineering as well as Sustainability
- Trust us to continuously improve our portfolio even beyond legislative and regulatory compliance.
- Profit from unique state-of-the-art inhouse testing facilities

EXPERTISE

Count on us as your **robust partner for the future** – we are passionate about supporting you with innovative flavor and fragrance ingredients that meet the highest quality standards and helping you achieve your ambitious sustainability targets. We combine our scientific strength and excellent regulatory expertise with a global production and supply network. Explore our product portfolio that empowers you to create outstanding aroma compositions in a variety of applications.

A drop full of **Rose**

The timeless essence of emotions.

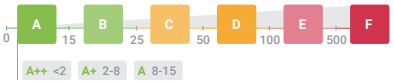
Choose from a variety of high-quality aroma ingredients ranging from warm rose to fruity and herbal notes. Create unique and precious blends with this universally beloved scent.

ROSE

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFICATION[1]	APPEARANCE	FRAGRANCE (Odor profile)	FLAVOR (Taste profile)	FOOD	KOSHER	HALAL	PCF[2]	OPTIONS	BIODEGRADABILTY
Citronellol		6-Octen-1-ol, 3,7-dimethyl-	106-22-9	203-375-0	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Floral-rosy, fresh, slightly citrus	Floral-rosy, fresh, slightly citrus	FSSC	•	•	A	rPCF, BMBcert®	Inherent, ultimately biodegradable
Citronellyl Acetate		3,7-Dimethyloct-6-en-1-yl acetate	150-84-5	205-775-0	Skin Irrit. 2 Aquatic Chronic 2	Clear colorless liquid	Floral-rosy, fruity, slightly citrus	Intensively fruity, floral-rosy, slightly citrus	FSSC	•	•	A	rPCF	Inherent, ultimately biodegradable
Dihydrorosan®		Tetrahydro-2-iso-butyl-4-methyl-2H-pyran	13477-62-8	236-770-1	Skin Irrit. 2 Aquatic Chronic 3	Clear colorless liquid	Mild, rosy, floral and herbal top note			•	•	B		Inherent, ultimately biodegradable
Geraniol Extra		2,6-Octadien-1-ol, 3,7-dimethyl-, (E)	106-24-1	203-377-1	Skin Sens. 1 Eye Dam. 1 Skin Irrit. 2	Clear colorless liquid	Floral, deep warm rose note	Floral, rose-like, sweet	FSSC	•	•	A+	rPCF, BMBcert®	Inherent, ultimately biodegradable
Geraniol 60		Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-	mixed isomers (106-24-1; 106-25-2)		Skin Sens. 1B Eye Dam. 1 Skin Irrit. 2	Clear colorless liquid	Floral, fresh, rose note	Floral-rosy, sweet	FSSC	•	•	A+	rPCF, BMBcert®	Inherent, ultimately biodegradable
Geranyl Acetate Extra		2,6-Octadien-1-ol, 3,7-dimethyl-, acetate, (E)-	105-87-3	203-341-5	Skin Sens. 1 Skin Irrit. 2 Aquatic Chronic 3	Clear colorless liquid	Fruity-floral, rose, slightly sweet, unique floral freshness	Sweet fruity, floral-rosy	FSSC	•	•	A	rPCF	Inherent, ultimately biodegradable
Geranyl Acetate 60		Reaction mass of geranyl acetate and neryl acetate	mixed Isomers (105-87-3; 141-12-8)		Skin Sens. 1 Skin Irrit. 2 Aquatic Chronic 3	Clear colorless to yellowish liquid	Sweet fruity-floral, rose, fresh	Sweet fruity, floral-rosy, slightly green	FSSC	•	•	A		Inherent, ultimately biodegradable
Nerol		2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)	106-25-2	203-378-7	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Fresh, floral, rose, citrus, slightly sweet and green	Floral, rose, green and sweet	FSSC	•	•	A		Inherent, ultimately biodegradable
Rose Oxide 70		Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	16409-43-1	240-457-5	Eye Irrit. 2 Skin Irrit. 2 Repr. 2 (H361f)	Clear colorless liquid	Vibrating, rich rose note, metallic			•	•	B		Inherent, ultimately biodegradable
Rose Oxide 90		Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	16409-43-1	240-457-5	Eye Irrit. 2 Skin Irrit. 2 Repr. 2 (H361f)	Clear colorless liquid	Vibrating, rich rose note, metallic			•	•	C	rPCF	Inherent, ultimately biodegradable
Tetrahydro-geraniol		3,7-Dimethy-loctan-1-ol	106-21-8	203-374-5	Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Fresh, reminiscent of rose with a mild waxy background, slightly citrus	Floral, rosy, slightly citrus	FSSC	•	•	A++	rPCF	Inherent, ultimately biodegradable

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)

[2] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:



rPCF
Products with reduced Product Carbon Footprint

BMBcert®
Biomass Balance certified products

Inherent, ultimately biodegradable

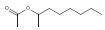
Readily biodegradable

A drop full of **Citrus**

Feel the energy of refreshing citrus.

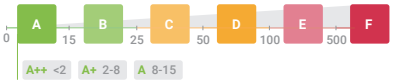
Achieve captivating results with our wide range of citrus aroma ingredients that add a fresh, zesty scent to your blends.

CITRUS

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFICATION[1]	APPEARANCE	FRAGRANCE (Odor profile)	FLAVOR (Taste profile)	FOOD	KOSHER	HALAL	PCF[2]	OPTIONS	BIODEGRADABILTY
Citral Extra		2,6-Octadienal, 3,7-dimethyl-	5392-40-5	226-394-6	Skin Sens. 1 Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yellowish liquid	Citrus, fresh, fruity, green	Citrus, fresh, fruity, green	FSSC	•	•	A+		
Citral N		2,6-Octadienal, 3,7-dimethyl-	5392-40-5	226-394-6	Skin Sens. 1 Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yellowish liquid	Citrus, fresh, fruity, green			•	•	A+		
Citral FCC		2,6-Octadienal, 3,7-dimathyl-	5392-40-5	226-394-6	Skin Sens. 1 Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yellowish liquid	Zesty citrus, lemon, agrumic, reminiscent of lemon peel	Zesty citrus, fresh, slightly green	FSSC	•	•	A+		
Citral FG		2,6-Octadienal, 3,7-dimethyl-	5392-40-5	226-394-6	Skin Sens. 1 Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yellowish liquid	Zesty citrus, fresh, agrumic, reminiscence of lemon peel	Zesty citrus, fresh, agrumic, reminiscence of lemon peel	FSSC	•	•	A+		
Citronellal		6-Octenal, 3,7-dimethyl-	106-23-0	203-376-6	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yellowish liquid Clear coloress to pale yellowish liquid	Citrus, green, fruity, typical citronella tone	Citrus, green, fruity, typical citronella tone	FSSC	•	•	A		
Citronellyl-nitrile		3,7-Dimethyloct-6-enenitrie	51566-62-2	257-288-8	not classified	Clear colorless to pale yellowish liquid	Citrus green, floral, slightly herbal			•	•	A		
Micadelva™		1-Methylheptyl-acetat	2051-50-5	218-123-5	Aquatic Chronic 3	Clear colorless liquid	Citrus, fresh, orange peel, floral			•	•	A++		

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)

[2] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:



BMBcert®
Biomass Balance certified products

Readily biodegradable

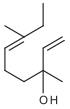
A drop full of

Lavender

Discover the inspiring floral freshness of lavender.

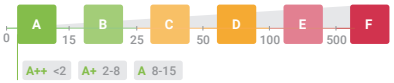
Our collection of lavender ingredients provides a variety of delicate notes for your creations. The remarkable floral freshness of our ingredients makes them highly effective in various applications.

LAVENDER

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFI-CATION[1]	APPEAR-ANCE	**FRAGRANCE** (Odor profile)	**FLAVOR** (Taste profile)	**FOOD**	**KOSHER**	**HALAL**	**PCF[2]**	**OP-TIONS**	**BIODE-GRADABILTY**
Ethyllinalool		1,6-Nonadien-3-ol, 3,7-dimethyl-	10339-55-6	233-732-6	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless to pale yello-wish liquid	Fresh, sweet, floral, lavender, bergamot and coriander			•	•	B		
Linalool		1,6-Octadien-3-ol, 3,7-dimethyl-	78-70-6	201-134-4	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Fresh floral, herbal, lavender, rosewood, petitgrain, bergamot	Floral, fruity, lavender, herbal, bergamot	FSSC	•	•	A		
Linalool FG		1,6-Octadien-3-ol, 3,7-dimethyl-	78-70-6	201-134-4	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Fresh floral, herbal, lavender, rosewood, petitgrain, bergamot	Floral, fruity, lavender, herbal, bergamot	FSSC	•	•	A		
Linalyl Acetate		1,6-Octadien-3-ol, 3,7-dimethyl-, acetate	115-95-7	204-116-4	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Floral, bergamot, petitgrain, lavender	Sweet, fruity, bergamot, floral	FSSC	•	•	A		
Tetrahydro-linalool		3-Octanol, 3,7-dimethyl-	78-69-3	201-133-9	Skin Sens. 1B Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Floral, slightly herbal-woody, rose, citrus notes	Floral, herbal, tea, citrus note	FSSC	•	•	A		

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)

[2] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:



rPCF
Products with reduced Product Carbon Footprint

BMBcert®
Biomass Balance certified products

Readily biodegradable

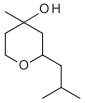
A drop full of

Muguet

A blossoming symphony of beauty.

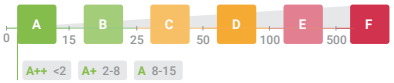
Muguet notes effortlessly add a touch of elegance and sophistication to any composition, enhancing its timeless beauty. Embrace the fresh, floral allure of muguet and enhance your fragrance creations with our selection of aroma ingredients.

MUGUET

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFICATION[1]	APPEARANCE	FRAGRANCE (Odor profile)	FLAVOR (Taste profile)	FOOD	KOSHER	HALAL	PCF[2]	OPTIONS	BIODEGRADABILTY
Hydroxy-citronellal		Octanal, 7-hydroxy-3,7-dimethyl-	107-75-5	203-518-7	Skin Sens. 1B Eye Irrit. 2	Clear colorless liquid	Floral, fresh muguet, aldehydic	Fresh, muguet, green	FSSC	•	•	A		
Lysmeral® Extra		Benzenepropanal, 4-(1,1-di-methylethyl)-. alpha.-methyl-	80-54-6	201-289-8	Acute Tox.4 (oral) Skin Sens. 1B Skin Irrit. 2 Aquatic Chronic 3 Repr. 1B (H360F) Repr. 2 (H361d)	Clear colorless liquid	Floral, fresh, impactful muguet, aldehydic, hints of magnolia, lilac, honeysuckle			•	•	A		
Pyranol		Tetrahydro-2-isobutyl-4-methyl-pyran-4-ol, mixed isomers (cis and trans)	63500-71-0	405-040-6	Eye Irrit. 2	Clear colorless liquid	Floral, fresh, soft, reminiscent of muguet			•	•	A+		

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)

[2] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:



rPCF
Products with reduced Product Carbon Footprint

BMBcert®
Biomass Balance certified products

Inherent, ultimately biodegradable

Readily biodegradable

A drop full of **Mint**

Experience the refreshing power of mint.

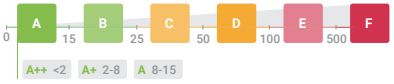
Infusing any composition with a burst of freshness and a revitalizing, cooling sensation, mint has become a cherished element in the world of flavors and fragrances. Our portfolio captures the essence of mint to bring limitless possibilities for making your creations stand out.

MINT

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFI-CATION[1]	APPEAR-ANCE	**FRAGRANCE** (Odor profile)	**FLAVOR** (Taste profile)	**FOOD**	**KOSHER**	**HALAL**	**PCF[3]**	**OP-TIONS**	**BIODE-GRADABILTY**
DL-Menthol FG		Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-rel-	89-78-1	201-939-0	Eye Irrit. 2 Skin Irrit. 2	White solid mass	Mint, fresh, cooling, herbal	Mint, fresh, cooling, herbal	FSSC	•	•	B		
L-Menthol FCC		Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-	2216-51-5	218-690-9	Eye Irrit. 2 Skin Irrit. 2	White solid mass	Strong mint, fresh, cooling	Strong mint, fresh, cooling	FSSC	•	•	A		
L-Menthol flakes FCC		Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1R,2S,5R)-	2216-51-5	218-690-9	Eye Irrit. 2 Skin Irrit. 2	White flakes	Strong mint, fresh, cooling	Strong mint, fresh, cooling	FSSC	•	•	A		
L-Menthone 70 FG		Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2S,5R)-	14073-97-3	237-926-1	Skin Sens. 1B Skin Irrit. 2	Clear colorless liquid	Cooling, fresh, mint, sweet, herbal	Cooling, fresh, mint, sweet, herbal	HACCP[2]	•	•	A		
L-Menthyl acetate FCC		Cyclohexanol, 5-methyl-2-(1-methylethyl)-, 1-acetate, (1R,2S, 5R)-	2623-23-6	220-076-0	Aquatic Chronic 2	Clear colorless liquid	Cooling, fresh, mint, fruity, herbal	Cooling, fresh, mint, fruity, herbal	FSSC	•	•	A		
L-Isopulegol FG		Cyclohexanol, 5-methyl-2-(1-methylethenyl)-, (1R,2S,5R)-	89-79-2	201-940-6	Acute Tox. 4 (oral) Eye Irrit. 2 Skin Irrit. 2	Clear colorless liquid	Cooling, fresh, mint, medicinal and herbal	Cooling, fresh, mint, medicinal and herbal	FSSC	•	•	A		

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)
Hazard Analysis and Critical Control Points (HACCP)
[2] HACCP compliant

[3] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:

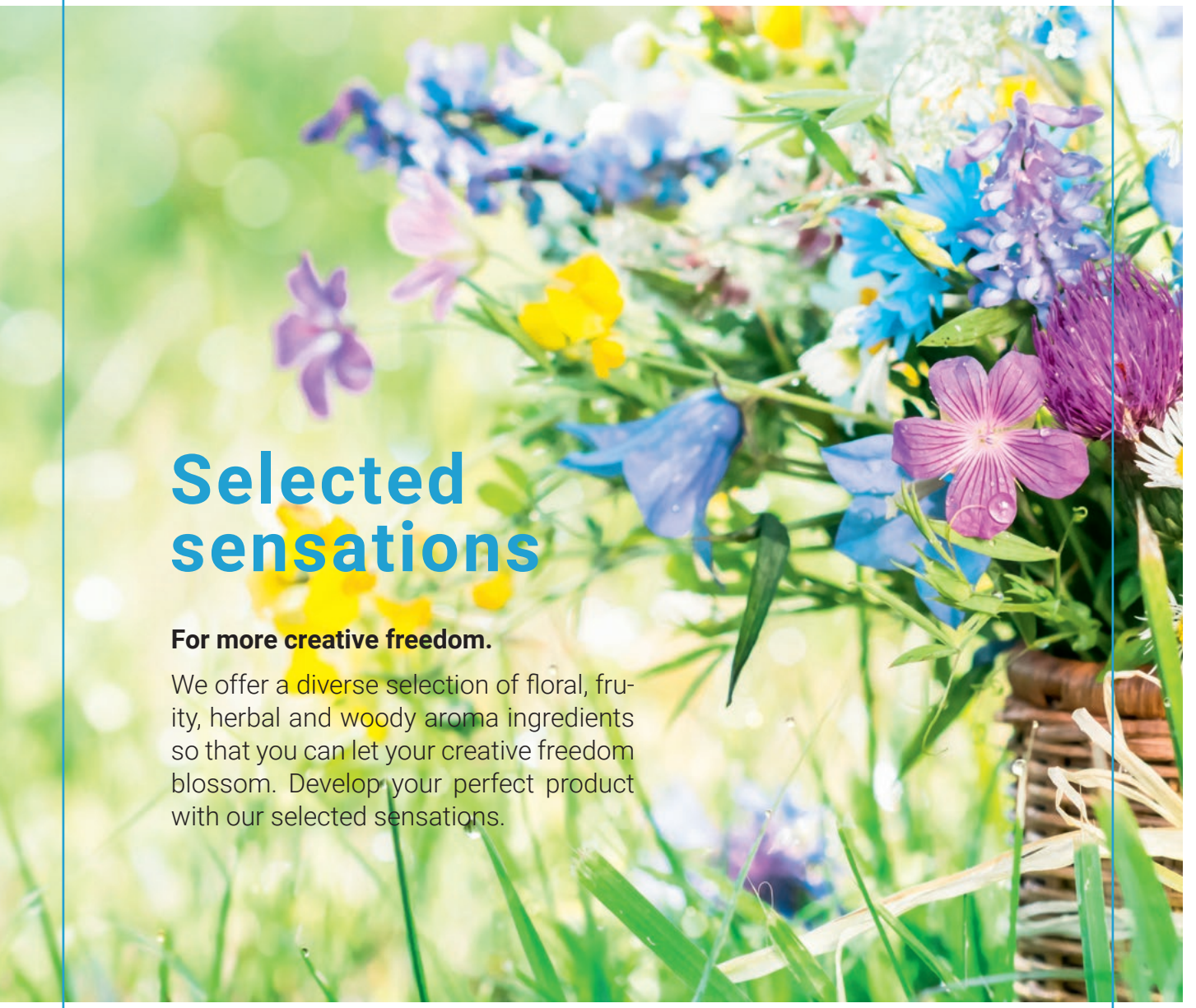


rPCF
Products with reduced Product Carbon Footprint

BMBcert®
Biomass Balance certified products

Inherent, ultimately biodegradable

Readily biodegradable



Selected sensations

For more creative freedom.

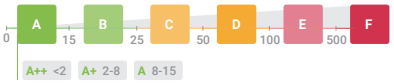
We offer a diverse selection of floral, fruity, herbal and woody aroma ingredients so that you can let your creative freedom blossom. Develop your perfect product with our selected sensations.

SELECTED SENSATIONS

							APPLICATION		BASF CERTIFICATION			SUSTAINABILITY		
PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFI-CATION[1]	APPEAR-ANCE	FRAGRANCE (Odor profile)	FLAVOR (Taste profile)	FOOD	KOSHER	HALAL	PCF[2]	OP-TIONS	BIODE-GRADABILTY
Anisaldehyde		4-Methoxy-benzaldehyde	123-11-5	204-602-6	Aquatic Chronic 3 Repr. 2 (H361fd)	Clear colorless to pale yello-wish liquid	Sweet, floral, anisic, hawthorn			•	•	A		
beta-Ionone R		(E)-4-(2,6,6-Trimethyl-1-cyclohe-xen-1-yl)-3-buten-2-one	79-77-6	201-224-3	Aquatic Chronic 2	Clear colorless to pale yello-wish liquid	Floral, woody, dry, slightly fruity	Floral, woody, fruity	FSSC	•	•	A		
Hydroxyciol		3,7-Dimethyloctane-1,7-diol	107-74-4	203-517-1	Eye Irrit. 2	Clear colorless viscous liquid	Floral, green, sweet, remini-scent of muguet			•	•	A		
iso-Phytol R		3,7,11,15-Tetra-methylhexa-dec-1-en-3-ol	505-32-8	208-008-8	Skin Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1	Clear colorless liquid	Mild, floral, herbal, green			•	•	A		
Methylionone 70		Ionone, methyl-	1335-46-2	215-635-0	Skin Irrit. 2 Skin Sens. 1B Aquatic Chronic 2	Clear colorless to yellowish liquid	Floral, velvety, violet, orris, a bit woody, fruity	Floral, violet-orris, woody, dry fruity	FSSC	•	•	B		
Nerolidol		1,6,10-Dodeca-trien-3-ol, 3,7,11-trimethyl-	7212-44-4	230-597-5	Skin Sens. 1B Eye Irrit. 2 Aquatic Acute 1 Aquatic Chronic 1	Clear colorless to pale yello-wish liquid	Mild, delicate, sweet, floral, green, woody	Fruity, floral, slightly woody	FSSC	•	•	B		
Prenyl Acetate		3-Methyl-2-butenyl acetate	1191-16-8	214-730-4	Flam. Liq. 3	Clear colorless liquid	Fruity, pear, green, aspects of banana	Sweet, fruity, floral, pear	FSSC	•	•	A+		
Velberry®		2,2-dimethylpropa-ne- 1,3-diol diacetate	13431-57-7	826-122-1	not classified	Clear colorless liquid	Fruity, gourmand, fresh			•	•	A+		

[1] according CLP (EG) No. 1272/2008
Food Safety System Certification (FSSC 22000)
Hazard Analysis and Critical Control Points (HACCP)

[2] Product Carbon Footprint (PCF) Ranges [kg CO_2e/kg]:



rPCF
Products with reduced Product Carbon Footprint

BMBcert®
Biomass Balance certified products

Readily biodegradable

INNOVATION MEETS AROMA
FERMENTATION-BASED, HIGH-QUALITY, NATURAL FLAVOR AND UNIQUE FRAGRANCE INGREDIENTS
Discover our Isobionics® portfolio
isobionics.com
Isobionics®
A brand of BASF

AT **ISOBIONICS®**, WE OFFER YOU ACCESS TO FERMENTATION-BASED, HIGH-QUALITY, NATURAL FLAVOR AND UNIQUE FRAGRANCE INGREDIENTS.

Our product range is the ideal choice for anyone looking for innovative, cutting-edge fragrance and flavor ingredients **based on fermentation technology.**

This unique process ensures a **constant high quality and reliable availability** of our products, independent of weather and harvest conditions.

Our passion is to continuously **innovate for the market** and develop flavor and fragrance ingredients that deliver a sensory experience customers desire.

In doing so, we stay true to our commitment to use only **renewable raw materials** as the source of our ingredients.

All of our products are pesticide-free[1], kosher and halal-certified!

Join us on our journey to transform the flavor & fragrance industry with our exceptional range of Isobionics® **aroma ingredients.**

[1] Regular checks performed according to DIN-EN 15662.
List of commodity/pesticide combination can be made available upon request.

OUR BIOTECHNOLOGY

Innovative Biotechnology for Natural Flavors and unique Fragrance Ingredients

With our Isobionics® portfolio we are at the forefront of biotechnology, utilizing advanced processes to create natural flavor and unique fragrance ingredients. Our proprietary fermentation technology leverages renewable raw materials, such as corn grown in Europe, to produce high-purity compounds with consistent quality. This innovative approach reduces our reliance on natural resources variability providing a stable quality and constant supply of ingredients.

Isobionics®
A brand of BASF

Fermentation is scaled up using renewable raw materials.

The enzymes are integrated into our fermentation platform.

The fermentation extract is distilled to deliver high purity natural ingredients.

Enzymes responsible for the natural flavor molecule are identified from botanical sources.

ISOBIONICS® FLAVOR INGREDIENTS

Experience the difference that our commitment to purity can make in your products.

Delight your customers with the **delicious taste and tempting aromas** of our natural product portfolio – whether for juices, nectars, syrups, beers, alcohol-free beverages, energy and sports drinks, confectionaries or ice creams.

Dive into a world of possibilities and learn more about our vibrant **citrus flavor ingredients** as well as our **selected flavor ingredients.**

CITRUS FLAVOR INGREDIENTS

			FLAVOR APPLICATION			BASF CERTIFICATION						
PRODUCT NAME	CAS-NO.	APPEARANCE	TASTE PROFILE	ODOR PROFILE	USE LEVELS	FEMA NO	NATURAL[1]	FOOD	KOSHER	HALAL	RENEWABLE-BASED	FERMENTATION PRODUCT
Isobionics® Natural *alpha*-Farnesene 95	502-61-4	Clear, dark yellow to brown liquid	Mango skin, carnation, ocimene, peach/pear skin, plant stem, slight oiliness, Phenolic, dry and bitter, balsamic	Root vegetable, flower stems, dry flower, woody, moss, phenyl ethyl alcohol like note, after smell chocolate	10 – 40 ppm	3839	EU/US	FSSC 22000	•	•		
Isobionics® Natural *beta*-Sinensal 20	3779-62-2, 60066-88-8	Clear, colorless to pale yellow liquid	Aldehydic, slightly metallic, citrus peel (tangerine/mandarin), marine and algae note	Fresh, aldehydic, orange and tangerine peel, top note of orange juice, marine and algae note	0.1 to 10 ppm	5088	EU/US	FSSC 22000	•	•		
Isobionics® Natural *beta*-Bisabolene 90	495-61-4	Clear, colorless to pale yellow liquid	Slightly green, white grape skin, pear, fruit pulp	Slightly green, pear apple skin, sappy, floral stems, minty, grape cognac note	10 – 30 ppm	4940	EU/US	FSSC 22000	•	•		
Isobionics® Natural *beta*-Farnesene 90	18794-84-8	Clear, colorless to pale yellow liquid	Apple skin, mango, slightly terpenic, white peach	Slightly green floral, sappy, peach, mango stone, watery cyclamen aldehyde note, flo-wer shop, mango skin dry-out	10 – 30 ppm	4971	EU/US	FSSC 22000	•	•		
Isobionics® Natural *delta*-Cadinene 95	483-76-1	Clear, colorless to pale yellow liquid	Grapefruit, orange, slightly smokey, herbal note, oregano, thyme	Mild spicy, reminiscent of weak nootkatone, dry dusty woody, dry forest, incense, weak dry out	10 – 50 ppm	4967	(EU)[2]/US	FSSC 22000	•	•		
Isobionics® Natural Nootkatone 70	4674-50-4	Clear, pale to dark yellow liquid and/or crystals	Dry cedar woody grapefruit cedar, incense, sandalwood	Slightly bitter, dry woody, cigar box, cedar, grapefruit, tobacco incense	10 – 30 ppm	4941	EU/US	FSSC 22000	•	•		

Isobionics® Natural Nootkatone 70

Isobionics® Natural *beta*-Sinensal 20

Isobionics® Natural *alpha*-Farnesene 95

Isobionics® Natural *delta*-Cadinene 95

[1] Our Isobionics® Natural products are natural according to the (EC) No 1334/2008, Article 16 for EU, CFR 101.22(a)(3) for US and ISO 9235 standards. [2] EU Flavor number not available

CITRUS FLAVOR INGREDIENTS

			FLAVOR APPLICATION			BASF CERTIFICATION						
PRODUCT NAME	CAS-NO.	APPEARANCE	TASTE PROFILE	ODOR PROFILE	USE LEVELS	FEMA NO	NATURAL[1]	FOOD	KOSHER	HALAL	RENEWABLE-BASED	FERMENTATION PRODUCT
Isobionics® Nootkatone 70	4674-50-4	Clear, pale to dark yellow liquid and/ or crystals	Fruity and waxy grape-fruit, dry cedar, warm incense note, slightly herbal, lovage, cascarilla bark	Dry woody, cedar, cigar box, fruity grapefruit, incense, lovage, slight celery note	10 – 30 ppm	3166		FSSC 22000	•	•		
Isobionics® Nootkatone 80	4674-50-4	Clear, pale to dark yellow liquid and/ or crystals	Woody cedar incense, lovage, grapefruit	Cedar warm incense, cigar box, celery, clovey, spicey	10 – 30 ppm	3166		FSSC 22000	•	•		
Isobionics® Nootkatone 98	4674-50-4	White to pale yellow crystals	Grapefruit juice, cedar incense, singular	Singular, clean and fruity grapefruit	10 – 30 ppm	3166		FSSC 22000	•	•		
Isobionics® Natural *trans-alpha*-Bergamotene 80	13474-59-4	Clear, colorless to pale yellow liquid	Citrus, especially lime, also lemon, light fruity, orchard fruit, oily	Very mild, waxy oily, citrus note; dries waxy candle like, olive oil	10 – 30 ppm	4960	EU/US	FSSC 22000	•	•		
Isobionics® Natural Valencene 75	4630-07-3	Clear, colorless to pale yellow liquid	Orange note, pithy, juicy woody, has mouthfeel, almost ionone like, smooth	Citrus, woody orange pith waxy	10 – 30 ppm	All the flavorings contained in the product are FEMA GRAS	EU/US	FSSC 22000	•	•		
Isobionics® Natural Valencene 80	4630-07-3	Clear, colorless to pale yellow liquid	Citrus, orange, fresh, fruity	Slightly orange, citrus fruit, floral	10 – 30 ppm	4838	EU/US	FSSC 22000	•	•		

Isobionics® Natural *trans-alpha*-Bergamotene 80

Isobionics® Natural Valencene

Isobionics® Natural Nootkatone 70

[1] Our Isobionics® Natural products are natural according to the (EC) No 1334/2008, Article 16 for EU, CFR 101.22(a)(3) for US and ISO 9235 standards. [2] EU Flavor number not available

SELECTED FLAVOR INGREDIENTS

			FLAVOR APPLICATION			BASF CERTIFICATION						
PRODUCT NAME	CAS-NO.	APPEARANCE	TASTE PROFILE	ODOR PROFILE	USE LEVELS	FEMA NO	NATURAL[1]	FOOD	KOSHER	HALAL	RENEWABLE-BASED	FERMENTATION PRODUCT
Isobionics® Natural *alpha*-Humulene 90	6753-98-6	Clear, colorless to pale yellow liquid	Woody cedar, piney, terpineol note, damp wood, sawdust	Dry woody, cedar like, resinous, piney, patchouli, slightly grapefruit, herbal	5 – 20 ppm	5077	(EU)[2]/US	FSSC 22000	•	•		
Isobionics® Natural Germacrene D 85	23986-74-5	Clear, colorless to pale yellow liquid	Minty, herbal, slightly spicy, basil, herbal, slightly green oily cyclamen watermelon	Fairly strong sharp aroma, herbal, basil like, slightly floral, flower stems, parsley, citrus orange pith	10 – 30 ppm	4974	EU/US	FSSC 22000	•	•		
Isobionics® Natural (-)-*alpha*-Bisabolol 99	23089-26-1	Clear, colorless to pale yellow liquid	Warm eugenol, carnation, smooth powdery vanilla like, cedar, grapefruit	Warm eugenol, carnation, some sweeter vanillin notes, incense, nootkatone, slightly cedar like, lovage, celery fenugreek dry out	5 – 10 ppm	4666	EU/US	FSSC 22000	•	•		
Isobionics® Natural *alpha*-Bisabolene 98	17627-44-0	Clear, colorless to pale yellow liquid	White flowery with a creamy lactone note, coconut milk	Oily, coconut/brazil nut, slightly mushroom, milky lactone note, parsnip, costus oil, warm vanil-la like note, mango stone	20 – 40 ppm	5067	EU/US	FSSC 22000	•	•		
Isobionics® Natural *beta*-Caryophyllene 80	87-44-5	Clear, colorless to pale yellow liquid	Woody, herbal, fatty, grapefruit general citrus, clean no phenolic, clovey character	Herbaceous, slightly green, oily, woody grapefruit/citrus, slightly spicy, clary sage	10 – 20 ppm	2252	EU/US	FSSC 22000	•	•		

Isobionics® Natural *alpha*-Humulene 90

Isobionics® Natural Germacrene D 85

Isobionics® Natural (-)-*alpha*-Bisabolol 99

Isobionics® Natural *alpha*-Bisabolene 98

Isobionics® Natural *beta*-Caryophyllene 80

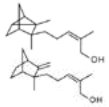
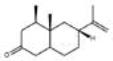
[1] Our Isobionics® Natural products are natural according to the (EC) No 1334/2008, Article 16 for EU, CFR 101.22(a)(3) for US and ISO 9235 standards. [2] EU Flavor number not available

ISOBIONICS® FRAGRANCE INGREDIENTS

Get inspired for your exclusive compositions.

Create excitement with our fermentation-based fragrance ingredients symbolizing high quality and exclusivity. Unleash your creativity with the heart note of sandalwood or the clean and fruity grapefruit scent.

SELECTED FRAGRANCE INGREDIENTS

PRODUCT NAME	MOLECULAR STRUCTURE	CHEMICAL NAME	CAS-NO.	EC-NO.	CLASSIFICATION[1]	APPEARANCE	FRAGRANCE APPLICATION: ODOR PROFILE	FRAGRANCE APPLICATION: TASTE PROFILE	BASF CERTIFICATION: FOOD	BASF CERTIFICATION: KOSHER	BASF CERTIFICATION: HALAL	SUSTAINABILITY: BIODEGRADABILITY	SUSTAINABILITY: RENEWABLE-BASED	FERMENTATION PRODUCT
Isobionics® Santalol		alpha-Santalol beta-Santalol	2576531-09-2	865-933-5	Skin Sens. 1B Skin Corr./Irrit.2 Aquatic Acute 1 Aquatic Chronic 1	Clear, yellow liquid	Woody, sandal wood			•	•	✓	✓	✓
Isobionics® Nootkatone 98		(4R,4aS,6R)-4,4a-dimethyl-6-(prop-1-en-2-yl)-4,4a,5,6,7,8-hexahydronaphthalen-2(3H)-one	4674-50-4	225-124-4	Skin Sens. 1 Eye Irrit. 2 Skin Irrit. 2	White to pale yellow crystals	Singular, clean and fruity grapefruit	Grapefruit juice, cedar incense, singular	FSSC 22000	•	•	✓	✓	✓

Isobionics® Santalol

Isobionics® Nootkatone 98

[1] according CLP (EG) No. 1272/2008

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