

always  
inspiring more ...

symrise 



**Beverages**

# Composer for natural x flavorings

## *Sourcing, refining and creating signature taste solutions*

White Paper 2021



delivering the authentic  
taste of nature

# code of nature

*Nature surrounds us. It delights us, feeds us and inspires us with its wealth of taste and boundless creativity. Consumers love the taste of nature – with an equally diverse and precise understanding of what nature means to them. With code of nature, customers and consumers receive the real tastes of nature that go into individual products, which entail and combine all facets of naturalness transparently.*

## Consumers are going all natural

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We have entered a new era of naturalness. It is evolving fast and picking up speed every day. Consumers dive deeper into their understanding of food and naturalness with every purchase they make. When choosing and buying their food and beverages they therefore demand nature as pure and rich as possible. Consumers want to know exactly what ingredients go into their food and where they come from. They want products from farmers that care about sustainable

cultivation on healthy soil. Protecting animals also plays a decisive role for many of them. Equally, they want their foods and beverages to be gently prepared and stored so that they keep their original taste and nutritional value. If consumers can actually see that something is made with honesty and integrity then it truly lives up to their expectations and perceptions. Naturalness in these many individual facets is sprouting in San Francisco, Shanghai, Berlin and Seoul – a true global phenomenon.

**Consumers want the ultimate taste experience. And they want this experience to come from real food, made only with pure natural ingredients.**

This puts the consumer into a great **dilemma**. Because nature means variety. It is evolving, subtle, ever changing, hard to predict, with crops and harvest depending on the weather, soil, and so much more. At the same time, consumers expect a very specific taste with high impact.

## The industry is turning towards naturalness

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These rapid changes within the world of naturalness and the consumer dilemma pose both huge challenges and opportunities on the food and beverage industry. Companies want to offer consumers products that they recognize and accept as truly natural and they have to adapt very quickly. The reason: Local innovators are

pioneering in many areas here and are growing fast. Very often, they are leading the way for international players. Having very much originated in the US, this trend has now spread and is expanding globally. **For international players, staying on top will require swiftly changing the game and shifting toward consumers' preference for "real" food.**

# Seize your opportunity for naturalness with natural X flavorings

Symrise consumer studies also confirm the importance of naturalness. When consumers see the term “natural x flavoring” on the label, they perceive this as particularly natural and often prefer this over “natural flavoring”. For example: a “natural peach flavoring” or “natural onion flavoring” sounds more appealing than a more generic “natural flavoring” – alone.

A natural product becomes particularly attractive when it tastes authentic and offers an enjoyable experience. In this environment, when combined with the expertise and product portfolio of Symrise, regulations such as the new EU Organic Regulation open up a wealth of great tasting opportunities for superior product experiences and natural labelling.

This becomes increasingly important in the growing demand for organic products in Europe. Last year, sales of organic food and beverages recorded high growth across almost all categories.

Where is this trend coming from? Many consumers perceive organic as the most natural option. At the same time, they consider organic products to be healthier and more sustainable. As a result, organic is now considered to be the most important “product promise” on food packaging. (Mintel, 2019)



Appeal to consumers' tastes preferences with organic compliant solutions from Symrise!



**Naturalness and organic are increasingly important preference drivers in key markets in Europe.**



**Consumers in Europe often prefer “natural x flavoring” over “natural flavoring”.**

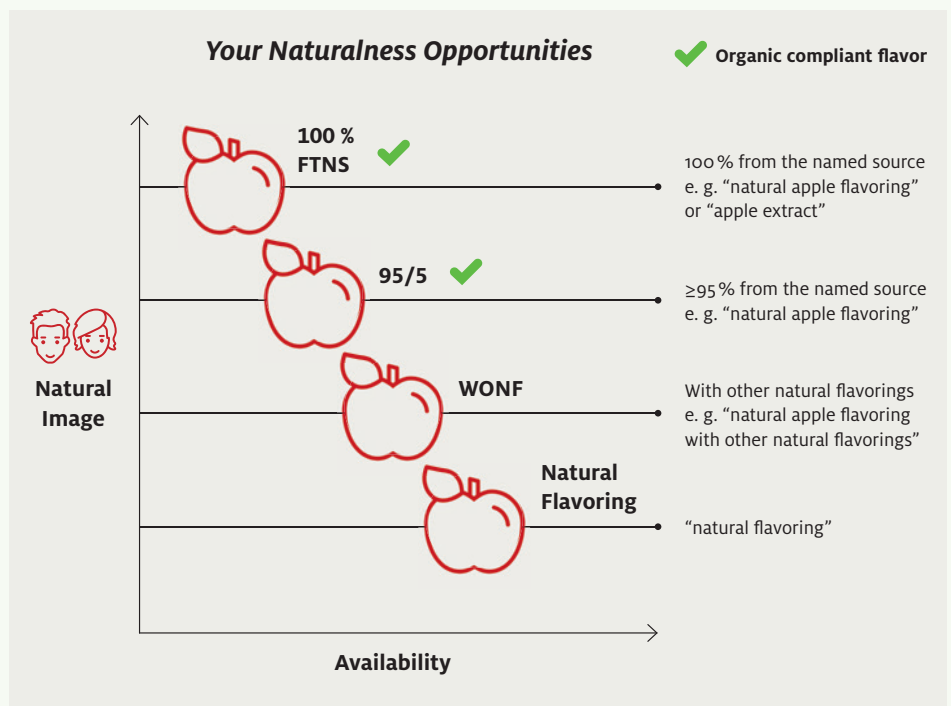
## What will change due to the new EU Organic Regulation?

The new EU Organic Regulation<sup>1</sup> goes into effect on January 1<sup>st</sup> 2022, and defines very precisely the use of natural flavorings in organic products. The relevant definitions are laid down in the EU Flavor Regulation<sup>2</sup>.

After January 2022, only certain natural flavorings will be allowed in organic products (see graphic). At least 95 % of a natural flavor must always originate from the named source.

That means for example that at least 95 % of tomato flavoring must come from tomato. Up to 5 % from other natural sources but only to round off the rich taste or assure a consistent and specific note.

**Manufacturers must therefore reformulate their organic products if they use flavors other than natural x-flavorings to meet the new EU requirements. Symrise taste and regulatory experts will guide them through all naturalness opportunities.**



<sup>1</sup> EU Organic Regulation (EU) No 2018/848

<sup>2</sup> EU Flavor Regulation (EU) No 1334/2008

# Two flavoring scenarios suitable to do declare natural x flavorings

## ← Naturalness – Labelling scenarios →

100% FTNS

Natural Flavoring Substances

95/5

WONF

Natural Flavoring

	0	1	2	3	4
Ingre-dients	100% Flavoring Preparation from the named source	100% Natural Flavoring Substances	> 95% from the named source, easily recognizable	< 95% from the named source, easily recognizable	100% from different source materials. <i>Reference to source materials does not reflect the taste.</i>
EU labelling	<ul style="list-style-type: none"> <li>Natural X Flavoring</li> <li>Specific name</li> </ul>	<ul style="list-style-type: none"> <li>Natural Flavoring Substances</li> </ul>	<ul style="list-style-type: none"> <li>Natural X Flavoring</li> </ul>	<ul style="list-style-type: none"> <li>Natural X Flavoring with other natural Flavorings (= WONF)</li> </ul>	<ul style="list-style-type: none"> <li>Natural Flavoring</li> </ul>
Examples	<ul style="list-style-type: none"> <li>Natural Strawberry Flavoring</li> </ul>	<ul style="list-style-type: none"> <li>Natural Flavoring Substances Vanillin</li> </ul>	<ul style="list-style-type: none"> <li>Natural Strawberry Flavoring</li> </ul>	<ul style="list-style-type: none"> <li>Natural Spice Flavoring WONF (= WONF)</li> </ul>	<ul style="list-style-type: none"> <li>Natural Flavoring (Gingerbread taste)</li> </ul>

● Natural X Flavorings (organic suitable)



# Your benefits

**code of nature®** forms a framework that pulls together the versatile natural expertise of Symrise. It goes beyond a mere portfolio of natural products. It enables a unique code of nature for each and every individual customer and solution.

It connects the dots of the long scientific heritage at Symrise with deep consumer understanding, sustainable backward integration, regulatory consultancy capability. This dedicated approach combines the work of Symrise experts with longstanding certified

partners, respecting nature, and using gentle technology and processes to amplify nature.

 <p><b>Your BENEFITS</b></p>	<p><b>Depictability &amp; Claimability</b> <i>of ingredients on front label</i></p>	<p><i>Healthy product positioning</i></p>	<p><b>Storytelling</b> <i>on labels &amp; communication</i></p>
<p><i>Superior, authentic sensory experience</i></p>	<p><b>Organic suitable</b></p>	<p><b><i>In-depth understanding</i></b> <i>of the regulatory framework as well NGO constraints</i></p>	

*Taking all this together, code of nature® goes beyond grey system theory.*

## An every day practice

Because Symrise is combining its wide expertise for each and every customer wish, each time it is creating unique and individual, truly and purely natural solutions – a unique code.

Symrise crafts inspiring solutions for its customers and consumers.

## Our Key Tonalities

Make consumers to enjoy the authentic taste of your products. Symrise supplies you with the best from the named sources – including 95 % to 100 % natural ingredients.

**Discover our key tonalities for natural x flavorings for your beverage products.**

	<p><b>CITRUS Fruits</b></p>	<p><i>Bergamot, Blood Orange, Grapefruit, Lemon, Lime, Mandarin, Orange, Orange Blossom, Pink Grapefruit, Yuzu</i></p>
	<p><b>Orchard Fruits</b></p>	<p><i>Apple, Apricot, Peach, Pear</i></p>
	<p><b>Red Fruits</b></p>	<p><i>Berry, Blueberry, Cherry, Raspberry, Strawberry</i></p>
	<p><b>Tropical Fruits</b></p>	<p><i>Banana, Passionfruit, Pineapple, Tropical</i></p>
	<p><b>Vanilla</b></p>	<p><i>Vanilla</i></p>

# Portfolio Compilation

<b>Product Code</b>	<b>Product Name</b>	<b>Cluster</b>	<b>Legal Name</b>	<b>95/5 or 100% FTNS</b>	<b>Dosage (%)</b>	<b>RTD/ RTE</b>
201480	Bergamot	Citrus Fruits	Natural Bergamot Flavoring	FTNS	2,00%	Tea base black
269633	Bergamot	Citrus Fruits	Natural Bergamot Flavoring	FTNS	3,00%	Tea base black
913814	Bergamot	Citrus Fruits	Natural Bergamot Flavoring	FTNS	7,00%	Tea base black
294461	Blood Orange	Citrus Fruits	Natural Blood Orange Flavoring	95/5	0,20%	Beverage Base
967598	Blood Orange	Citrus Fruits	Natural Blood Orange Flavoring	FTNS	0,10%	Beverage Base
344701	Grapefruit	Citrus Fruits	Natural Grapefruit Flavoring	95/5	0,10%	Beverage Base
352026	Grapefruit	Citrus Fruits	Natural Grapefruit Flavoring	95/5	0,05%	RTD Softdrink
365711	Grapefruit	Citrus Fruits	Natural Grapefruit Flavoring	95/5	0,05%	RTD Softdrink
953328	Grapefruit	Citrus Fruits	Natural Grapefruit Flavoring	FTNS	0,15%	Beverage Base
329653	Lemon	Citrus Fruits	Natural Lemon Flavoring	95/5	0,05%	Beverage Base
336277	Lemon	Citrus Fruits	Natural Lemon Flavoring	FTNS	0,01%	Beverage Base
340479	Lemon	Citrus Fruits	Natural Lemon Flavoring	FTNS	0,05%	Tea hot RTD
492598	Lemon	Citrus Fruits	Natural Lemon Flavoring	95/5	0,05%	Beverage Base
492992	Lemon	Citrus Fruits	Natural Lemon Flavoring	95/5	1,20%	Beverage Base
745192	Lemon	Citrus Fruits	Natural Lemon Flavoring	95/5	0,07%	Beverage Base
966807	Lemon	Citrus Fruits	Natural Lemon Flavoring	FTNS	0,15%	Beverage Base
274278	Lime	Citrus Fruits	Natural Lime Flavoring	FTNS	0,05%	Beverage Base
374860	Lime	Citrus Fruits	Natural Lime Flavoring	FTNS	2,50%	Tea base black
376005	Lime	Citrus Fruits	Natural Lime Flavoring	FTNS	0,08%	RTD Softdrink
492705	Lime	Citrus Fruits	Natural Lime Flavoring	95/5	0,10%	Beverage Base
492714	Lime	Citrus Fruits	Natural Lime Flavoring	95/5	0,10%	Beverage Base
846272	Lime	Citrus Fruits	Natural Lime Flavoring	95/5	0,20%	Beverage Base
847251	Lime	Citrus Fruits	Natural Lime Flavoring	FTNS	0,05%	RTD Softdrink
909845	Lime	Citrus Fruits	Natural Lime Flavoring	FTNS	0,05%	Beverage Base
252535	Mandarin	Citrus Fruits	Natural Mandarin Flavoring	FTNS	4,00%	Tea base black

# Portfolio Compilation

Product Code	Product Name	Cluster	Legal Name	95/5 or 100% FTNS	Dosage (%)	RTD/ RTE
470807	Mandarin	Citrus Fruits	Natural Mandarin Flavoring	95/5	0,10%	Beverage Base
242880	Orange	Citrus Fruits	Natural Blood Orange Flavoring	FTNS	6,00%	Tea base black
470601	Orange	Citrus Fruits	Natural Orange Flavoring	95/5	0,02%	Tea hot RTD
480391	Orange	Citrus Fruits	Natural Orange Flavoring	95/5	0,10%	Beverage Base
495918	Orange	Citrus Fruits	Natural Orange Flavoring	95/5	0,10%	Beverage Base
641440	Orange	Citrus Fruits	Natural Orange Flavoring	FTNS	0,01%	Beverage Base
649287	Orange	Citrus Fruits	Natural Orange Flavoring	95/5	0,20%	Beverage Base
657365	Orange	Citrus Fruits	Natural Orange Flavoring	95/5	0,10%	Beverage Base
770857	Orange	Citrus Fruits	Natural Orange Flavoring	FTNS	0,20%	Beverage Base
899497	Orange Blossom	Citrus Fruits	Natural Orange Blossom Flavoring	FTNS	5,00%	Tea base black
258867	Pink Grapefruit	Citrus Fruits	Natural Pink Grapefruit Flavoring	FTNS	0,20%	Beverage Base
452796	Yuzu	Citrus Fruits	Natural Yuzu Flavoring	FTNS	0,05%	RTD Softdrink
301413	Apple	Orchard Fruits	Natural Apple Flavoring	FTNJ	0,05%	Beverage Base
312616	Apple	Orchard Fruits	Yellow Fruits	Natural Apple Flavoring	FTNF	Tea hot infusion
331681	Apple	Orchard Fruits	Natural Apple Flavoring	95/5	0,18%	Beverage Base
409962	Apple	Orchard Fruits	Natural Apple Flavoring	FTNJ	0,20%	Beverage Base
492621	Apple	Orchard Fruits	Natural Apple Flavoring	95/5	0,25%	Beverage Base
492625	Apple	Orchard Fruits	Natural Apple Flavoring	95/5	0,25%	Beverage Base
603791	Apricot	Orchard Fruits	Natural Apricot Flavoring	95/5	0,15%	Beverage Base
311766	Peach	Orchard Fruits	Yellow Fruits	Natural Peach Flavoring	FTNF	Tea hot infusion
494194	Peach	Orchard Fruits	Natural Peach Flavoring	95/5	0,15%	Beverage Base
494199	Peach	Orchard Fruits	Natural Peach Flavoring	95/5	0,15%	Beverage Base
603796	Peach	Orchard Fruits	Natural Peach Flavoring	95/5	0,15%	Beverage Base
603812	Peach	Orchard Fruits	Natural Peach Flavoring	95/5	0,15%	Beverage Base
880243	Peach	Orchard Fruits	Natural Peach Flavoring	FTNJ	0,10%	Beverage Base

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880244	Peach	Orchard Fruits	Natural Peach Flavoring	FTNF	0,15%	Beverage Base
653923	Pear	Orchard Fruits	Natural Pear Flavoring	FTNJ	5,00%	Beverage Base
602404	Berry	Red Fruits	Natural Berry Flavoring	95/5	0,10%	Beverage Base
498733	Blueberry	Red Fruits	Natural Blueberry Flavoring	95/5	0,10%	Beverage Base
311761	Cherry	Red Fruits	Natural Cherry Flavoring	FTNF	0,05%	Tea hot infusion
428352	Cherry	Red Fruits	Natural Cherry Flavoring	95/5	0,10%	Beverage Base
493841	Cherry	Red Fruits	Natural Cherry Flavoring	95/5	0,22%	Beverage Base
737460	Cherry	Red Fruits	Natural Cherry Flavoring	FTNF	0,10%	Beverage Base
850938	Cherry	Red Fruits	Natural Cherry Flavoring	FTNF	0,05%	Beverage Base
311748	Raspberry	Red Fruits	Natural Raspberry Flavoring	FTNF	0,05%	Tea hot infusion
425852	Raspberry	Red Fruits	Natural Raspberry Flavoring	95/5	0,10%	Beverage Base
453657	Raspberry	Red Fruits	Natural Raspberry Flavoring	FTNF	0,20%	Tea hot infusion
493845	Raspberry	Red Fruits	Natural Raspberry Flavoring	95/5	0,14%	Beverage Base
845427	Raspberry	Red Fruits	Natural Raspberry Flavoring	FTNF	0,10%	Beverage Base
883853	Raspberry	Red Fruits	Natural Raspberry Flavoring	FTNF	0,20%	RTD
966441	Raspberry	Red Fruits	Natural Raspberry Flavoring	FTNF	0,15%	Beverage Base
352705	Strawberry	Red Fruits	Natural Strawberry Flavoring	FTNF	0,31%	Beverage Base
424780	Strawberry	Red Fruits	Natural Strawberry Flavoring	FTNF	0,05%	Tea hot infusion
482266	Strawberry	Red Fruits	Natural Strawberry Flavoring	95/5	0,20%	Beverage Base
603434	Strawberry	Red Fruits	Natural Strawberry Flavoring	95/5	0,15%	Beverage Base
603435	Strawberry	Red Fruits	Natural Strawberry Flavoring	95/5	0,15%	Beverage Base
777657	Strawberry	Red Fruits	Natural Strawberry Flavoring	FTNF	0,05%	Beverage Base
347222	Banana	Tropical Fruits	Natural Banana Flavoring	FTNF	0,10%	Beverage Base
898518	Banana	Tropical Fruits	Natural Banana Flavoring	95/5	0,10%	Beverage Base
301755	Passionfruit	Tropical Fruits	Natural Passionfruit Flavoring	FTNF	0,10%	Beverage Base



# Portfolio Compilation

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307010	Passionfruit	Tropical Fruits	Natural Passionfruit Flavoring	FTNF	0,05%	Tea hot infusion
347221	Passionfruit	Tropical Fruits	Passionfruit Extract	FTNF	0,10%	Beverage Base
482786	Passionfruit	Tropical Fruits	Natural Passionfruit Flavoring	95/5	0,10%	Beverage Base
347254	Pineapple	Tropical Fruits	Natural Pineapple Flavoring	FTNF	0,20%	Beverage Base
425962	Tropical	Tropical Fruits	Natural Tropical Fruit Flavoring	95/5	0,16%	Tea hot black
428329	Vanilla	Vanilla	Natural Vanilla Flavoring	FTNS	0,18%	Hot Tea (RTD)
779015	Vanilla	Vanilla	Natural Vanilla Flavoring	FTNS	0,10%	Hot Tea (RTD)
497372	Yellow Fruit	Yellow Fruits	Natural Tropical Fruit Flavoring	95/5	0,20%	Beverage Base
603934	Yellow Fruit	Yellow Fruits	Natural Yellow Fruit Flavoring	95/5	0,15%	Beverage Base

## Why Symrise:

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- ✓ **Technology**  
Sourcing of the best nature has to offer
- ✓ **Design**  
Sensory based taste modelling on a molecular level
- ✓ **Refinement**  
Gentle processing of natures' varieties



Got a taste for  
natural X flavorings?  
*Talk to us.*

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