

News Release

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BASF Aroma Ingredients expands its Isobionics® portfolio with new natural flavor

- Isobionics® Natural beta-Caryophyllene 80 is the latest addition to the Isobionics® flavor portfolio
- Isobionics® Natural *beta*-Caryophyllene 80 is not derived from clove oil and has the benefit of no phenolic and no eugenol character; it is produced from renewable resources using cutting-edge biotechnology
- New flavor was developed in response to specific customer requirements and will be presented at FlavourTalk Raw Materials Exhibition 2024

[Geleen, Netherlands, March 12] – Isobionics[®], a BASF Aroma Ingredients brand, is launching a new natural product on the flavor market. Isobionics[®] Natural *beta*-Caryophyllene 80 is the latest addition to the Isobionics[®] portfolio, and is proof of the commitment to developing natural flavors driven by customer needs. Isobionics[®] Natural *beta*-Caryophyllene 80 will be presented for the first time at FlavourTalk Raw Materials Exhibition 2024, which will take place on March 20 at the Millennium Gloucester Hotel Conference Centre in London.

"We are delighted to introduce Isobionics® Natural *beta*-Caryophyllene 80 to the market; it's a great addition to our portfolio of natural flavors. All our products are produced independent of the plant environment and harvest conditions and are pesticide-free," says Giovanni D'Andola, Flavor Launch Manager at BASF.

"Building on our cutting-edge fermentation technology, we're constantly expanding

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our natural flavor portfolio beyond our well-established citrus products to address further customer and market demands."

Breaking new ground beyond the citrus portfolio, Isobionics® is unlocking a world of new possibilities for food, beverage, and flavor enthusiasts:

- Isobionics® Natural beta-Caryophyllene 80 has an herbaceous, slightly green, parsley, black pepper, grapefruit, slightly clary sage odor. The taste at 10 to 20 ppm is woody, grapefruit, citrus, mango and pear skin.
- Isobionics® Natural beta-Caryophyllene 80 is not derived from clove oil and has the benefit of no phenolic and no eugenol character. This makes applications in citrus flavors like orange, grapefruit, black pepper, ylang-ylang and peppermint oils possible. With 80% purity, the product is suitable for a broad range of applications like beverages, food and fragrances. Our cutting-edge fermentation technology lets us guarantee premium quality and reliable availability.
- Isobionics® Natural beta-Caryophyllene 80 is compliant with EU and US food grade regulations, respectively FLAVIS: 01.007 and FEMA number 2252. The product is EU and US natural, pesticide-free¹, kosher and halal certified.

Our new flavor expands the flavorist palette to a new level

This flavor ingredient – produced at very high concentration using fermentation technology – can be found not only in citrus essential oils, but also in several other natural oils, such as ylang-ylang, black pepper, clove, guava, thyme, rosemary, peppermint, eucalyptus, cinnamon, lavender and sage. This natural product uses only renewable raw materials, which makes it independent of harvest conditions and seasonality; it is also free of agricultural residues.

"Isobionics® Natural *beta*-Caryophyllene 80 is another proof point for our customer-centric innovation, meeting our customers demands for fermentation-based natural flavors. We are proud to offer the next innovative aroma ingredient

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

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that prioritizes quality and sustainability in the flavor industry," says Steffen Götz, Vice President of Aroma Ingredients at BASF.

The biotech platform plays a significant role in developing future ingredients to deliver exceptional flavor profiles that are geared to consumer preferences.

The new natural flavor Isobionics[®] Natural *beta*-Caryophyllene 80 has now been officially launched. Customers can already reach out to their designated sales contacts and schedule an exclusive presentation of the new flavor to experience this extraordinary flavor innovation firsthand.

About BASF's Nutrition & Health division

BASF Nutrition & Health provides a comprehensive product and service range for human and animal nutrition, pharmaceutical, and flavor & fragrance industries. With our science-driven portfolio, we address customers in globally growing markets to meet the demands of an expanding world population. Together with our customers, we play an active role in enhancing the nutrition, health and wellbeing of consumers all over the world. Our products fulfill the highest safety, regulatory and sustainability standards. BASF Nutrition & Health operates sites in Europe, North America and in Asia-Pacific. For more information, go to www.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Around 112,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €68.9 billion in 2023. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at www.basf.com.