



Organoleptic Characteristics of Flavor Materials

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- Robert Pan, Senior Flavorist, Bell Flavors & Fragrances
- Susie Sadural, Consulting Flavorist

Ambrette Absolute GV F0052

Source: Naturex

FEMA# 2050, CAS# 84455-19-6

Natural

Odor: @ 1%. Sweet, musky, berrylike, soapy and whiskeylike with a waxy undertone.

Taste: @ 0.5 ppm. Sweet, musky, haylike and slightly woody.

Taste: @ 1.0 ppm. Musky, soapy, perfumey and slightly woody.

Possible applications: This powerful material will add sweet, musky notes to many berry flavors including blackberry, blueberry, raspberry, strawberry, cherry and their blends, especially the infamous “red licorice.” Ambrette seed will also add interesting perfumey notes to mints for oral hygiene products, anise, Sen-Sen and cordial flavors.

► **Naturex;** www.naturex.com

Ethyl-3-hydroxybutyrate, Natural

Source: Wen International

FEMA# 3428, CAS# 5405-41-4

Natural occurrence: Blackberry, grape, mango, rum, black tea

Odor: @ 100%. Fruity, fresh, winey and fermented.

Taste: @ 15 ppm. Fruity, winey, sweet, fermented and grape-like.

Taste: @ 30 ppm. Fruity, winey, sweet, waxy and berrylike.

Possible applications: At lower levels this material will reinforce the character of dark berry flavors including blackberry, blueberry and especially purple grapes. At higher dosages the character is more of a red berry and will enhance ripe notes in raspberry, strawberry and tomato, as well as in apple, plum, pear and so on. Because it also possesses winey notes, ethyl-3-hydroxybutyrate will be suitable in alcoholic flavors like wine and rum.

► **Wen International;** www.weninternational.com

Farnesene, Mixture of Isomers

Source: Bedoukian

FEMA# 3839, CAS# 502-61-4

Natural occurrence: Clary sage, ginger, grapefruit, mandarin, orange, pear, ylang-ylang

Odor: @ 100%. Green, floral, fresh, terpeny and vegetablelike.

Taste: @ 5 ppm. Green, floral, herbal and oily.

Taste: @ 10 ppm. Bitter, green, floral, soapy and slightly lavenderlike.

Possible applications: The variety of notes in this material will give interesting twists to many different types of flavors, including herbals, especially cilantro; vegetable flavors like celery and carrot; mint and other flavors for oral care; fruit flavors where green, floral notes are important such as pear and guava; and alcoholic beverage flavors like gin and digestive cordials.

► **Bedoukian;** www.bedoukian.com

Lactone of *cis*-Jasmone

Source: Bedoukian

FEMA# 3937, CAS# 70851-61-5

Natural occurrence: Not yet found in nature

Odor: @ 100%. Creamy, coconutlike, milky, buttery, fatty and slightly nutty.

Taste: @ 2 ppm. Sweet, creamy, coconutlike, fatty and dairylike with a rich mouthfeel.

Taste: @ 5 ppm. Creamy, sweet, coconutlike, buttery, nutty and dairylike with a rich mouthfeel.

Possible applications: This delicious material will add depth and richness to most any dairy flavor including

butter, cream, clotted cream, condensed milk, cajeta, cream cheeses, cheddars, blue cheeses and so on. Its fatty notes will deliver depth to nut flavors like pecan, macadamia, almond, cashew and Brazils, as well as fruit flavors, especially peach, apricot, mango, coconut, papaya and more.

►**Bedoukian**; www.bedoukian.com

Limediene (synonym for methyl cyclohexadiene)

Source: Bedoukian

FEMA# 4311, CAS# 30640-46-1

Natural occurrence: Yes, but not cited

Odor: @ 1%. Oily, limelike, terpeney, gasolinelike, slightly alliaceous and phenolic.

Taste: @ 1 ppm. Limelike, terpeney, rubberlike and gasolinelike.

Taste: @ 2 ppm. Limelike, burnt, rubberlike, gasolinelike and green.

Possible applications: This potent material will enhance citrus flavors, especially lemon and lime, at levels below 1 ppm. At not much higher dosages it can offer a gas-grilled note to charcoal-roasted meat, vegetable and fruit flavors.

►**Bedoukian**; www.bedoukian.com

Passifloran

Source: Vigon International

FEMA# 3797, CAS# 4166-20-5

Natural occurrence: Yellow passion fruit, peanut (microwave blanched) and strawberry

Odor: @ 1%. Gassy, tropical, sulfurous/catty and alliaceous.

Taste: @ 0.5 ppm. Tropical, passion fruit and guavalike, sulfurous, green and alliaceous.

Possible applications: This very powerful material packs quite a punch, and at levels below 0.5 ppm will emphasize juicy, tropical, fruity notes in passion fruit, guava, guanabana (soursop), durian and grapefruit, as well as peach, apricot and black currant.

►**Vigon International**; www.vigoninternational.com

Triisobutylidihydrothiazine (synonym for bacon dithiazine)

Source: Vigon International

FEMA# 4017, CAS# 74595-94-1

Nature identical

Odor: @ 1%. Gassy, sulfurous, meaty, fried, fatty, savory, fermented and baconlike.

Taste: @ 0.5 ppm. Meaty, roasted, fatty, burnt and slightly nutty with a hint of tropical fruit.

Taste: @ 1 ppm. Roasted meat, fatty and baconlike with a coffee nuance.

Possible applications: This product has a very large repertoire of characteristics that will fit well into a myriad of different flavor types. Its fatty, meaty notes make it amenable for use in meat flavors, particularly bacon, pork, roast beef and chicken, and allied flavors such as grill, tallow, lard, gravy and so on. The sulfurous notes make it a good choice for bringing out tropical notes in

papaya and durian, and it will also enhance the savory notes in tomato and other vegetable flavors. Other interesting applications in are coffee and nuts, particularly Brazil and hazelnuts.

►**Vigon International**; www.vigoninternational.com

Undecatriene

Source: Bedoukian

FEMA# 3795, CAS# 16356-11-9

Natural occurrence: Mandarin, celery, galbanum hops, pineapple

Odor: @ 1%. Green, waxy, fatty, vegetablelike, bell pepperlike, cucumberlike and cilantrolike.

Taste: @ 0.5 ppm. Fresh, green, oily, waxy, vegetablelike, cucumberlike and cilantrolike.

Taste: @ 1 ppm. Green, waxy, carrotlike, rooty, fatty and vegetablelike.

Possible applications: Another very potent product for flavorists' arsenals, undecatriene's powerful green notes will add fresh vegetable notes to green pepper as well as cucumber and herbal flavors, especially cilantro and parsley. At lower levels it will reinforce a fatty note in flavors like tallow, lard and schmaltz, and at very low levels it will even enhance fruit flavors like citrus, melon and guava.

►**Bedoukian**; www.bedoukian.com

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