



Organoleptic Characteristics of Flavor Materials

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1-Tetradecanal (synonym: myristaldehyde; aldehyde C-14, myristic)

Source: Treatt

FEMA# 2763, CAS# 124-25-4

Natural occurrence: Pistachio, grapefruit, lemon, lime, mandarin, cucumber, coriander leaf, beef, chicken, pork, lamb, and peanut.

Odor: @ 100%. Waxy, nutty, fatty, tallowlike and slightly citrus rind.

Taste: @ 1 ppm. Waxy and fatty with body.

Taste: @ 2 ppm. Waxy, fatty, creamy, oily and slightly nutty with body.

Possible applications: This material will emphasize peely and heavier folded oil-type notes within citrus flavors and blends. At low levels, its fatty, waxy notes will add character to cilantro and parsley, as well as to meat flavors like beef, lamb, pork and fats thereof. It should also be considered as part of the deep-fried complex in corn chips, cracklings, donuts, french fries and other flavors of this ilk.

► **Treatt**; www.treatt.com

Spearmint oleoresin

Source: Lionel Hitchen

FEMA# 3031, CAS# 84696-51-5, natural (*Mentha spicata* L. (Lamiaceae))

Odor: @ 100%. Fresh, minty, green, cooling, herbal and leafy.

Taste: @ 2 ppm. Leafy, green, fresh, herbal and slightly cooling with a minty undertone.

Taste: @ 5 ppm. Fresh, minty, herbal, green and cooling.

Possible applications: This particular preparation offers a subtle rendition of spearmint, definitely different from the oil. At low levels, its fresh, leafy profile with a delayed cooling nuance will add naturalness to vegetable flavors like lettuce

and watercress, as well as herbal and tea flavors. At higher levels, it will add general, minty notes to compositions without screaming “spearmint.”

► **Lionel Hitchen**; www.lhitchenusa.com

Strawberry furanone ethyl ether, natural (synonym: 2,5-dimethyl-4-ethoxy-3(2H)-furanone)

Source: Alfrebro/Wild

FEMA# 4104, CAS# 65330-49-6, natural

Natural occurrence: Coffee

Odor: @ 100%. Apple, fresh, fruity, ciderlike and alcoholic.

Taste: @ 15 ppm. Brown, slightly nutty and grainy.

Taste: @ 30 ppm. Brown, musty, earthy, nutty and burnt sugarlike.

Possible applications: Brown flavors like caramel, toffee, brown sugar, maple are all good applications for this material. The sweet, brown notes of this product will also complement toasted notes in nuts and baked notes in flavors like bread and pie crust, cookie and potato skin.

► **Alfrebro/Wild**; sales@alfrebro.com

2-Ethyl-2-hexenal, natural

Source: Alfrebro/Wild

FEMA# 4612, CAS# 645-62-5, natural

Natural occurrence: Fried potato, beef, heated wheat flour, Cnidium species.

Odor: @ 1%. Cooling, green, musty, sweet, minty, herbal and fruity.

Taste: @ 1 ppm. Fruity, applelike and slightly grainy.

Taste: @ 2 ppm. Fruity, applelike, green, waxy, oily and slightly musty and potato-like.

Possible applications: The unusual combination of characteristics in this product will add fruitiness to apple, pear, guava, kiwi and quince flavors. At lower levels, it can be used to contribute to grain notes in whole wheat bread flavors.

► **Alfrebro/Wild**; sales@alfrebro.com

Hexyl cinnamic aldehyde, natural

Source: Alfrebro/Wild

FEMA# 2569, CAS# 101-86-0, natural

Natural occurrence: Cooked rice, chamomile.

Odor: @ 1%. Sweet, floral, green, slightly powdery with a hint of rice.

Taste: @ 1 ppm. Slightly floral, sweet and cooked ricelike.

Taste: @ 2 ppm. Floral, waxy, soapy and musty.

Possible applications: The delicate cooked rice note of this chemical can easily be overlooked because of its dominant

floral notes. Using it at dosages lower than 1 ppm will certainly enhance rice flavors. At higher levels, it will contribute floral notes to floral flavors like jasmine tea, honey, lychee, rambutan, pear, apple and plum.

► **Alfrebro/Wild**; sales@alfrebro.com

4-Hydroxy-4-methyl-7-*cis*-decenoic acid γ -lactone (synonyms: 5-(*cis*-3-hexenyl) dihydro-5-methyl-2(3H) furanone; lactone of *cis*-jasmane)

Source: SAFC

FEMA# 3937, CAS# 70851-61-5

Not yet found in nature.

Odor: @ 1%. Oily, creamy, buttery and slightly brown with a coconut nuance.

Taste: @ 5 ppm. Creamy, milky, rich, oily and nutty.

Taste: @ 10 ppm. Creamy, oily, milky, rich and slightly coconutlike.

Possible applications: The rich, creamy, oily notes of this lactone will deliver depth and aftertaste to dairy flavors like milk, cream, butter and fresh cheeses. Those same qualities will enhance the fatty acids in nut flavors like pecan, macadamia, Brazil nut and coconut. Sweet brown flavors will also benefit, especially toffee, caramel, dulce de leche, custard, vanilla, butterscotch and chocolate. On the fruit side, it can be used to expand the lactonic profile of peach, apricot, strawberry and mango.

► **SAFC**; www.safc.com

Coffee oil, subcritical, natural, FG

Source: SAFC

GRAS, CAS# 8001-67-0, natural, (*Coffea arabica* L. (Rubiaceae))

Odor: @ 100%. Roasted, ashy, coffee and slightly coallike.

Taste: @ 5 ppm. Roasted, burnt, slightly nutty, coffee with a hint of cocoa.

Taste: @ 10 ppm. Ashy, roasted, burnt, coffee, oily and mochalike.

Possible applications: There's no surprise that this material will reinforce, if not carry the profile in all flavors of its namesake, especially burnt espresso types. Other flavors in which it will add a dark interest are chocolate, meat, barbecue, caramel, toffee, molasses and tobacco.

► **SAFC**; www.safc.com

Cocoa extract

Source: Ventos/Indesso

GRAS, CAS# 84649-99-0, natural (*Theobroma cacao* L. (Malvaceae))

Odor: @ 100%. Sweet, cocoa, brown, creamy and dark chocolatelike.

Taste: @ 0.25% in 5% sucrose water. Sweet, creamy, powdery and milk chocolatelike.

Possible applications: This characteristic extract will add creamy, milky notes to chocolate, cocoa, fudge and mocha flavors. It will also serve as a very good base for "WONFing."

► **Ventos**; www.ventos.com

Green tea extract

Source: Apple Flavor & Fragrance

GRAS, natural (*Camellia sinensis* (L.) Kuntze (Theaceae))

Odor: @ 100%. Dry, herbal, earthy, leafy and slightly vegetable-like, with a whiff of the barnyard.

Taste: @ 0.05%. Green, leafy, astringent and bitter.

Taste: @ 0.10%. Green tea, herbal, slightly floral, dry and astringent.

Possible applications: Of course, this material will be very useful in green tea flavors because of its very characteristic profile. It will also perform well in herbal flavors intended for beverage applications.

► **Apple Flavor & Fragrance**; www.cnaff.com

Black tea essence

Source: Apple Flavor & Fragrance

GRAS, natural (*Camellia sinensis* (L.) Kuntze (Theaceae))

Odor: @ 100%. Sweet, brown, honeylike, haylike, floral and tea.

Taste: @ 0.05%. Tea, leafy, floral and astringent.

Taste: @ 0.10%. Tea, leafy, floral and astringent.

Possible applications: This material is highly characteristic of quality black teas. Not only will it grace that type of flavor, it will contribute interesting notes to raspberry, blackberry, blackcurrant and other berry flavors. It can also serve as a base for adding other fruit and spice flavors intended for beverage applications.

► **Apple Flavor & Fragrance**; www.cnaff.com

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