



Organoleptic Characteristics of Flavor Materials

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Chocolate essence extract, natural, U1-1130349.VD29

Source: Kerry Group

GRAS, natural, *Theobroma cacao* L.

Odor: @ 100%. Sweet, cocoa, chocolate, powdery, slightly acidic and creamy.

Taste: @ 0.1%. Cocoa, chocolate and powdery.

Taste: @ 0.2%. Cocoa, powdery, chocolate, slightly winey and creamy.

Possible applications: This extract will be useful in all cocoa and chocolate flavors, especially those intended for dairy and alcoholic beverages.

► **Kerry Group**; www.kerrygroup.com

4-Acetoxy-2,5-dimethyl-3(2H)-furanone (synonym: fraision acetate)

Source: M & U International

FEMA# 3797, CAS# 4166-20-5

Natural occurrence: Yellow passion fruit, peanut and strawberry.

Odor: @ 100%. Sweet, sharp, brown, burnt sugarlike and caramellic.

Taste: @ 5 ppm. Sweet, burnt sugarlike, slightly maltol-like and strawberrylike.

Taste: @ 10 ppm. Sweet, caramellic, brown, slightly toasted, slightly fruity and maltol-like.

Possible applications: The synonym cited above is derived from the French word for strawberry (*fraise*) for which this material will enhance cooked, jammy notes. Other flavors where it will add sweet, brown notes are caramel, toffee, molasses, maple, browned butter, pecan, hazelnut, cookie and bread crust. On the savory flavor side, it will add sweet, roasted

notes in meat and poultry, soy sauce, grilled vegetables and barbeque.

► **M&U International**; www.mu-intel.com

Dihydrocoumarin, natural

Source: Aromiens International Inc.

FEMA# 2381, CAS# 119-84-6, natural

Natural occurrence: Yellow sweet clover and deertongue.

Odor: @ 1%. Sweet, haylike, spicy and coconutlike.

Taste: @ 1 ppm. Sweet, spicy, cinnamic, balsamic and creamy.

Taste: @ 2 ppm. Sweet, spicy, cinnamic, balsamic and creamy.

Possible applications: This natural version of dihydrocoumarin includes spice notes and the typical coumarinic notes. It will add a twist to cinnamon and other spice flavors and their blends. Other flavors in which to consider its use are anise, cherry, vanilla, cream, root beer, cola and cream soda.

► **Aromiens International**; www.aromiens.com

2-Methoxy-4-vinylphenol, 1% in PG, natural

Source: Charkit

FEMA# 2675, CAS# 7786-61-0, natural

Natural occurrence: Beer, coffee, peanut, rum, strawberry, tea, tobacco, vanilla and whisky.

Odor: @ 1%. Sweet, slightly vanillalike, smoky, clovelike, spicy, slightly brown and medicinal.

Taste: @ 1 ppm. Woody, clovelike, spicy and tongue-numbing.

Taste: @ 2 ppm. Chocolatelike, spicy, clovelike, slightly smoky and tongue-numbing.

Possible applications: The spicy, smoky profile of this chemical will fit nicely into Indonesian vanilla-type flavors, as well as cured meats like ham, bacon and jerky. Other flavors where it will add character are barbeque, clove, cinnamon, coffee and dark chocolate.

► **Charkit**; www.charkit.com

Geranium oil rectified, FLG

Source: Laboratoire Monique Remy/IFF

FEMA# 2508, CAS# 800-46-2, natural

Odor: @ 1%. Sweet, floral, rosy, waxy, perfumy and green.

Taste: @ 1 ppm. Floral, perfumy, waxy and slightly soapy, with a fruity undertone.

Taste: @ 2 ppm. Floral, perfumy, waxy and slightly haylike, with low berry notes.

Possible applications: This essential oil will contribute lovely rosy, floral notes to apricot, pear, peach, guava, hibiscus, lychee, rambutan, raspberry, lemon and orange flavors, when used at very low levels. Black tea, tobacco and liqueur flavors are also interesting applications to consider.

► **Laboratoire Monique Remy/IFF**; www.iff.com

Pyrazines mix #2, natural

Source: Excellentia International

FEMA# various, CAS# various, natural

Odor: @ 100%. Earthy, musty, nutty, slightly chocolatelike and vegetablelike.

Taste: @ 1 ppm. Earthy, cocoalike, potatolike, brown and nutty.

Taste: @ 2 ppm. Earthy, potatolike, coffeelike and nutty.

Possible applications: This pyrazine, with its strong, earthy notes, will add character to potato, cocoa, coffee, walnut, hazelnut, peanut, bitter chocolate, cauliflower, broccoli, and root vegetables like carrot and beet.

► **Excellentia International**; www.excellentiainternational.com

2,6-Dimethoxy phenol - ABT# 1593

Source: Advanced Biotech

FEMA# 3137, CAS# 91-10-1, natural

Natural occurrence: Coffee, tobacco, bonito, rum and whisky.

Odor: @ 1%. Sweet, vanillinlike, spicy, slightly fatty and phenolic.

Taste: @ 2 ppm. Sweet, warm, spicy and phenolic.

Taste: @ 4 ppm. Sweet, vanillinlike, spicy and phenolic, with a smoky undertone.

Possible applications: This intriguing material will lend sweet, smoky notes to vanilla, smoked fish, bacon, ham and smoked cheese flavors. Other flavors it will shine in are root beer, cola, clove, ginger, cinnamon and tobacco.

► **Advanced Biotech**; www.adv-bio.com

2-Methyltetrahydrofuran-3-thiol acetate

Source: Treatt

FEMA# 4686, CAS# 252736-41-7

Not yet found in nature.

Odor: @ 0.1%. Meaty, sulfurous, alliaceous and eggy.

Taste: @ 0.5 ppm. Meaty, sulfurous and onionlike.

Taste: @ 1 ppm. Eggy, meaty, onionlike and savory.

Possible applications: Savory flavors are the obvious targets for this powerful material. Cooked egg, liver, boiled meats, bouillon and onion all come to mind, as well as flavors for pet food.

► **Treatt**; www.treatt.com

γ-Ionone

Source: Aromiens International Inc.

FEMA# 3175, CAS# 79-76-5

Natural occurrence: Tomato.

Odor: @ 0.1%. Sweet, perfumy, earthy, fruity and berrylike.

Taste: @ 1 ppm. Earthy, berrylike and perfumy.

Taste: @ 2 ppm. Earthy, berrylike and candylike.

Possible applications: This particular ionone is fruitier and less perfumy than the α and β forms. Its berrylike note makes it a good choice for flavors of that ilk, especially raspberry, blackberry, blueberry, grape, cherry and all their blends. Its

earthy quality will also give an interesting twist to root vegetables like beet and carrot, although at lower dosages than stated above.

► **Aromiens International**; www.aromiens.com

Spiro(2,4-dithia-1-methyl-8-oxabicyclo(3.3.0)octane-3,3'-(1'-oxa-2'-methyl)cyclopentane) W327000

Source: Sigma-Aldrich

FEMA# 3270, CAS# 38325-25-6

Not yet found in nature.

Odor: @ 0.1%. Meaty, sulfurous, savory, fatty and bready.

Taste: @ 1 ppm. Meaty, porklike, savory and condensed milklike.

Taste: @ 2 ppm. Meaty, hamlike, porklike, brown, savory and cooked.

Possible applications: First of all, this product needs a nickname.

Its very interesting profile will be welcomed in many savory flavors like meat, especially chicken and pork, gravy, bread, yellow and white cakes, bouillon and cooked milk.

► **Sigma-Aldrich**; www.sigmaaldrich.com

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