



Organoleptic Characteristics of Flavor Materials

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Organoleptic Evaluation Panel

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- Carl Holmgren, consulting flavor chemist
- William Jaggard, Bell Flavors & Fragrances
- Tom Gibson, creative director, Silesia Flavors
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Natural occurrence information is from Leffingwell & Associates. Suppliers of most materials found in this report can be located in *Allured's Flavor & Fragrance Materials*, published in print and online by Allured Business Media. Learn more at www.perfumerflavorist.com/ffm.

Suppliers: Suggest materials for evaluation to Judith Michalski; judithmichalskillc@gmail.com.

Blood Orange 5-Fold

Source: Lionel Hitchen

FEMA# 2825, CAS# 8028-48-6

Odor: @ 100%. Sweet, peely, aldehydic and orangelike.

Taste: @ 5 ppm. Orange/mandarinlike, peely and aldehydic.

Taste: @ 10 ppm. Orange/mandarinlike, peely and aldehydic.

Possible applications: This material has a very nice clean, full-bodied quality which will fit well into all orange and citrus blend flavors.

► **Lionel Hitchen;** www.ltheo.co.uk

Cycloionone

Source: Vigon International

FEMA# 3822, CAS# 5552-30-7

Natural occurrence: Cognac, champaca concrete, osmanthus, passion fruit.

Odor: @ 1%. Fruity, cedarlike, berrylike and cooling.

Taste: @ 0.1 ppm. Fruity, berrylike, woody and slightly waxy.

Taste: @ 1 ppm. Cedarlike, berrylike and orrislike.

Possible applications: This material will find a good home in berry flavors like raspberry, blackberry, cherry, and grape. It will also add depth and interest to red wine flavors as well as red licorice.

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

4-Decenoic Acid

Source: DeLong Chemicals America

FEMA# 3914, CAS# 26303-90-2

Natural occurrence: Beer and hops.

Odor: @ 1%. Savory, fatty and meaty.

Taste: @ 10 ppm. Fatty and savory.

Taste: @ 20 ppm. Fatty, rich, meaty and savory.

Possible applications: This material gives "fattiness" without oxidative notes. Its rich, savory qualities will add depth to chicken, beef and creamy cheese flavors, such as cream cheese, brie and chevre, as well as other dairy products. Of course, it is a "natural" for fat replacers.

► **DeLong Chemicals;** www.delongchemicals.com

4-Ethyl Octanoic Acid

Source: DeLong Chemicals America

FEMA# 3800, CAS# 16493-80-4

Natural occurrence: Lamb, mutton, goat cheese, costus root, tobacco.

Odor: @ 1%. Waxy, fatty, meaty with an underlying animalic note.

Taste: @ 2 ppm. Fatty, meaty, waxy and oxidized.

Taste: @ 5 ppm. Waxy, oxidized, savory, meaty and animalic.

Possible applications: This material is highly reminiscent of goatiness and is useful in all flavors of that ilk, such as goat butter, milk, *cajeta* (goat's milk caramel) and cheese. It is also applicable to bovine as well as ovine dairy type flavors.

► **DeLong Chemicals America;** www.delongchemicals.com

cis-3-Hexenyl Propionate

Source: Fontarome

FEMA# 3933 CAS# 33467-74-2

Natural occurrence: Mango, plum, black tea, thyme.

Odor: @ 1%. Green, unripe, fruity and sweet.

Taste: @ 2 ppm. Green, leafy, fruity with fresh nances.

Taste: @ 4 ppm. Green, fruity (apple, pear), fresh with slightly vegetablelike notes.

Possible applications: With its fruity, green notes *cis*-3-hexenyl propionate will add freshness to pear, apple, and pineapple. It will also enhance the green notes of guava, green tea and tropicals like green mango.

► **Fontarome;** www.fontaromechemical.com

Popcorn Pyrimidine (synonym: 5,7-Dihydro-2-Methylthieno[3,4-d]Pyrimidine)

Source: DeLong Chemicals America

FEMA# 3338, CAS# 36267-71-7, Not yet found in nature

Odor: @ 1%. Nutty, popcorn, roasted and brown.

Taste: @ 1 ppm. Nutty and brown.

Taste: @ 4 ppm. Sweet, caramellic, brown and nutty.

Possible applications: This material will enhance popcorn and corn flavors, nut flavors, especially hazelnut and peanut, browned butter, caramel, toffee and other sweet brown flavors. It can also reinforce baked notes in cookies, bread, crackers, etc.

► **DeLong Chemicals America;** www.delongchemicals.com

Resinoid Benzoin M 0053277

Source: Mane

FEMA# 2133 CAS# 9000-72-0

Odor: @ 1%. Sweet, balsamic, slightly fruity, vanillalike with resinous undertones.

Taste: @ 5 ppm. Sweet, spicy and resinous.

Taste: @ 10 ppm. Sweet, resinous, dried fruitlike with vanillalike nuances.

Possible applications: With its sweet, spicy notes this material will blend well in spice flavors like cinnamon and clove. It will also enhance vanilla flavors as well as dried fruit type flavors, especially dark cherry, raisin, prune, apricot, etc.

► **Mane;** www.mane.com

Resinoid Vanilla M 0057511

Source: Mane

FEMA# 3106, CAS# 98450-63-5

Odor: @ 100%. Vanilla, sweet, woody, slightly spicy and resinous.

Taste: @ 0.05%. Vanilla, resinous and slightly spicy.

Taste: @ 0.10%. Vanilla, sweet, resinous and brown.

Possible applications: This extract of vanilla is highly characteristic and will blend well in any vanilla or chocolate flavor. Its sweet brown notes will also complement caramel, toffee, maple, coffee and *dulce de leche* flavors to name a few.

► **Mane;** www.mane.com

Styrallyl Acetate, Natural

Source: Wen International

FEMA# 2684, CAS# 93-92-5

Natural occurrence: Clove, gardenia, avocado.

Odor: @ 1%. Fruity, green, floral and berrylike with a brilliant top note.

Taste: @ 5 ppm. Fruity, floral, and green.

Taste: @ 10 ppm. Green, sharp, fruity, floral and fresh.

Possible applications: This material will fit well into berry

flavors, especially cranberry, raspberry, cherry and strawberry. It will also bring out the sweet fruitiness in rhubarb and, at lower levels, plum flavors.

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

Whiskey Lactone (synonym: Oak Lactone; Methyl Octalactone)

Source: Wen International

FEMA# 3803, CAS# 39212-23-2

Natural occurrence: Cognac, rum, sherry, Scotch whiskey, bourbon, port wine.

Odor: @ 1%. Coconutlike, coumarinlike, sweet, slightly creamy with herbal, celerylike notes.

Taste: @ 8 ppm. Sweet, coconut and coumarinlike and slightly celerylike.

Taste: @ 15 ppm. Sweet, coconut and coumarinlike, slightly brown, celerylike and slightly creamy.

Possible applications: Whiskey lactone can be beneficial in coconut, nut, brown and vanilla flavors as well as dairy flavors at low levels. Where it will really shine, however, is in alcoholic flavors, like whiskey, rum and sherry, where it will help supply the mellow, cask notes that result from these products aging in wooden barrels.

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

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