



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
- Robert Pan, Bell Flavors & Fragrances

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.

Champignol (Synonym: (3R)-Oct-1-en-3-ol)

Source: Bedoukian

FEMA# 4492, CAS# 3687-48-7

Natural occurrence: Coffee.

Odor: @ 1%. Mushroomlike, musty, earthy and slightly mold-ripened cheeselike.

Taste: @ 3 ppm. Mushroomlike, musty and mold-ripened cheeselike.

Taste: @ 9 ppm. Earthy, mushroomlike, musty and mold-ripened cheeselike.

Possible applications: This isomer of 1-octen-3-ol is earthy and mushroomy, as one would expect, making it a given for mushroom flavors. With its additional mold-ripened cheese note it will also add interest to blue, gorgonzola, brie, Camembert and other cheese flavors of this type.

► **Bedoukian**; www.bedoukian.com

Everlasting Resinoid M0057510 (Immortelle)

Source: Mane

FEMA# 2592, CAS# 90045-56-0

Odor: @ 1%. Herbal, dried fruitlike, slightly spicy, green with woody undertones.

Taste: @ 5 ppm. Green and fresh.

Taste: @ 10 ppm. Herbal, woody, slightly floral, dry with floral notes.

Possible applications: Although not a standout on its own, this product will enhance the herbal notes in cordials, dried fruit, oral hygiene and other mint flavors.

► **Mane**; www.mane.com

cis-3-Hexenoic Acid, Natural

Source: Bedoukian

FEMA# 4493, CAS# 17745-43-5

Natural occurrence: Banana, beer, cocoa, tea, grape, kiwi, raspberry.

Odor: @ 1%. Fruity, green apple, vegetablelike and sweaty with waxy, berrylike nuances.

Taste: @ 8 ppm. Green, apple skinlike, fruity and slightly waxy.

Taste: @ 15 ppm. Bodied, green, vegetablelike, fruity with maltol-like sweetness.

Possible applications: This material will find good use in berries, especially raspberry and strawberry, as well as apple, pear and tropicals. Its fruity notes will also blend well in cheese flavors, especially Italian types like parmesan and asiago.

► **Bedoukian**; www.bedoukian.com

Homomenthyl Acetate

Source: Bedoukian

FEMA# 4512, CAS# 67859-96-5, Not yet found in nature

Odor: @ 100%. Slightly floral, slightly green, softly cooling, anisic with an underlying black pepper note.

Taste: @ 10 ppm. Herbal, minty and slightly spicy.

Taste: @ 20 ppm. Green, spicy, herbal and slightly floral.

Possible applications: Homomenthyl acetate has softly spicy and minty qualities which can be used to compliment clove, cinnamon, peppermint and spearmint flavors. It certainly won't be the star of the show, but it will lend a tempering depth to these types of flavors.

► **Bedoukian**; www.bedoukian.com

Labdanum Resinoid M0020046

Source: Mane

FEMA# 2610, CAS# 84775-64-4

Odor: @ 1%. Sweet, woody, piney, resinous, floral with incenselike nuances.

Taste: @ 5 ppm. Woody, piney, sweet, berrylike with ambergrislike undertones.

Taste: @ 10 ppm. Woody, musky, sweet, floral with an underlying dark fruit note.

Possible applications: This is another material with very complex organoleptic qualities. It will enhance and deepen fruit flavors like blueberry, blackberry, black currant, Concord grape, strawberry and raspberry, as well as flavors for tobacco, wine, cordials, whiskey and cola.

► **Mane;** www.mane.com

trans-2-Nonenyl Acetate

Source: Bedoukian

FEMA# 4552, CAS# 30418-89-4

Natural occurrence: Strawberry.

Odor: @ 1%. Waxy, green, slightly musty, melonlike with fatty undertones.

Taste: @ 3 ppm. Waxy, green, cucumberlike and musty.

Taste: @ 7 ppm. Oxidized, fatty, waxy, green, vegetablelike and cucumberlike.

Possible applications: At low levels *trans*-2-nonenyl acetate can be used effectively to enhance the characterizing notes in watermelon, honeydew, cantaloupe and cucumber flavors. Care must be taken to not overdose on this compound lest oxidized off notes result. This may also be used judiciously in fat-type flavors.

► **Bedoukian;** www.bedoukian.com

Olibanum Resinoid M0020018 (Frankincense)

Source: Mane

FEMA# 2816, CAS# 8016-36-2

Odor: @ 1%. Terpenelike, piney, woody, perfumey, green and resinous.

Taste: @ 10 ppm. Herbal, black pepperlike, woody and perfumey.

Taste: @ 20 ppm. Black pepperlike, perfumey, sweet and terpenelike.

Possible applications: This particular olibanum extractive has an extremely complex and rich aroma and taste. It will add depth and interest to cordial-type flavors like chartreuse, anisette and absinthe, to tropical flavors like mango, kiwi and passionfruit, to citrus blends, to name just a few.

► **Mane;** www.mane.com

Pyrazine Mix #18, Natural

Source: A.M. Todd

Odor: @ 0.25%. Nutty, earthy, roasted and cocoalike.

Taste: @ 10 ppm. Nutty, musty, peanuty and cocoalike.

Taste: @ 20 ppm. Cocoalike, nutty, slightly green and peanuty.

Possible applications: A welcome addition to the natural pyrazine category this blend consists predominantly of 2,3,5-trimethyl pyrazine with smaller amounts of with 2-ethyl-5-, 2-ethyl-6- and 2-ethyl-3- methyl pyrazines. It will fit very nicely into chocolate, nut (especially hazelnut and peanut) and any combination thereof,

as well as coffee, roasted meat, potato and brown flavors.

► **A.M. Todd;** www.amtodd.com

Pyrazine Mix #20 Natural

Source: A.M. Todd

Odor: @ 0.25%. Nutty, earthy, cocoalike, musty and slightly roasted.

Taste: @ 5 ppm. Chocolatelike and slightly nutty.

Taste: @ 10 ppm. Chocolatelike, nutty, slightly roasted and slightly malty.

Possible applications: This pyrazine mixture is comprised primarily of 2,5-dimethyl pyrazine with lesser amounts of 2,6- and 2,3- dimethyl pyrazines and 2-ethyl pyrazine.

Like Pyrazine Mix #18, it will enhance chocolate and nut (especially walnut, pecan and peanut) flavors. Other good applications are brown flavors like malt, caramel and burnt sugar.

► **A.M. Todd;** www.amtodd.com

trans-2-Tridecen-1-ol

Source: Bedoukian

FEMA# 4617, CAS# 68480-25-1

Natural occurrence: Andrena bees.

Odor: @ 1%. Fatty, soapy, green, cilantrolike with a brothy undertone.

Taste: @ 2 ppm. Waxy, soapy, cilantrolike and herbal.

Taste: @ 4 ppm. Soapy, fatty (animal), brothy, green and cilantrolike.

Possible applications: This material will lend depth to herbal compositions like cilantro and coriander. The fatty, green notes will also blend well in citrus, melon and cucumber. At higher levels the brothy, fatty character will enhance meat flavors like chicken and lamb.

► **Bedoukian;** www.bedoukian.com

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