

Organoleptic Characteristics of Flavor Materials

Judith Michalski, Senior Flavorist, abelei flavors; jmichalski@abelei.com

Flavorcon Panelists

- Judith Michalski
- Cyndie Lipka, Senior Flavorist, Bell Flavors & Fragrances
- · Gerard Mosciano, Consulting Flavor Chemist
- Robert Pan, Principal Development Scientist, Spicetec Flavors & Seasonings
- · Deborah Barber, Senior Scientist, Kraft Foods
- · Carl Holmgren, Consulting Flavor Chemist
- Tom Gibson, Creative Director, Silesia Flavors

Elderflower absolute

Source: Robertet

FEMA# 2406, CAS# 68916-55-2, natural, Sambucus canadensis

and S. nigra

Odor: @ 100%. Sweet, brown, herbal, slightly cooling, tobaccolike, dried fruitlike and haylike.

Taste: @ 2 ppm. Herbal, green, slightly brown and tealike.

Taste: @ 4 ppm. Herbal, green, sweet, slightly licoricelike and tobaccolike.

Possible applications: This lovely flower extract will enhance brown fruit flavors like date, raisin, tamarind, prune, fig and cooked apple. A touch of it in dark cherry, apricot, strawberry and peach will add depth and body. Other flavors that will benefit from its use are tobacco, honey, licorice and herbal teas.

➤ Robertet; www.robertet.com

Orange oil Spain

Source: Ventos

FEMA# 2825, CAS# 8008-57-9, natural, Citrus sinensis L. Osbeck

Odor: @ 100%. Sweet, juicy, citrus, pulpy and slightly estery.

Taste: @ 10 ppm. Juicy, fresh, fruity, sweet and pulpy.

Taste: @ 20 ppm. Full-bodied, juicy, fresh, fruity, slightly tart and slightly peely.

Possible applications: The whole fruit notes of this particular oil will offer fresh, just-squeezed juice notes to Orange Julius and Creamsicle-type flavors. Its relative lack of heavy peel notes will be a welcome addition to all other citrus, punch and bubble gum flavors where lighter, fruity notes are desired.

➤Ventos; www.ventos.com

Laurel leaf oil

Source: Ventos

FEMA# 2125, CAS# 8007-48-5, natural, Lauris nobilis L.

Odor: @ 100%. Cooling, eucalyptol-like, fresh, spicy, slightly floral and aromatic.

Taste: @ 1 ppm. Spicy, herbal, cooling, green and slightly terpency.

Taste: @ 2 ppm. Spicy, cooling, green, fresh, and slightly oily with a citrus nuance.

Possible applications: Mint and oral care flavors are good applications for this product, which is usually thought of as a savory ingredient. Other non-traditional flavors which will be made fresher and crisper by its use are melon, cucumber, green pepper and celery, albeit at threshold levels.

➤Ventos; www.ventos.com

Mimosa absolute. French FLG

Source: Laboratoire Monique Remy/IFF

FEMA# 2755, CAS# 8031-03-6, natural, *Acacia decurrens* Willd., variety *dealbata*

Odor: @ 100%. Sweet, haylike, slightly cooling, balsamic, warm, slightly brown and honeylike, with a tobacco undertone.

Taste: @ 2 ppm. Sweet, haylike, warm, brown and slightly oily.Taste: @ 4 ppm. Sweet, slightly floral, haylike, balsamic and slightly herbal.

Possible applications: A touch of this premium material will add a unique quality to many fruit flavors like strawberry, cranberry, blueberry, raspberry, blackberry, honeydew melon, pear and apple. Honey, mead, vanilla, tobacco, cream soda and marshmallow flavors should also be thought of for its use.

➤Laboratoire Monique Remy/IFF; www.iff.com

2-Methyl-2-pentenoic acid, natural

Source: Advanced Biotech

FEMA# 3195, CAS# 3142-72-1

Natural occurrence: Strawberry, snake fruit and tobacco.

Odor: @ 100%. Sweet, acidic, fruity, berrylike, musty, sweaty and cheeselike.

Taste: @ 25 ppm. Acidic, slightly metallic, astringent and berrylike.

Taste: @ 50 ppm. Acidic, astringent, fruity and berrylike.

Possible applications: This material has been used extensively in strawberry flavors, where it works very well. Other areas where it will complement the fruity-acid complex are raspberry, blueberry and cranberry, and tropicals like cherimoya,

papaya and guava, as well as in aged cheeses, especially Parmesan.

➤ Advanced Biotech; www.adv-bio.com

Methyl nicotinate

Source: Sigma Aldrich

FEMA# 3709, CAS# 93-60-7

Natural occurrence: Beer, brandy, coffee, guava, hazelnut, jasmine, strawberry, tobacco and vanilla.

Odor: @ 1%. Sweet, warm, coumarinic, slightly brown and slightly vanillinlike, with an underlying aminelike note.

Taste: @ 10 ppm. Sweet, astringent, slightly brown and slightly vanillinlike.

Taste: @ 20 ppm. Sweet, vanillic, mouth-drying and slightly leatherlike, with a tobaccolike aftertaste.

Possible applications: The astringent, drying notes of this ingredient at higher levels make it a very good material for giving the mouthfeel of smoking tobacco. At levels lower than 10 ppm, it may be used in vanilla flavors to simulate the astringency of extract notes, and in cola, ginger ale and root beer flavors to add sweetness and the astringency of carbonation.

➤Sigma Aldrich; www.sigmaaldrich.com

Nutmeg absolute

Source: Robertet

GRAS, CAS# 84082-68-8, natural, *Myristica fragrans* Houtt. *Odor:* @ 100%. Sweet, warm, spicy, woody, balsamic and slightly woody.

Taste: @ 1 ppm. Warm, spicy, sweet, woody and balsamic.

Taste: @ 2 ppm. Warm, spicy, sweet, woody and balsamic.

Possible applications: The sweet spiciness of this product will shine in all sweet spice flavors, as well as in custard, eggnog, rum, cola, vanilla and liqueurs.

➤ Robertet; www.robertet.com

Methyl 1-propenyl sulfide

Source: Treatt

FEMA# 4574, CAS# 10152-77-9

Natural occurrence: Asafoetida and roasted sesame seeds. Odor: @ 0.01%. Sulfurous, alliaceous, cooked greens and savory. Taste: @ 0.05 ppm. Savory, brothy, oniony and slightly meaty. Taste: @ 0.10 ppm. Onionlike and garliclike, brothy and savory. Possible applications: The savory, alliaceous qualities of this material will enhance many flavors, including onion, garlic,

bouillon, gravy, beef, pork, chicken and liver sausage.

➤Treatt; www.treatt.com

Rose Water Essential FLG

Source: Laboratoire Monique Remy/IFF

FEMA# 2993, CAS# 84604-12-6, natural, *Rosa centifiolia Odor*: @ 100%. Floral, rose, sweet, slightly spicy and powdery. *Taste*: @ 0.5 ppm. Fruity, sweet and floral, with a tropical nuance.

Taste: @ 1 ppm. Fruity, floral, rosy and petal-like.

Possible applications: Rose water is a by-product of water distillation of rose petals. Although it shares some organoleptic similarities with rose oil, it has its own unique profile. This is evident in the predominantly fruity profile, which will fit very nicely into tropical flavors like lychee, rambutan, mango and hibiscus, as well as apple (Pink Lady, especially), pear, peach, strawberry, apricot, raspberry, blackberry and blueberry. Other flavors where it can add a lovely twist are tea, herbal tea and those intended for alcoholic drinks.

➤Laboratoire Monique Remy/IFF; www.iff.com

1-(2-FurfuryIthio)-propanone

Source: Charkit

FEMA# 4676, CAS# 58066-86-7

Not yet found in nature.

Odor: @ 1%. Skunky, sulfurous, slightly gasolinelike, savory and roasted coffeelike.

Taste: @ 1 ppm. Roasted coffee and dark chocolatelike.

Taste: @ 2 ppm. Sulfurous, meaty, roasted coffeelike and dark chocolatelike.

Possible applications: A little of this odiferous organic will go a long way in bringing true, deep-roasted notes to coffee without adding burnt notes. Mochas and chocolate flavors will be enriched as well. Those roasted notes will also be appreciated in beef, chicken, pork, grilled and barbecue flavors.

➤ Charkit; www.charkit.com

To purchase a copy of this article or others, visit www.PerfumerFlavorist.com/magazine.