

# Organoleptic Characteristics of Flavor Materials

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# **Organoleptic Evaluation Panelists**

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- Cyndie Lipka, Senior Flavorist, Prinova Flavors
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- Deborah Barber, Senior Scientist, Kraft Foods
- Carl Holmgren, Consulting Flavor Chemist
- Tom Gibson, Creative Director, Silesia Flavors

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#### **Honey Treattarome 9802**

Source: Treatt

GRAS, natural

*Odor*: @ 100%. Sweet, brown, slightly savory and characteristic. *Taste*: @ 0.05%. Sweet, brown, floral and characteristic.

- *Taste*: @ 0.10%. Sweet, brown, slightly toffeelike and characteristic.
- *Possible applications:* This distillate of honey will enliven flavors for tea and tobacco, as well as enhance browns like toffee, peanut, dried fruits and honey, of course.

### 2-Methyltetrahydrofuran-3-one, natural ABT# 1327 (synonym: coffee furanone)

Source: Advanced Biotech

FEMA# 3373, CAS# 3188-00-9, natural

*Natural occurrence:* Almond, wheat bread, chicken, hazelnut, guava, peanut and tomato.

Odor: @ 100%. Solventlike, brown, nutty, roasted and caramellic. *Taste:* @ 50 ppm. Brown, rumlike, savory, nutty and coffeelike. *Taste:* @ 75 ppm. Brown, rumlike, caramellic and slightly acrid. *Possible applications:* Sweet brown flavors are the primary appli-

cation for this furanone. Its brown, caramellic character will complement flavors like caramel, rum, hazelnut, brown sugar, coffee and Irish cream. Savory flavors like soy, au jus and grill notes for fruits are other good choices.

#### 4-Hydroxy-2,5-dimethyl-3(2H)-furanone, natural, ABT# 1545 (synonym: walnut furanone; strawberry furanone) *Source*: Advanced Biotech

FEMA# 3174, CAS# 3658-77-3, 57-55-6, natural

- *Natural occurrence:* Almond, hazelnut, gooseberry, pineapple, beef, malt, strawberry and popcorn.
- *Odor:* @ 100%. Sweet, brown, bread crustlike, nutty and slightly burnt.
- Taste: @ 2 ppm. Brown, sweet, fruity and pineapplelike.
- Taste: @ 5 ppm. Sweet, fruity, nutty, maltol-like and brown.
- *Possible applications:* This product is very useful in brown flavors like nut, caramel, coffee, cocoa, browned butter, dulce de leche and rum. It will also add jammy notes in fruit flavors, especially pineapple and strawberry, and will contribute to baked/roasted notes in bread and meat flavors.

# **Tangerine oil HCF**

Source: FMI

- FEMA# 3041, CAS# 8016-85-1, natural, Citrus tangerina
- Odor: @ 100%. Peely, citrus, slightly citronellalike and characteristic.
- *Taste:* @ 2 ppm. Sweet, peely, waxy, slightly green and citrus/ orangelike.
- *Taste:* @ 4 ppm. Sweet, waxy and citrus/orangelike, with a slight terpene note.
- *Possible applications:* This product can be well-used in citrus flavors and blends, especially tangerine, mandarin, orange and bergamot, as well as in apricot and mango.

# Coffeetone, natural ABT# 1067

Source: Advanced Biotech

Odor: @ 100%. Coffeelike, sweet, caramellic, roasted and slightly burnt.

Taste: @ 10 ppm. Brown, cocoalike and slightly nutty.

- *Taste:* @ 20 ppm. Brown, coffeelike, burnt and slightly dried fruitlike.
- *Possible applications:* This proprietary mix of naturals will reinforce roasted brown notes in coffee, cocoa, mocha, espresso and dried fruits like raisin, tamarind and fig. It can also contribute to roast qualities to meat flavors.

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#### 3-(Methylthio)-decanal

Source: Sigma-Aldrich

FEMA# 4734, CAS# 1256932-15-6

Not yet found in nature

*Odor:* @ 1%. Gassy, sulfurous, green, cruciferous, onionlike and meaty.

Taste: @ 0.1 ppm. Musty, meaty and fatty.

Taste: @ 0.2 ppm. Savory, gassy, fatty, meaty, brown and rich.

*Possible applications:* This new component to the FEMA list will lend savory, meaty notes to cooked vegetable and meat flavors, as well as those for soup, gravy and fat replacers.

# Ethyl *trans*-2-*cis*-4-decadienoate, natural

Source: Sigma-Aldrich

FEMA# 3148, CAS# 3025-30-7, natural *Natural occurrence:* Apple, pear, durian and quince.

*Odor:* @ 1%. Sweet, green, fatty, fruity, pearlike, applelike and fresh.

*Taste:* @ 1 ppm. Fruity, fresh, green and pulpy.

*Taste:* @ 2 ppm. Fresh, sweet, fruity, pearlike and applelike.

Possible applications: This characterizing component for pear will also fit very nicely into yellow and green apples, honeydew melon, and tropicals like kiwi, guava and lychee flavors. A touch in green onion, cucumber and green pepper will help to bring out fresh, bright notes.

#### 2-Ethyl-2,5-dihydro-4methylthiazole

Source: Sigma-Aldrich

FEMA# 4695, CAS# 41803-21-8

Natural occurrence: Onion.

*Odor:* @ 1%. Onionlike, savory and green, with a slight hint of blackcurrant.

*Taste:* @ 0.25 ppm. Catty and meaty. *Taste:* @ 0.50 ppm. Catty and meaty.

*Possible applications:* At very low levels this interesting chemical will add a tropical, catty character to blackcurrant, mango, peach, passion fruit, lychee, grape and white wine flavors. Alliaceous flavors like scallions and garlic will also benefit from its use.

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