



# Organoleptic Characteristics of Flavor Materials

Judith Michalski, Senior Flavorist, Bell Flavors & Fragrances; [jmichalski@bellff.com](mailto:jmichalski@bellff.com)

## Organoleptic Evaluation Panel

- Judith Michalski
- Tom Gibson, Creative Director, Silesia Flavors
- Carl Holmgren, Consulting Flavor Chemist
- Cyndie Lipka, Senior Flavorist, Bell Flavors & Fragrances
- Gerard Mosciano, Consulting Flavor Chemist
- Robert Pan, Senior Flavorist, Bell Flavors & Fragrances
- Susie Sadural, Consulting Flavorist

## Benzyl phenylacetate, natural

Source: Fleurchem

FEMA# 2149, CAS# 102-16-9

Natural occurrence: Champaca, narcissus

Odor: @ 100%. Sweet, floral, honeylike and baby powderlike with a hint of yeast.

Taste: @ 2 ppm. Sweet, honeylike, powdery and floral with a cocoa undertone.

Taste: @ 4 ppm. Heavy, honeylike, floral, powdery and cocolike.

Possible applications: Floral-type flavors will be enhanced by the use of this chemical as well as chocolate, malt and honey.

Other areas it should be considered for are in peach, apricot, raspberry, raisin, date and tobacco flavors.

►Fleurchem; [www.fleurchem.com](http://www.fleurchem.com)

## 4-Acetyl-2-methylpyrimidine

Source: Treatt

FEMA# 3654, CAS# 37860-38-2

Natural occurrence: Cooked beef

Odor: @ 1%. Nutty, brown, grainy and crackerlike.

Taste: @ 1 ppm. Sweet, nutty, brown, bready, toasted and cornlike with a hint of steamed rice.

Taste: @ 2 ppm. Sweet, toasted, bready, brown, cornlike and nutty.

Possible applications: This material can fit beautifully into almost any flavor that has roasted and/or toasted notes including nuts (especially pecan, macadamia, hazelnut and peanut), cocoa, caramel, butterscotch, toffee, browned butter, bread, rice, corn (sweet, tortilla and popcorn), coffee, oats and other grains. In the savory area, its characteristics will enhance not only roasted meat flavors, but seafood as well, especially shrimp and scallops.

►Treatt; [www.treatt.com](http://www.treatt.com)

## Ethyl 3-methylthiopropionate

Source: Frutarom

FEMA# 3343, CAS# 13327-56-5

Natural occurrence: Beer, Parmesan cheese, passion fruit, pineapple, kiwi, malt whiskey

Odor: @ 0.1%. Fruity, sweet, cruciferous, fermented, tropical and slightly cheesy.

Taste: @ 0.3 ppm. Fruity, fermented, fatty, slightly cheesy, vegetablelike and slightly alliaceous.

Taste: @ 1 ppm. Alliaceous, green, fruity, overripe/rotten, oily and slightly cheesy.

Possible applications: When used judiciously, the diverse notes of this material will enhance the sweet, ripe character of many fruits like pineapple, watermelon, cantaloupe, honeydew, passion fruit, kiwi and berries. However, if it's overused, it can easily push that desirable ripeness over the edge to rottenness (which would only be suitable for durian). The oily, fruity notes of ethyl-3-thiopropionate will also enhance hard, Italian cheese flavors like Parmesan, Romano and Grano Padano. Those same qualities will also add to the character of olive and olive oil-type flavors. Other areas where this chemical can be well-applied are in fresh onion, garlic, kimchi, wasabi and other cruciferous vegetable flavors.

►Frutarom; [www.frutarom.com](http://www.frutarom.com)

## Roasted Cumin Oleoresin

Source: Kancor

GRAS, CAS# 8014-13-9

Natural

Odor: @ 100%. Warm, spicy, oily earthy and slightly herbal.

Taste: @ 1 ppm. Warm, spicy, green and earthy.

Taste: @ 3 ppm. Spicy, green, fatty and herbal.

Possible applications: This very characteristic material can be used in spice blend flavors where cumin is a must, especially curry, garam masala, chili, adobos and baharat.

►Kancor; [www.kancorflavours.com](http://www.kancorflavours.com)

## Apple Essence 2500-fold, Fuji Type #24125

Source: Cvista

GRAS

Natural

Odor: @ 100%. Sweet, fresh, apple, winey, estery, slightly green, slightly spicy and ciderlike.

Taste: @ 0.05%. Fresh, fruity, apple, green, pulpy, slightly winey and slightly peely.

*Possible applications:* This very characteristic essence is primarily useful in apple flavors, but will also lend sweet, fresh, green, fruity notes to kiwi, guava, pear, quince and other pome fruits as well. Another obvious application is in apple and fruit juice blends.

► **Cvista;** [www.cvista.com](http://www.cvista.com)

### **Mango Ginger Extract GIMN-21007**

*Source:* Kancor

GRAS, CAS# 92456-82-1

*Natural*

*Odor:* @ 100%. Brown, spicy, gingerlike, earthy and woody.

*Taste:* @ 10 ppm. Brown, spicy and gingerlike.

*Taste:* @ 20 ppm. Spicy, woody, earthy and slightly terpeney.

*Possible applications:* Although mango ginger is part of the ginger family, it's more closely related to turmeric. This interesting material will add a different twist to sweet and savory spice blends as well as to Sen-Sen-type products, anise, licorice, tamarind, balsamic vinegar and tobacco flavors.

► **Kancor;** [www.kancorflavours.com](http://www.kancorflavours.com)

### **Lanceolata Extract**

*Source:* Treatt

FEMA# 4755 interim, CAS# 18315-52-3

*Natural*

*Odor:* @ 100%. Sweet, spicy, woody, herbal, black pepperlike, slightly cooling, black pepperlike with an underlying terpene freshness.

*Taste:* @ 2 ppm. Herbal, green, slightly spicy, warm and woody.

*Taste:* @ 5 ppm. Herbal, spicy, biting, woody, slightly tropical, slightly vegetablelike with a lingering throat burn

*Possible applications:* This soon-to-be FEMA registered plant extractive will be a welcome addition to the flavorists' toolbox.

At lower levels it can reinforce the herbal, green notes in flavors like basil, oregano, marjoram, etc. as well as in vegetable flavors, especially the cruciferous types like wasabi, broccoli, horseradish and cabbage. It will also find a home in tropical fruits like mango and passion fruit. Where it will really shine though will be in the trigeminal arena adding intriguing prickly, hot notes to spice flavors like ginger, cinnamon, clove, black pepper, chili, curry and other similar blends. Additional areas where it should be considered for use are in mints, cordials, oral care and alcoholic beverage flavors.

► **Treatt;** [www.treatt.com](http://www.treatt.com)

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