



Organoleptic Characteristics of Flavor Materials

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Organoleptic Evaluation Panel

- Judith Michalski
- Tom Gibson, creative director, Silesia Flavors
- Gerard Mosciano, consulting flavor chemist
- Robert Pan, senior flavorist, Bell Flavors & Fragrances
- Carl Holmgren, consulting flavor chemist
- Cyndie Lipka, flavor chemist, Sethness Greenleaf

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.

Spearmint Oleoresin AA012801

Source: Naturex

FEMA# 3031, CAS# 84696-51-5

Odor: @ 100%. Fresh, cooling, green, leafy, crisp and minty.

Taste: @ 10 ppm. Leafy, cooling, green and melonlike.

Taste: @ 20 ppm. Leafy, cooling, green, slightly bitter and spearmintlike.

Possible applications: This interesting material is not truly characteristic at the lower evaluation level and will enhance melon flavors, especially honeydew and cucumber. At higher levels it will add interest to mint and spice flavors and fresh natural notes to mojito-type beverages.

► **Naturex**; www.naturex.com

Mentha spicata "Nana" (Spearmint Oil)

Source: Berje

FEMA# 3032, CAS# 84696-51-5

Odor: @ 100%. Fresh, herbal, slightly dirty, weedy and minty.

Taste: @ 10 ppm. Fresh, minty and green, with a sweet, candylike nuance.

Taste: @ 20 ppm. Cooling, herbal, fresh, leafy and spearmintlike.

Possible applications: Spearmint oil "Nana" has a complex profile, more like a spearmint/peppermint type than just straight oil. It can be used to add a twist to all mint and oral hygiene type flavors.

► **Berje**; www.berjeinc.com

3-Mercaptohexyl Acetate, 0.1% in ETOH

Source: A.M. Todd

FEMA# 3851, CAS# 136954-20-6, Natural

Natural occurrence: Passion fruit, wine.

Odor: @ 0.1%. Sharp, sulfuraceous, onion/garlic and tropical with catty undertones.

Taste: @ 0.1 ppm. Tropical fruitlike, fresh and sulfuraceous.

Taste: @ 0.3 ppm. Tropical fruitlike, catty and sulfuraceous.

Possible applications: The tropical, catty notes of this material override the onion/garlic top notes, making it a wonderful addition to flavors such as lychee, rambutan, mango, passion fruit and guava, as well as peach, grapefruit, white grape and sauvignon blanc flavors.

► **A.M. Todd**; www.amtodd.com

Methyl Furfuryl Mercaptopropionate

Source: Penta

FEMA# 4538, CAS# 94278-26-9

Natural occurrence: Not yet found in nature.

Odor: @ 1%. Sulfuraceous, rubber, savory, cooked and meaty.

Taste: @ 1 ppm. Alliaceous, roasted meat, savory and bloody.

Taste: @ 3 ppm. Roasted meat, brothy, metallic and savory.

Possible applications: A good fit for roast meat flavors, methyl furfuryl mercaptopropionate will also complement grilled, browned and some tropical flavors, such as pineapple.

► **Penta**; www.pentamfg.com

Methyl 3-(Methylthio) Butyrate

Source: Frutarom

FEMA# 4166, CAS# 207983-28-6

Natural occurrence: Beer.

Odor: @ 0.1%. Slightly catty, rotten, slightly creamy, tropical fruitlike with a pervasive, cheesy undertone.

Taste: @ 0.1 ppm. Cheesy, fermented, metallic and tropical fruitlike.

Taste: @ 0.25 ppm. Overripe fruitlike, catty, tropical fruitlike and cheesy.

Possible applications: This compound possesses an impressive aroma that won't soon be forgotten. Despite that, it can grace tropical fruit flavors such as papaya and mango, as well as black currant, peach and ripe berries. It will also reinforce aged notes in cheese flavors like limburger, Swiss and cheddar.

►Frutarom; www.frutarom.com

CO₂ Extract Red Seaweed M0057500

Source: Mane

CAS# 92128-82-0

Odor: @ 1%. Barnyardlike, brown, slightly leathery and slightly floral with a fishy undertone.

Taste: @ 10 ppm. Slightly green, raw fish and oceanic.

Taste: 20 ppm. Fresh, raw fish, shellfish, slightly perfumey and brown.

Possible applications: This extract of red seaweed has a very disparate combination of notes but will blend well in any seafood flavor, and possibly maple and green tea as well.

►Mane; www.mane.com

Coffee Oil

Source: Berje

CAS# 84650-00-0

Odor: @ 100%. Roasted, ashy and burnt.

Taste: @ 10 ppm. Coffee, roasted and slightly nutty.

Taste: @ 20 ppm. Coffee, burnt, nutty and ashy.

Possible applications: This coffee oil has a typical high roast character and will enhance all flavors of the coffee, chocolate and mocha type. It will also add interest to other brown flavors, such as maple, caramel and cask notes in alcoholic flavors.

►Berje; www.berjein.com

Jasmin Acetoacetate (synonym: Ethyl 2-Hexylacetoacetate)

Source: IFF

FEMA# 4459, CAS# 29214-60-6

Natural occurrence: Not yet found in nature.

Odor: @ 100%. Sweet, fruity, floral and green.

Taste: @ 15 ppm. Floral, fruity and green.

Taste: @ 30 ppm. Bitter, green, soapy and fruity.

Possible applications: This material is a good choice for use in apple, berry, melon, rhubarb, tropical fruit, pear and watermelon flavors.

►IFF; www.iff.com

Stearic Acid

Source: Penta

FEMA# 3035, CAS# 57-11-14

Natural occurrence: Blue cheese, Swiss cheese, cooked beef, rum, saffron.

Odor: @ 100%. None.

Taste: @ 10 ppm in soy oil. Fatty, waxy, creamy and dairylike.

Taste: @ 20 ppm in soy oil. Fatty, nutty, rich and slightly cheesy.

Possible applications: Stearic acid can be used in most nut, fat and dairy flavors to give richness and great fatty mouthfeel. It was also noted that the beaniness of the soy oil was reduced at both evaluation levels.

►Penta; www.pentamfg.com

Furfuryl Formate, 50% in Furfuryl Alcohol

Source: Cargill

FEMA# 4542, CAS# 13493-97-5, Natural

Natural occurrence: Coffee, white bread, licorice, cooked meat.

Odor: @ 50% in furfuryl alcohol. Sharp, horseradishlike, brown and coffeelike.

Taste: @ 0.5 ppm. Brown, cooked, bread and pungent.

Taste: @ 2.5 ppm. Bread, coffee, rice and cereal-like.

Possible applications: Bread, coffee, rice and cereal and brown flavors in general will all benefit from this material.

►Cargill; www.cargill.com

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