



# Organoleptic Characteristics of Flavor Materials

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50

## 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](http://www.perfumerflavorist.com/ffm).

Suppliers: Suggest materials for evaluation to Judith Michalski; [judithmichalskillc@gmail.com](mailto:judithmichalskillc@gmail.com).

## Coffee Extract Cappuccino FP24667

Source: Frutarom

CAS# 84650-00-0, Natural

Odor: @ 100%. Sweet, brown, mochalike and roasted with toffee notes.

Taste: @ 0.05%. Roasted, slightly burnt, coffeelike and cocoalike with toasted nut undertones.

Taste: @ 0.10%. Roasted, mochalike, caramellic, brown and toasted nutlike.

Possible applications: This isn't the typical coffee solid extract in that it has some very interesting cocoa and toffee notes. It will benefit all coffee flavors, as well as other brown flavors such as cocoa, caramel, maple, nuts—particularly hazelnut and peanut—toffee and caramel corn.

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

## 3-Mercaptohexyl Alcohol 0.1% in Ethanol (synonym: 3-Thiohexanol)

Source: A.M. Todd

FEMA# 3850, CAS# 51755-83-0, Natural

Natural occurrence: Passion fruit, red wine, grapefruit.

Odor: @ 0.1%. Savory, meaty, raw onionlike and slightly green.

Taste: @ 0.1 ppm. Alliaceous, green and meaty with subdued tropical fruity notes.

Taste: @ 0.3 ppm. Alliaceous, green and meaty.

Possible applications: At higher levels this very powerful material is best suited for alliaceous types of flavors like onion, garlic and scallion. Its meaty notes will also enhance savory beef and pork flavors. At lower levels it will add topical nuances to passion fruit, kiwi, grapefruit, lychee, rambutan and sauvignon blanc flavors.

►A.M. Todd; [www.amtodd.com](http://www.amtodd.com)

## Methionyl Butyrate

Source: Treatt

FEMA# 4160, CAS# 16630-60-7

Natural occurrence: Beer and hops oil.

Odor: @ 1%. Nutty, meaty, potatolike, brown, buttery and cheesy.

Taste: @ 2 ppm. Nutty, earthy, potatolike, brown, savory and sulfurous.

Taste: @ 5 ppm. Bloody, brown, nutty, caramellic, earthy and savory.

Possible applications: This material's notes are many and diverse, making it a very useful addition across a broad range of flavors, including toffee, caramel, cajeta, potato, mushroom, coffee, nuts, peanut, cheese, browned butter, fried fat, baked, meat, popcorn and custard, just to name a few.

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

## 2-Methyl-4-Propyl-1,3-Oxathiane, 0.1% in Ethanol (synonym: (Z)-Galbanum Oxathiane)

Source: A.M. Todd

FEMA# 3578, CAS# 59324-17-3, Natural

Natural occurrence: Passion fruit, clary sage.

Odor: @ 0.1%. Meaty, pungent, green and fruity with an underlying burnt plastic note.

Taste: @ 0.1 ppm. Tropical fruity, green and slightly savory.

Taste: @ 0.3 ppm. Fresh, green, catty and tropical fruity.

Possible applications: This is another very interesting and intense compound that will add character to tropical fruits such as durian, guava and passion fruit. At very

low levels it can also add a fresh twist to mint flavors and alliaceous flavors.

► **A.M. Todd**; [www.amtodd.com](http://www.amtodd.com)

### **Mountain Maple Bark SE MM 621095**

Source: Naturex

FEMA# 2757, CAS# 91770-23-9, Natural

Odor: @ 100%. Sweet, caramellic and brown.

Taste: @ 0.05%. Bitter, astringent and brown.

Taste: @ 0.10%. Bitter, astringent, maplelike, brown and toffee-like.

*Possible applications:* This is a traditional brown flavor material, and it will fit well into those types of flavors, including maple, toffee, caramel, chocolate, vanilla and nut.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

### **Peppermint Oil Organic**

Source: Berje

FEMA# 2848, CAS# 8006-90-4,  
Natural

Odor: @ 100%. Minty, mentholic,  
candylike and characteristic.

Taste: @ 10 ppm. Cooling, minty  
and characteristic.

Taste: @ 30 ppm. Candy canelike,  
cooling, fresh and characteristic.

*Possible applications:* If organic certification is needed, this is a very characteristic oil that can be used to fulfill that requirement in mint and oral hygiene flavors.

► **Berje**; [www.berjeinc.com](http://www.berjeinc.com)

### **Peppermint Spirits M Pep Tin 3 611095**

Source: Naturex

CAS# 84082-70-2, Natural

Odor: @ 100%. Green, cooling,  
minty, fresh and characteristic.

Taste: @ 40 ppm. Fresh, green,  
cooling and minty.

Taste: @ 80 ppm. Cooling, fresh,  
candylike, minty and leafy.

*Possible applications:* This extract of peppermint has a lovely green tinge and will impart sweet, peppermint leaf notes to flavors for confections, as well as add interesting cooling notes to bottled teas and other beverages.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

### **2-Thiophenemethanol**

Source: Sigma-Aldrich

FEMA# 4642, CAS# 636-72-6

Natural occurrence: Coffee.

Odor: @ 0.1%. Alliaceous, fishy,  
meaty and metallic with a burnt  
rubber nuance.

Taste: @ 0.5 ppm. Alliaceous, coffeelike and slightly savory.

Taste: @ 1.0 ppm. Coffeelike and onion/garliclike, with a rubberlike undertone.

*Possible applications:* Suggested uses for this very potent component are in onion and garlic flavors, meat, anchovy and other fish flavors, mold-ripened cheeses, such as camembert and brie, and coffee flavors.

► **Sigma-Aldrich**; [www.sigmaaldrich.com](http://www.sigmaaldrich.com)

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