



# Organoleptic Characteristics of Flavor Materials

Gerard Mosciano

Gerard Mosciano is joined by Judith Michalski, chief flavorist, Edlong Flavors; Carl Holmgren, consulting flavor chemist; and Douglas Young, principal flavorist, Symrise, in the organoleptic evaluations presented here.

Address correspondence to Gerard Mosciano, c/o *Perfumer & Flavorist* magazine, 362 South Schmale Road, Carol Stream, IL 60188-2787.

Suppliers of most materials found in this report can be located in *Allured's Flavor & Fragrance Materials*, published by Allured Publishing Corporation, 362 South Schmale Road, Carol Stream, IL 60188-2787 USA, telephone 630-653-2155; fax 630-653-2192, [www.perfumerflavorist.com](http://www.perfumerflavorist.com).

## Absolute Orange Blossom (Neroli)

*Source:* Charabot

FEMA# 2818, Natural

*Odor:* @ 1.0 percent. Sweet, floral, powdery, citrusy with woody floral jasmine and neroli notes.

*Taste:* @ 5 PPM. Floral, citrus, tropical, rose, petitgrain, anthranilatelike with Maderia-like nuances.

*Possible applications:* Floral nuances, pear, grape, citrus and fruity background for peach, apricot and fruit punches.

► **Charabot**; tel: 845-398-1200;  
[www.charabot.com](http://www.charabot.com)

## Asafoetida Tincture

*Source:* Frutarom

FEMA# 2106, CAS# 9000-04-08, Natural

*Odor:* Neat. Sulfurous, alliaceous, roasted garlic and onionlike with warm, brothy nuances.

*Taste:* @ 2 PPM. Savory, alliaceous garlic and sweet onionlike with a lingering sulfurous and slight black pepper bite.  
*Possible applications:* Savory nuances for roasted onion and garlic, general sulfurous nuances.

► **Frutarom**;  
tel: 201-861-9500;  
[www.frutarom.com](http://www.frutarom.com)



## Boronia Absolute Tasmania

*Source:* Citrus & Allied

FEMA# 2167, CAS# 91771-36-7, Natural

*Odor:* @ 1.0 percent. Sweet, fresh and floral, aromatic green herbal and woody, berry and powdery with an overall tutti-fruttilike nuance.

*Taste:* @ 3 PPM. Sweet, berry, fruity and green, woody, powdery with floral gardenia and overripe fruity nuances.

*Possible applications:* Tea, raspberry, strawberry, violet nuances, apricot, peach, black currant, mint highlights, juicy fruit kickers and honey.

► **Citrus & Allied**; tel: 719-343-0030;  
[www.citrusandallied.com](http://www.citrusandallied.com)

## Cappuccino Coffee Extract

*Source:* Autocrat Food Ingredients

Natural

*Odor:* @ 100 percent. Dark coffee, brown, beany, burnt with a slightly caramel, grainy and smoky note.

*Taste:* @ 3.0 percent in water. Roasted coffee with burnt, beany and bitter notes.

*Possible applications:* Italian and regular coffee beverages, roasted nuances for nuts, maple and molasses.

► **Autocrat Food Ingredients**; tel: 800-288-6272;  
[www.autocrat.com/pages/ingredients.asp](http://www.autocrat.com/pages/ingredients.asp)



### Decanal Dimethyl Acetal

Source: Charkit/Oxford Chemicals

FEMA# 2363, CAS# 7779-41-1, Artificial

Odor: @ 1.0 percent. Heavy fatty, waxy citrus orange with a strong aldehydic character. It also has a slightly green/vegetative bell pepper nuance.

Taste: @ 2 PPM. Fatty, waxy, citrus orange with fatty aldehydic nuances and a hint of mushroom.

Possible applications: Orange, tangerine, citrus products in general, poultry and dairy nuances, jalapeño and cilantro spice nuances.

► **Charkit/Oxford Chemicals**; tel: 44-1429-863555; [www.oxfordchemicals.com](http://www.oxfordchemicals.com)

### 4-Ethyl Guaiacol

Source: Advanced Biotech

FEMA# 2436, CAS# 2785-89-9, Natural

Natural occurrence: Beer, cinnamon, coffee, grape, brandy, malt, rum, soy sauce and whiskey.

Odor: @ 1.0 percent. Slightly sweet, spicy clove, smoky and phenolic with charred whiskey barrel notes and a slight vanillalike creaminess.

Taste: @ from 5-10 PPM. Dry, smoky, clove, phenolic and vanillalike with tobacco and woody notes, and a burnt bacon oily aftertaste.

Possible applications: Smoke flavors, shellfish, ham and cheese flavors, bacon, tobacco, savory nuances, as well as whiskey toners, wine flavors and tomato.

► **Advanced Biotech**; tel: 973-357-0577; [www.adv-bio.net](http://www.adv-bio.net)



### Ethyl-3-Methyl Thio Propionate

Source: Natural Advantage

FEMA# 3343, CAS# 13327-56-5, Natural

Natural occurrence: Pineapple, beer, grape brandy, passion fruit and whiskey.

Odor: @ 1.0 percent. Fruity, tinny pineapple, onion sulfurous, musty tomato with metallic ripe and canned notes, savory green with hints of horse-radish and tropical notes.

Possible applications: Pineapple, black olives, tropicals, fruity metallic nuances, onion, rum, whiskey, tomato and Italian cheeses.

► **Natural Advantage**; tel: 732-274-9683; [www.natural-advantage.net](http://www.natural-advantage.net)

### Guarana Extract 2 Percent Caffeine

Source: IFF

FEMA# 2536, Natural

Odor: @ 100 percent. Slightly sweet, cocoalike, woody with herbal, medicinal and root beer-like nuances.

Taste: @ 0.70 percent. Bitter, astringent, woody with a good mouthfeel, and cocoa and root beerlike nuances.



Possible applications: Herbal and astringent nuances for beverages, cocoa flavors.

► **IFF**; tel: 212-765-5500; [www.iff.com](http://www.iff.com)

### 2,4-Heptadienal 10 Percent in Neobee Vegetable Oil

Source: Alfrebro/Degussa

FEMA# 3164, CAS# 4313-03-5, Natural

Natural occurrence: Avocado, caviar, cooked beef, cooked chicken, cooked lamb and pork, potato chips, Virginia tobacco.

Odor: @ 0.10 percent. Green fatty, herbal, vegetative, aldehydic oily with cucumber and fried nuances.

Taste: @ 0.25 PPM. Green fatty, harsh chicken fat, cucumber with brothy and fishy nuances.

Possible applications: Cucumber, watermelon, herbal teas, potato chips, peanut butter, tomato and fried chicken.

► **Alfrebro/Degussa**; tel: 800-234-2539; [www.flavors-fruit-systems.com](http://www.flavors-fruit-systems.com)



### Kola Nut Extract

Source: IFF

FEMA# 2607, CAS# 89997-82-0, Natural

Odor: @100 percent. Earthy, brown, slightly cocoalike with woody oaklike nuances.

Taste: @ 0.75 percent. Woody, herbal and bitter flavor reminiscent of cocoa, walnut hulls and fenugreek with a lingering astringent aftertaste.

Possible applications: Cocoa, vanilla, astringency necessary for cola beverages and other beverages.

► **IFF**; tel: 212-765-5500; [www.iff.com](http://www.iff.com)

### Methionol (synonym: 3-(Methylthio)-Propyl Alcohol)

Source: IFF

FEMA# 3415, CAS# 505-10-2, Natural

Natural occurrence: Apple and grape brandy, asparagus, fermented soy sauce, tomato.

Odor: @ 1.0 percent. Sulfurous, savory, vegetative raw potato-like, fresh tomato, metallic anchovylike with some onion and garlic nuances.

*Taste:* @ 0.5 PPM. Metallic, tomato, potato, anchovylike with savory brothy and maltlike nuances.

*Possible applications:* Tomato, fried and fresh potato, anchovy and other fish characters, malt, savory and metallic nuances, cocoa.

► **IFF**; tel: 212-765-5500; [www.iff.com](http://www.iff.com)

## 2-Methyl-2-Pentenal

*Source:* Alfrebro/Degussa

FEMA# 3194, CAS#623-36-9, Natural

*Natural occurrence:* Coffee, fish, grape, grape brandy, pumpkin, roasted onion and roasted peanut.

*Odor:* @ 1.0 percent. Ethereal and pungent acrylate and acetophenone-like, penetrating, irritating with a fresh green juicy-fruity nuance.

*Taste:* @ 5 PPM. Sweet, tangy, juicy fruit, cherry, almond, citrus and tropical with a slight penetrating burning sensation.

*Possible applications:* Orange, strawberry, dark cherry, pineapple, apple and kiwi, mustard, horseradish, rum, as well as tropical fruity nuances.

► **Alfrebro/Degussa**; tel: 800-234-2539; [www.flavors-fruit-systems.com](http://www.flavors-fruit-systems.com)

## Methyl-3-Phenyl Propionate (synonym: Methyl Dihydro Cinnamate)

*Source:* Alfrebro/Degussa

FEMA# 2741, CAS# 103-25-3

*Natural occurrence:* Tabasco peppers.

*Odor:* @ 1.0 percent. Sweet, rich spicy Ceylon cinnamonlike, balsamic with fruity, resinous and powdery nuances.

*Taste:* @ 5 PPM. Cinnamon spicy, sweet, balsamic with fruity floral and resinous nuances.

*Possible applications:* Honey, fruit confections—especially cherry and cinnamon red hots, cinnamon spice blends.

► **Alfrebro/Degussa**; tel: 800-234-2539; [www.flavors-fruit-systems.com](http://www.flavors-fruit-systems.com)

## 2-Methyl-4-Propyl-1,3-Oxathiane (synonyms: Oxane, Trophathiane, Maracuya Compound)

*Source:* Natural Advantage

FEMA# 3578, CAS# 67715-80-4, Natural

*Natural occurrence:* Passion fruit.

*Odor:* @ 1.0 percent. Bright impacting sulfury, catty, green alliaceous vegetative, tropical, oily, grapefruit, ripe fruity reminiscent of pulpy mango and peach.

*Taste:* @ 2 PPM. Sulfurous, pulpy tropical passion fruit and durian, oily green waxy, citruslike, gooseberrylike, ripe fresh pineapple with a rootlike radish nuance.

► **Natural Advantage**; tel: 732-274-9683; [www.natural-advantage.net](http://www.natural-advantage.net)

## Oil Fennel Sweet

*Source:* IFF

FEMA# 2483, CAS# 8006-84-6, Natural

*Odor:* @ 1.0 percent. Sweet anise, licorice confection, ouzo cordial-like with full-bodied woody, herbal and root beerlike nuances.

*Taste:* @ 10 PPM. Sweet anise, woody, green, herbal, methyl chavicol-like with licorice and root beer nuances and a lingering sweetness that is characteristic of fennel seeds.

*Possible applications:* Licorice confections, oral care, vanilla, root beer, ouzo flavorants, sweetener blends.

► **IFF**; tel: 212-765-5500; [www.iff.com](http://www.iff.com)



## Phenol

*Source:* H. Interdonati Inc.

FEMA# 3223, CAS# 108-95-2, Natural

*Natural occurrence:* Burley tobacco, cocoa, coffee, cooked beef and chicken, fermented soy sauce, fish, roasted almonds and tea.

*Odor:* @ 1.0 percent. Medicinal, creosote, smoky, spicy, phenolic, leatherlike with notes of fried meat and coffee.

*Taste:* @ 3 PPM. Spicy, phenolic, tobacco, musty, woody, medicinal, smoky, tarlike and slightly spicy clovelike.

*Possible applications:* Tobacco, smoke flavors, medicinal nuances, spice notes, Dutch cocoa, roasted coffee, savory notes for beef and bacon, dairy nuances.

► **H. Interdonati Inc.**; tel: 631-367-6611; fax: 631-367-6626

## Phenyl Ethyl Hexanoate

*Source:* Robertet

FEMA# 3221,

CAS# 6290-37-5, Natural

*Natural occurrence:* Burley tobacco, grape brandy, passion fruit, rum, sherry, whiskey and wine.

*Odor:* @ 1.0 percent. Sharp, winy, cocoa, honey, vanilla, yeasty, floral with hints of jammy fruity nuances.

*Taste:* @ 10 PPM. Cocoa, fruity, green, winy, fermented and slightly astringent.

*Possible applications:* Cocoa, winy and floral nuances, honey, vanilla and tropical nuances.

► **Robertet**; tel: 201-337-7100; [www.robertet.com](http://www.robertet.com)



## Phenyl-1,2-Propanedione 1 Percent

Source: Charkit/Oxford Chemicals

FEMA# 3226, CAS# 579-07-7, Nature Identical

*Natural occurrence:* Coffee, baked potato and butter.

*Odor:* @ 1.0 percent. Creamy, buttery, fatty, slightly vanillalike, slightly walnut nutty, almond and marzipanlike with a woody styraxlike nuance, and having a slightly sour yeasty and fermented nuance.

*Taste:* @ 5 PPM. Cultured creamy, dairylike and slightly astringent with a slight spicy caraway/cumin nuance.

*Possible applications:* Baked potato, butter, coffee, licorice, wine, raspberry, cranberry, honey, baked goods, cultured dairy nuances, cognac and bread notes.

► **Charkit/Oxford Chemicals;**  
tel: 44-1429-863555;  
[www.oxfordchemicals.com](http://www.oxfordchemicals.com)

## Vanilla Extract Twofold, Bourbon Type (halal approved)

Source: IFF

Natural

*Odor:* @ 100 percent. Sweet vanilla, creamy, balsamic with slight beany and anisic nuances.

*Taste:* @ 0.5 percent in water. Creamy vanilla, woody with balsamic and marshmallow ice-creamlike nuances.

*Possible applications:* Anywhere where a halal vanilla or a clearer vanilla is required.

► **IFF;** tel: 212-765-5500;  
[www.iff.com](http://www.iff.com)

## Vetiver CO<sub>2</sub> Extract

Source: Danisco

Natural

*Odor:* @ 1.0 percent. Green, aromatic, floral geranium, woody, musty, and slightly earthy and powdery.

*Taste:* @ 10 PPM. Green, aromatic, woody orris with iononelike nuances.

*Possible applications:* Apple, tropical nuances, white grape, peach, green plum, and raisin and tropical nuances.

► **Danisco;** tel: 201-444-9821;  
[www.danisco.com](http://www.danisco.com)

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