



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.

2-Acetyl-3,5(6)-Dimethyl Pyrazine

Source: SAFC

FEMA# 3327, CAS# 54300-08-2,

Nature identical

Natural occurrence: Coffee.

Odor: @ 1.0 percent. Musty roasted cocoa, nutty peanut with a caramel-like nuance.

Taste: @ 5 PPM. Almond, caramel, cocoa, hazelnut, peanut, pistachio, toffee and coffeelike.

Possible applications: Roasted nut — especially almond, hazelnut, pistachio and peanut, cocoa, coffee and toffee, and popcorn nuances.

►SAFC; tel: 800-244-1173; www.sigmaaldrich.com/SAFC/Global.html

Ambrette Seed Oil

Source: A Woman of Uncommon Scents
FEMA# 2051, CAS# 8015-62-1, Natural

Odor: @ 1.0 percent. Musky and musty berrylike with raspberry and red licorice nuances and a hint of Sen-Sen confection.

Taste: @ 3 PPM. Soapy, musky, Sen-Sen, tomato vegetative, spicy with notes of raspberry and cherry punch.

Possible applications: Berry, raspberry,

licorice, Sen-Sen confections, tomato and other vegetative nuances.

►A Woman of Uncommon Scents; tel: 717-530-0609; www.awomanofuncommonscent.com

Caprylic Acid (synonym: octanoic acid)

Source: SAFC

FEMA# 2799, CAS# 124-07-2, Nature identical

Natural occurrence: Apple, blue cheese, burley tobacco, butter, cheddar cheese, cocoa, coconut, cooked lamb and mutton, milk, rum and whiskey.

Odor: @ 1.0 percent. Waxy, dirty, sweaty and cheesy fatty, with dirty oily and creamy dairy nuances.

Taste: @ 10 PPM. Creamy, waxy, dirty, sweaty, dairy cheeselike.

Possible applications: Pineapple, coconut, condensed milk, creamy dairy notes for butter and cheese, and whiskey nuances.

►SAFC; tel: 800-244-1173; www.sigmaaldrich.com/SAFC/Global.html

Cinnamyl Formate

Source: Degussa/Alfrebro

FEMA# 2299, CAS# 203-223-3, Natural

Natural occurrence: Narcissus.

Odor: @ 1.0 percent. Cinnamon spicy, slightly balsamic, cherry fruity with berry and tropical nuances.

Taste: @ 5 PPM. Sweet, cinnamonlike, astringent



with woody resinous and balsamic nuances.
Possible applications: Apple, spice blends, tropical fruits and cherry.

► **Degussa/Alfrebro**; tel: 513-539-7373;
www.degussafoodingredients.com

2-Ethyl-3-Methoxy Pyrazine

Source: Frutarom

FEMA# 3280, CAS# 68739-00-4, Nature identical

Natural occurrence: Coffee and potato.

Odor: @ 1.0 percent. Musty, green vegetative, earthy, nutty with a toasted corn-nutlike nuance.

Taste: @ 5 PPM. Roasted coffee, nut, cocoa, earthy with a caramellic and baked potato nuance.

Possible applications: French fried or baked potato, cocoa and coffee with a roasted-nut skinlike nuance.

► **Frutarom**; tel: 201-861-9500; www.frutarom.com

2-Ethyl Thio Phenol

Source: SAFC

FEMA# 3345, CAS# 4500-58-7, Artificial (not reported found in nature)

Odor: @ 0.1 percent. Alliaceous, burnt meaty, rubber tirelike with dried fish, vegetative, nutty and coffee with a catty nuance.

Taste: @ 0.1 PPM. Onion, horseradish, nutty, meaty, fishy with roasted sesame seed and toasted bread notes.

Possible applications: Savory pot roast, roasted sesame, fish, bacon, coffee and potato.

► **SAFC**; tel: 800-244-1173;
www.sigmaaldrich.com/SAFC/Global.html

Fresh Tangerine FTNF

Source: Lionel Hitchen
(Essential Oils) Ltd.

Natural

Odor: @ 10 percent. Fresh, juicy, citrus orange tangerinelike with sweet aldehydic notes.

Taste: @ 15 PPM in 5 percent sugar and 0.10 percent CA. Fresh, juicy tangerine orangelike.

Possible applications: Tangerine and orange juice add back and top note enhancers.

► **Lionel Hitchen (Essential Oils) Ltd.**;
tel: 44-(0)-1962-760815; www.lheo.co.uk



2-Furfurylidene Butyraldehyde

Source: Degussa/Alfrebro

FEMA# 2492, CAS# 770-27-4, Artificial (not reported found in nature)

Odor: @ 1.0 percent. Sweet solventlike, brown, caramel with coconut, chocolate and vanilla nuances.

Taste: @ 5 PPM. Sweet brown, coconut, creamy with an astringent nut skin and a vanilla aftertaste.

Possible applications: Caramel, brown sugar, molasses, nut, coconut and vanilla.

► **Degussa/Alfrebro**; tel: 513-539-7373;
www.degussafoodingredients.com

Lauric Acid

Source: Advanced Biotech

FEMA# 2614, CAS# 143-07-7, Natural

Natural occurrence:

Blue cheese, butter, cheddar cheese, rice, cooked lamb and mutton, roasted peanut, Swiss cheese.

Odor: @ 1.0 percent.

Fatty, creamy, cheeselike, candle waxy with egglike richness.

Taste: @ 5 PPM. Waxy, fatty and oily, tallowlike, creamy and dairylike with a coating-mouth feel.

Possible applications: Condensed milk and cream flavors, general dairy — especially cheese applications, savory tallow and olive oil notes, and nutty nuances.

► **Advanced Biotech**; tel: 973-357-0577;
www.adv-bio.com



Lemon Carbonyls FTNF

Source: Lionel Hitchen (Essential Oils) Ltd.

Natural

Odor: @ 10 percent. Fresh, juicy lemonlike with aldehydic citral notes and a lime-like 7UP nuance.

Taste: @ 10 PPM in 5 percent sugar and 0.10 percent CA. Juicy lemon, tangy, sweet, citral-like, pulpy body with a slight green nuance.

Possible applications: Natural lemon and lime top note additives, candy applications and cola flavors.

► **Lionel Hitchen (Essential Oils) Ltd.**;
tel: 44-(0)-1962-760815; www.lheo.co.uk

Meta Cresol

Source: SAFC

FEMA# 3530, CAS# 108-39-4,
Nature identical

Natural occurrence: Beer, coffee, egg, grape, Oriental tobacco, roasted barley, rum, sherry and whiskey.

Odor: @ 1.0 percent. Phenolic, spicy eugenol-like, medicinal, smoky powdery with a leatherlike note.

Taste: @ 2 PPM. Phenolic, smoky, balsamic, medicinal and spicy eugenol-like.

Possible applications: Vanilla, smoke, spice

notes for eugenol and clove, whiskey and bourbon.

► **SAFC**; tel: 800-244-1173;
www.sigmaaldrich.com/SAFC/Global.html

2-Methoxy-3-Iso butyl Pyrazine

Source: SAFC

FEMA# 3132, CAS# 24683-00-9,
Nature identical

Natural occurrence: Green beans, bell pepper, galbanum oil, lettuce, parsnip root, potato and spinach.

Odor: @ 0.1 percent.

Characteristically green pepper vegetative with tomato and floral green nuances.

Taste: @ 0.5 PPM. Green pepper vegetative, cucumber and raw tomatolike.

Possible applications: Green pepper, cucumber, tomato, celery, raw potato and assorted other vegetables.

► **SAFC**; tel: 800-244-1173;
www.sigmaaldrich.com/SAFC/Global.html



Methyl Furoate

Source: SAFC

FEMA# 2703, CAS# 611-13-2,
Nature identical

Natural occurrence: Coffee, guava, potato, grape brandy, roasted hazelnut, peanut and almond, passion fruit and tomato.

Odor: @ 1.0 percent. Musty, sweet caramel, fruity, cocoa, bready and slightly rubbery.

Taste: @ 20 PPM. Brothy, yeasty, caramellic and burnt with a sweet bready, acetoin, buttery nuance.

Possible applications: Grape, caramel, butterscotch, maple, cocoa, rum, brandy, bread, cereal, popcorn, molasses, nut and tobacco.

► **SAFC**; tel: 800-244-1173;
www.sigmaaldrich.com/SAFC/Global.html

2-Methyl Hexanoic Acid

Source: Treatt USA

FEMA# 3191, CAS# 4536-23-6,
Nature identical

Natural occurrence: Baked potato, cooked lamb and mutton, grape brandy and Virginia tobacco.

Odor: @ 1.0 percent. Acidic sour, dairy fatty with cooked lardlike nuances.

Taste: @ 40 PPM. Creamy fatty with an oily mouth feel and waxy nuances.

Possible applications: Meat fat — especially lamb and mutton, chicken, cocoa and dairy nuances.

► **Treatt USA**; tel: 863-668-9500;
www.treatt.com

Oil Cherry Laurel

Source: Mastertaste

FEMA# 2277, Natural

Odor: @ 1.0 percent. Benzaldehyde, sweet almond fruity with cherry and berry nuances.

Taste: @ 25 PPM. Sweet fruity, cherry, berry, benzaldehyde and nutty.

Possible applications: Cherry, berry, almond and other nuts, fruit punch.

► **Mastertaste**; tel: 888-574-8844;

www.mastertaste.com

Oil Neroli

Source: Robertet

FEMA# 2771,

Natural

Odor: @ 1.0 percent. Floral

geranium,

citruslike, slightly woody with tropical and fruity nuances.

Taste: @ 10 PPM. Floral rose, woody citrus, tealike with dry tutti-frutti and herbal nuances, and a citrus undertone similar to orange marmalade.

Possible applications: Earl Grey tea, orange marmalade, floral notes and tutti-frutti nuances.

► **Robertet**; tel: 201-337-7100; www.robertet.com



Ortho Cresol

Source: SAFC

FEMA# 3480, CAS# 95-48-7, Nature identical

Natural occurrence: Cinnamon, coffee, Oriental tobacco, rum, sherry, tea, tomato and whiskey.

Odor: @ 1.0 percent. Phenolic, medicinal, sweet spicy, smoky with a methyl salicylate nuance.

Taste: @ 2.0 PPM. Sweet medicinal, phenolic and tarlike.

Possible applications: Bacon, meaty notes, spicy eugenol and clove, smoke and whiskey flavors.

► **SAFC**; tel: 800-244-1173;

www.sigmaaldrich.com/SAFC/Global.html

2-Pentadecanone (synonym: methyl tridecyl ketone)

Source: Degussa/Alfrebro

FEMA# 3724, CAS# 2345-28-0,

Nature identical

Natural occurrence: Blue cheese, butter, cheddar cheese, coffee, cooked beef, chicken, lamb and mutton, krill, strawberry and wheat bread.

Odor: @ 1.0 percent. Chemical-like, fruity green, dairylike fatty and waxy with blueberry and cognac notes.

Taste: @ 50 PPM. Berry, blueberry fruity, waxy fatty, haylike green with a dairy aftertaste.

Possible applications: Tropical nuances, blueberry, cocoa, coconut, waxy dairy notes for various cheeses.

► **Degussa/Alfrebro**; tel: 513-539-7373;

www.degussafoodingredients.com

Pentyl Butyrate

Source: SAFC

FEMA# 3893, CAS# 60415-61-4,

Nature identical

Natural occurrence: Strawberry, banana, purple passion fruit and juice.

Odor: @ 1.0 percent. Sweet, musty, fruity, floral and tutti-frutti with apple, banana, cherry and strawberry nuances.

Taste: @ 10 PPM. Fruity winelike, green unripe banana and slightly astringent.

Possible applications: Grape, wine,

banana, plum, blue cheese, strawberry, berry, apple and cherry.

► **SAFC**; tel: 800-

244-1173; www.sigmaaldrich.com/

SAFC/Global.html

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