



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.

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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.

Absolute Cardamom Extra

Source: Payan Bertrand

CAS# 8000-56-6, Natural

Odor: @ 1.0 percent. Woody, spicy, citrus floral with aromatic tropical nuances.

Taste: @ 5 PPM. Oily, citrus lemon, slightly spicy with a slight cooling eucalyptus nuance.

Possible applications: Tea, chai, mango, citrus nuances, spice enhancers and ethnic spice blends.

► **Payan Bertrand**; tel: 33-4-93-40-14-14; www.payanbertrand.com



Taste: @ 5 PPM. Sweet, woody, slightly astringent, spicy tropical with terpy myrcenelike nuances.

Possible applications: Honey, tropical mango, passion fruit and guava, and woody nuances for apple, strawberry and white grape.

► **Payan Bertrand**; tel: 33-4-93-40-14-14; www.payanbertrand.com

Absolute Osmanthus Extra

Source: Payan Bertrand

FEMA# 3750, CAS# 68917-05-5, Natural

Odor: @ 1.0 percent. Sweet, woody, herbal and floral with aromatic fruity berry notes and citrus, juniper and ginlike nuances.

Taste: @ 5 PPM. Iononelike woody, fruity with good berry depth, slightly citrus and floral.

Possible applications: Juicy fruit enhancers, berry, raspberry and blackberry, lychee and white grape.

► **Payan Bertrand**; tel: 33-4-93-40-14-14; www.payanbertrand.com

Absolute Hops Extra

Source: Payan Bertrand

CAS# 8060-46-5, Natural

Odor: @ 1.0 percent. Sweet, terpy and slightly woody with fruity acidic and honeylike nuances.

Absolute Raspberry Leaf Extra

Source: Payan Bertrand

CAS# 84929-76-0, Natural

Odor: @ 1.0 percent.

Woody, seedy fruity berry, leafy tobacco, genetlike with floral, spicy, smoky and dried fruity nuances.

Taste: @ 5 PPM. Woody, aromatic, slightly medicinal-like with an incense-like nuance.



Correction

In the Spring issue (page 39), **Oil Cherry Laurel** was mistakenly identified as a material offered by **Mastertaste**. The company does not supply this material. We regret the error.

Possible applications: Tobacco, honey, dried fruit notes, seedy and woody notes for raspberry and strawberry, and other fruit nuances.

► **Payan Bertrand**; tel: 33-4-93-40-14-14;
www.payanbertrand.com

Absolute Seaweed

Source: Payan Bertrand

CAS# 68917-51-1, Natural

Odor: Neat. Brown, brothy, green, woody, tealike, herbal with nuances of salty sea air.

Taste: @ 0.05 percent. Green, vegetative, woody and slightly haylike with fishy and seashorelike nuances.

Possible applications: Fish flavors, seafood additives, herbal nuances for tobacco and tea.

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www.payanbertrand.com

2-Butyl Furan

Source: Treatt USA

FEMA# 4081,

CAS# 4466-24-4,

Nature identical

Natural occurrence:

French fried

potato, cranberry,

boiled egg, cooked

chicken, coffee,

black tea, roasted

filbert,

roasted peanut, cooked chicken and chicken fat.

Odor: Slightly nutty and green vegetative, cabbage and potatolike with moldy and eggy nuances.

Taste: @ 8 PPM. Musty, moldy, slightly nutty with wasabi and vegetative notes.

Possible applications: Nut, potato, grilled and fried flavors, turkey, nut nuances, egg flavors.

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



Chinottol

Source: Cargill Flavor Systems

Natural

Odor: @ 10 percent. Woody, aromatic bitterslike, smoky, dry and astringent, nutshell-like with a slight fusel and herbal nuance.

Taste: @ 20 PPM. Slightly herbal bitter and dry astringent, earthy, woody with a slight musklike undertone.

Possible applications: Bitter cordials, aromatic bitters, astringent nutshell notes, cocoa and coffee beany nuances, herbal notes.

► **Cargill Flavor Systems**; tel: 334-93093111;
www.cargillflavorsystems.com

trans 2-Dodecenal

Source: Cargill Flavor Systems

FEMA# 2402, CAS# 20407-84-5, Nature identical

Natural occurrence: Coriander seed, cooked beef, chicken and pork, milk, orange, rice and roasted peanut.

Odor: @ 0.1 percent in neobee oil. Fatty, waxy, metallic, fatty tallow, greasy, meaty, green vegetative cucumber with chicken and cilantro notes.

Taste: @ 0.1 PPM. Strong aldehydic, soapy, vegetative green, celery and cucumber-like, banana musty, chicken fatty and brothy.

Possible applications: Cucumber, chicken fat, banana, cream, ice cream, tomato, citrus orange and tangerine, melon, Mexican and Chinese spice blends.

► **Cargill Flavor Systems;** tel: 334-93093111; www.cargillflavorsystems.com

Furfuryl Thio Propionate

Source: Charkit/Oxford Chemical

FEMA# 3347, CAS# 59020-85-8, Nature identical

Natural occurrence: Coffee.

Odor: @ 0.10 percent.

Sulfurous, alliaceous, coffee, brown, savory with a roasted rubbery note.

Taste: @ 1 PPM. Alliaceous onion and garlic, coffee, brown savory meaty with a sautéed onion and roasted garlic nuance.

Possible applications:

Coffee, onion and garlic, roasted nut nuances, roasted onion and garlic, caramel, pot roast meaty savory notes.

► **Charkit/Oxford Chemical;** tel: 44-1429-863555; www.oxfordchemicals.com

2-Heptanethiol

Source: Treatt USA

FEMA# 4128, CAS# 628-00-2, Nature identical

Natural occurrence: Red and green peppers, chili paste, rambutan fruit.

Odor: @ 1.0 percent. Sulfurous vegetative, savory burnt rubbery, fatty with meaty grilled notes, cooked onion and garlic with a slight fuzzy, fruity nuance.

Taste: @ 1.5 PPM. Sulfurous, cooked savory meaty, brothy with rubbery, savory and fatty cooked meaty notes.

Possible applications: Savory grilled meats, egg, brothy nuances, chicken, turkey, bacon, onion and garlic, fuzzy nuances for tropicals.

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



2-Heptanone (synonym: Methyl Amyl Ketone)

Source: Advanced Biotech

FEMA# 2544,

CAS# 110-43-0, Natural

Natural occurrence:

Black currant, blue cheese, caviar, cheddar cheese, loganberry, mushroom, Swiss cheese, walnut and whiskey.

Odor: @ 1.0 percent.

Cheesy ketonic, slightly green waxy, banana fruity.

Taste: @ 20 PPM. Cheesy, fruity, coconut, waxy green, creamy, fungal with buttery and brown fruity nuances.

Possible applications: Cheddar, Swiss and blue cheeses, coconut, butter, banana, cream flavors, apple and pear.

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



3-Hepten-2-One

Source: Bedoukian Research Inc.

FEMA# 3400, CAS# 1119-44-4,

Nature identical

Natural occurrence: Red and green pepper, capsicum varieties, hop oil and roasted filbert.

Odor: @ 1.0 percent. Pungent, dairy, creamy, slightly ketonic, sour milky, blue cheese, waxy, earthy mushroom.

Taste: @ 5 PPM. Creamy, dairy, waxy, stale milky, blue cheese and cheese rind with ripe, slightly moldy stale milk with a good mouthfeel.

Possible applications: Blue cheese, milk, coconut, mushroom, mango, nut flavors.

► **Bedoukian Research Inc.;** tel: 203-830-4000; www.bedoukian.com

2-Iso Propyl-5-Methyl-2-Hexenal (synonym: Iso Dihydro Lavandulal)

Source: Bedoukian Research Inc.

FEMA# 3406, CAS# 35158-25-9,

Nature identical

Natural occurrence: Cocoa.

Odor: @ 1.0 percent. Woody, musty, nutshell-like, slightly floral and cooling with a honey and cocoa creamy nuance.

Taste: @ 10 PPM. Woody, nutshell, cocoa hulls, thiazolelike creamy nuance and a fresh, fruity peachlike nuance.

Possible applications: Nutmeg, cocoa, honey, peach fuzzy notes, apricot, almond and other nutshell notes.

► **Bedoukian Research Inc.;** tel: 203-830-4000; www.bedoukian.com

Lactic Acid 88 percent

Source: SAFC

FEMA# 2611, CAS# 598-82-3, Natural

Natural occurrence: Beer, bread dough, cheddar cheese, cocoa, coffee, grape brandy, Swiss cheese, whiskey, yogurt and milk.

Odor: Neat. Acidic, slightly caramel, dairy creamy, buttermilk and yogurtlike.

Taste: @ 20 PPM. Acidic sour creamy, dairylike with a fruity mango nuance.

Possible applications: Buttermilk, various cheese flavors, butterscotch, blackberry, natural dairy acidulant, yogurt, sourdough flavors.

► **SAFC;** tel: 800-244-1173;

www.sigmaldrich.com/

SAFC/Global.html

Methyl trans-3-Hexenoate

Source: Bedoukian Research Inc.

FEMA# 3364, CAS# 2396-78-3

Natural occurrence: Guava, pineapple, Virginia tobacco.

Odor: @ 1.0 percent. Sweet sharp green, juicy fresh fruity with tropical and vegetative nuances.

Taste: @ 5 PPM. Sweet green, slightly acidic with fruity nuances of pineapple, pear, apple and passion fruit.

Possible applications: Pear, apple, pineapple, tropical nuances, fresh green fruity impact notes.

► **Bedoukian Research Inc.;**

tel: 203-830-4000;

www.bedoukian.com



Methyl 2-Methoxy Benzoate

Source: Treatt USA

FEMA# 2717, CAS# 606-45-1,

Nature identical

Natural occurrence: Grape and mushroom.

Odor: @ 1.0 percent. Fruity, winey, fermented with a slightly musty and anisic nuance.

Taste: @ 10 PPM. Fruity, anisic, fermented and winey with a good mouthfeel.

Possible applications: Cherry, cranberry, blueberry, strawberry, grape and wine flavors.

► **Treatt USA;** tel: 863-668-9500;

www.treatt.com

Oleoresin Salmon

Source: Payan Bertrand

CAS# 68991-43-5, Natural

Odor: @1.0 percent. Slightly sweet, rich, characteristic of salmon with a mildly

smoky aminelike fishy nuance.

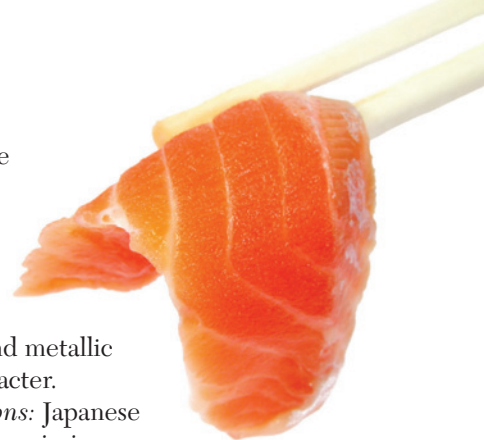
Taste: @ 10 PPM.

Fishy, salty, tasty savory with a slight smoky amine and metallic umamilike character.

Possible applications: Japanese savory crackers, surimi, savory nuances for fish soups and sauces.

► **Payan Bertrand;** tel: 33-4-93-40-14-14;

www.payanbertrand.com



4-Tertiary Butyl Phenol

Source: SAFC

FEMA# 3918, CAS# 98-54-4, Nature identical

Natural occurrence: Smoke.

Odor: @ 1.0 percent. Solventlike, phenolic, metallic, medicinal, leatherlike with spicy and smoky nuances.

Taste: @ 5 PPM. Metallic, spicy and smoky.

Possible applications: Vanilla, smoke flavors, whiskey blenders, burnt notes, spice nuances.

► **SAFC;** tel: 800-244-1173;

www.sigmaldrich.com/SAFC/Global.html

2-Thienyl Disulfide

Source: Treatt USA

FEMA# 3323, CAS# 6911-51-9, Nature identical

Natural occurrence: Smoke.

Odor: @ 0.5 percent. Roasted, burnt rubbery, savory and brothy, sulfurous onion and garlic with a hard-boiled egg, roasted nut skin, and coffee and cocoa-like nuances.

Taste: @ 2 PPM. Roasted sulfurous, nutty and earthy with coffee and chocolate nuances.

Possible applications: Turkey, chicken, pork, roasted Spanish peanuts, shiitake mushrooms, chocolate, coffee.

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

Treattarome Mango

Source: Treatt USA

Natural

Odor: Neat. Sweet, ripe mango, slightly sulfurous and terpy with floral and fruity nuances.

Taste: @ 0.1 percent. Sweet mango nectar, juicy and pulpy, floral, slightly fruity with a tealike nuance in the aftertaste.

Possible applications: Add back for tropical beverages, peach, apricot, kiwi, passion fruit, mango, star fruit, pear and apple, papaya and strawberry.

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



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