



Organoleptic Characteristics of Flavor Materials

by Gerard Mosciano

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Butyl Propionate

Source: Fontarome

FEMA# 2211, CAS# 590-01-2, Nature identical

Natural occurrence: Fresh apple, apple juice, melon, strawberry, plum and cherry.

Odor: @ 1.0 percent. Sweet, impacting estery fruity, floral, green apple and banana, waxy with a cheesy nuance.

Taste: @ 10-30 PPM. Estery fruity, waxy, apple and banana, pineapple and slightly green.

Possible applications: Banana, guava tropical, plum, apple, fruit cocktail, white grape and peach.

► **Fontatome;** tel: 414-769-3000; www.wixon.com

Cocal Reaction Product

Source: Natural Advantage

Natural

Odor: @ 100 percent. Powdery, musty, dark cocoa powder, rich nutty, brown, roasted peanut and toffee notes with nuances of mocha coffee.

Taste: @ 0.2 percent in 10 percent sugar solution. Dark cocoa powder, nut skin, powdery, coffee body with a slightly bitter aftertaste.

Possible applications: Hazelnut, cocoa powder enhancers, Nutella-type products, peanut, mocha coffee, toffee flavors.

► **Natural Advantage;** tel: 732-274-9683; www.natural-advantage.net

Coffee Essence Concentrate

Source: Sensus Corp.

Natural

Odor: @ 100 percent. Fresh brewed dark roasted

coffee, roasted nut and roasted espresso or European coffee beans. It has a slight sulfurous furfuryl mercaptan notes with a slight furanone and smoky nuances.

Taste: @ 0.20 percent. Fresh brewed full bodied dark roasted coffee with a slight powdery mocha nuance. It leaves a lingering nutty coffee astringency and aftertaste.

Possible applications: Coffee top notes, espresso and European coffee flavors, mocha, roasted nutty nuances, cocoa and chocolate, peanut, savory roasted meaty notes, baked potato.

► **Sensus Corp.;** tel: 650-794-2660

Cucumber Essence Concentrate

Source: Sensus Corp.

Natural

Odor: @ 100 percent. Fresh green cucumber, tomato-like, watermelon with honeydew-like nuances. It has aldehydic and floral nuances.

Taste: @ 0.20 percent. Fresh green cucumber and watermelon rind with a fresh tomato-like nuance.

Possible applications: Vegetative notes for cucumber, watermelon, pepper, honeydew, cantaloupe and tomato; tropical nuances and savory nuances for chicken and lamb.

► **Sensus Corp.;** tel: 650-794-2660

4,5-Dimethyl-3-Hydro-2, 5-Dihydrofuran-2-one

FEMA# 3634, CAS# 68091-15-8,

Nature identical

Natural occurrence: Fenugreek seed, roasted Virginia tobacco, sake, sugar and rice wine.

Odor: @ 5.0 percent. Sweet, cyclotene maple, caramellic, toffee, maltol like, burnt brown sugar, cooked and syrupy.

Taste: @ 50 PPM. Sweet caramellic, maple, walnut and brown sugar, slightly nutty, cotton candy, fenugreek, rum and honey.

Possible applications: Malt, molasses, brown sugar notes, walnut and nut nuances, maple, caramel, sugar nuances, meat, coffee and HVP.

Green Tea Essence Concentrate

Source: Sensus Corp.

Natural

Odor: @ 100 percent. Brewed green tea, hay-like, floral with a slight woody ionone-like nuance.

Taste: @ 0.20 percent. Full-bodied fresh green tea, woody, herbal and slightly floral, with a lingering astringency and a faint dried fruity aftertaste.

Possible applications: Tea flavors for top notes and body, flavored tea beverages, raisin, plum and prune flavors.

► **Sensus Corp.;** tel: 650-794-2660

trans-2-Hexenyl Hexenoate

Source: Fontarome

FEMA# 3983, CAS# 53398-86-0, Nature identical

Natural occurrence: Kumquat fruit, strawberry, black tea and nectarines.

Odor: @ 1.0 percent. Waxy, fruity, whiskey- and cognac-like with an aromatic leafy green pear skin and soapy nuance.

Taste: @ 1-10 PPM. Waxy, leafy green, tea-like, fruity, soapy, heavy berry with an astringent after note.

Possible applications: Whiskey blenders, green tea, vegetative nuances, strawberry, apple, pear and tropical fruit notes.

► **Fontatome;** tel: 414-769-3000; www.wixon.com

Juniper Berry Oil, English Distillation

Source: IFF

FEMA# 2604, CAS# 8002-68-4, Natural

Odor: @1.0 percent. Slightly green citrus lemon and lime, aromatic incense-like, gin-like, terpy and peppery spicy.

Taste: @ 5 PPM. Aromatic gin-like, clean, green terpy, woody, spicy herbal, soapy and berry-like.

Possible applications: Gin flavors, herbal

and spice blends, savory sausage notes, lemon and lime and tropical fruit nuances.
►IFF; tel: 212.765.5500; www.iff.com

2-Methylheptan-3-one, Butyl Isopropyl Ketone

Source: Aldrich

FEMA# 4000, CAS# 13019-20-0,

No natural occurrences found

Odor: @ 1.0 percent. Alcoholic and solvent-like, slightly green, fruity banana and apple with a ketonic blue moldy cheese and buttery creaminess. On dry out it becomes bleach-like.

Taste: @ 5 PPM. Ketonic, fruity, cooling carvone-like with an earthy balsamic caraway and spearmint notes.

Possible applications: Spearmint enhancers, carvone and caraway nuances, banana, apple and tropical notes, herbal and fruity flavors, oral care products, licorice, milk, blue cheese, tallow and lard flavors.

►Aldrich; tel: 800-325-3010 (US and Canada only; consult Web site for index of worldwide offices); www.sigmaaldrich.com

γ-Nonalactone: Aldehyde C-18

Source: Bell Aromatics

FEMA# 2781, CAS# 104-61-0

Nature identical: Identified in peaches, apricots, roasted barley, rum and tomato.

Odor: @ 1.0 percent. Coconut, creamy, waxy, dairy, butterscotch with a fruity nuance.

Taste: @ 10 PPM. Coconut, fatty, sweet creamy vanilla milky, with a waxy lactonic and slightly nutty nuance.

Possible applications: Coconut, nut flavors such as macadamia and pecan, vanilla, peach and apricot, caramel, coumarinic notes, butterscotch and dairy nuances.

►Bell Aromatics; tel: 414-384-7017; www.bellff.com

Oak Wood Critical CO₂ Extract

Source: SKW/Alfrebro

Natural

Odor: @ 1.0 percent. Woody oak, whiskey, smoky, spicy, fusel alcoholic, yeasty and fermented.

Taste: @ 0.10 PPM. Woody, casky, whiskey, smoky, phenolic with rum fusel alcoholic notes.

Possible applications: Rum, brandy, whiskey blenders, woody cask notes, vanilla.

►SKW/Alfrebro (Degussa); tel: 513-771-4682; www.degussa.com

2-Octanone, Methyl Hexyl Ketone

Source: Moore Ingredients

FEMA# 2802, CAS# 111-13-7, Natural, Nature identical

Natural occurrence: Banana, apple, butter, cheddar cheese, cocoa, cooked rice, fish, grape, brandy, krill, milk, mushroom, potato chips.

Odor: @ 1.0 percent. Musty ketonic, cheesy notes of blue and parmesan, fatty dairy-like with creamy and green earthy nuances.

Taste: @ 10 PPM. Ketonic, dairy, waxy cheese rind, woody, mushroom, yeasty and slightly whiskey-like.

Possible applications: Blue, cream and Parmesan cheeses, dairy notes, mushroom, cream, coconut fat notes, banana, apple, whiskey notes, rice flavors.

►Moore Ingredients; tel: 513-881-7144; moorelab.com

Pamplefleur, Orris Concrete

Source: IFF

FEMA# 2829, CAS# 8002-73-1, Natural

Natural occurrence: Orris root.

Odor: @ 1.0 percent. Sweet woody, floral, berry seedy, creamy and waxy with a powdery nuance.

Taste: @ 5 PPM. Berry, woody, floral, seedy, ionone, waxy with rich raspberry and blackberry nuances.

Possible applications: Raspberry, blackberry, straw berry, cherry, floral nuances, juicy notes for blueberry.

►IFF; tel: 212.765.5500; www.iff.com

2-Phenyl-3-Carboethoxy Furan

Source: IFF

FEMA# 3468, CAS# 50626-02-3, Artificial

Odor: @ 10 percent. Sweet fruity, tropical, woody, melon, berry, pineapple, vanilla creamy.

Taste: @ 10 PPM. Sweet, tropical, heavy fruity, slightly jamy with a lingering fruity taste.

Possible applications: Passion fruit, mango, peach, apricot, macadamia nut, strawberry and pineapple.

►IFF; tel: 212.765.5500; www.iff.com

Pyridine Mixture #89

Source: Advanced Biotech

Natural

Odor: @ 0.1 percent. Brown, cooked, nutty, vegetative and slightly woody.

Taste: @ 0.03 PPM. Brown, cooked meaty, with musty and nutty nuances.

Possible applications: Tobacco, woody notes, coffee, meat, nut and caramel notes.

►Advanced Biotech; tel: 559.651.2042; www.adbio.com

Raspberry α Key Natural

Source: IFF

Odor: @ 1.0 percent. Sweet woody seedy, fruity, ionone like with a ripe fleshy raspberry with a slight violet floral note.

Taste: @ 5 PPM. Woody, berry, seedy fruity, fleshy raspberry with a floral note.

Possible applications: Red licorice, raspberry, straw - berry, cherry, blackberry and cranberry.

► **IFF**; tel: 212.765.5500; www.iff.com

Raspberry β Key Natural

Source: IFF

Odor: @ 1.0 percent. Mellow berry, woody ionone-like with an estry, fruity, jamy sweet irone-like note. It has a violet floral and soapy nuance.

Taste: @ 5 PPM. Berry raspberry, woody, slightly citrus-like with floral, jamy and fruity undertones.

Possible applications: Raspberry, strawberry, red licorice, orange juice flavors and Dr. Pepper nuances.

► **IFF**; tel: 212.765.5500; www.iff.com

2,3,5,6-Tetramethyl Pyrazine

Source: Abaco

FEMA# 3237, CAS# 1124-11-4,
Nature identical

Natural occurrence: Burley tobacco, cocoa, coffee, cooked lamb, Emmental cheese, fermented soy sauce, roasted peanuts, sake, tea, wheat bread and wine.

Odor: @ 1.0 percent. Nutty, woody, slightly roasted and musty.

Taste: @ 20 PPM. Sweet nutty, dirty woody, raw coffee beans, slightly cocoa musty.

Possible applications: Baked goods, nut flavors, cocoa and chocolate flavors, coffee, butterscotch, caramel, brown sugar.

► **Abaco**; tel: 706-779-0001;
abaco@alltell.net

3,7,11-Trimethyl-2,6,10-Dodecatgrienal, Farnesal

Source: Aldrich

FEMA# 4019, CAS# 19317-11-4

Nature identical: Identified in ailanthus leaves and neroli.

Odor: @ 1.0 percent. Floral, soapy, woody, linalool oxide and tea-like, with berry and citrus nuances.

Taste: @ 1.0 PPM. Musty, fruity and berry-like, ambrette seed and sen-sen-like.

Possible applications: Berry depth notes for blackberry, raspberry and blueberry, tea, red and black licorice, floral, and minty nuances.

► **Aldrich**; tel: 800-325-3010 (US and Canada only; consult Web site for index of worldwide offices);
www.sigmaaldrich.com

Ylang Abs. Pure

Source: Robertet

CAS# 8006-81-3, Natural

Odor: @ 1.0 percent. Sweet, floral jasmine, powdery with a slight spicy note it has aromatic and citrus notes and tropical nuances of mango, mangosteen and banana.

Taste: @ 5 PPM. Soapy, powdery, tutti frutti and bubble gum-like, tropical, floral jasmine with a candy banana nuance.

Possible applications: Bubble gum, banana, jasmine floral notes, root beer, vanilla, fruity cola flavors, tutti frutti, orange, apple, apricot, peach, rose colas.

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