

# Organoleptic Characteristics of Flavor Materials

By Gerard Mosciano



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## 1-Octen-3-one

Source: Oxford

FEMA# 3515, CAS# 3391-86-4, Artificial

*Natural Occurrence:* Clover, cooked artichoke, peas, soybeans, wheat.

*Odor:* @ 0.1%. Mushroom, dank, earthy, musty, vegetative, dirty with cooked oily nuances.

*Taste:* Mushroom, earthy, fishy, vegetative with oily beany nuances.

*Possible Applications:* Mushroom, vegetative notes for peas, onion, potato, fruity nuances for apple, fish, earthy nuances.

## 2-Octen-4-one

Source: IFF

FEMA# 3603, CAS# 4643-27-0, Artificial, Nature identical

*Natural Occurrence:* Wheat bread.

*Odor:* @ 0.1%. Yeasty, fruity, mushroom, metallic, bread, pineapple, horseradish, earthy.

*Taste:* Vegetable green, earthy, horseradish, anchovy, earthy, ketonic, onion, musty, tropical lift, yeasty, bread, mushroom, fermented.

*Possible Applications:* Tomato, pineapple, horseradish, cabbage, celery, potato, leek, chives, yogurt, tropical nuances, mushroom, bread.

## 3-Mercapto-2-pentanone

Source: Oxford

FEMA# 3300, CAS# 67633-97-0, Artificial, Not found in nature

*Odor:* @ 0.1%. Sulfurous, metallic, roasted savory notes of onion, horseradish, potato, tomato, with fresh tropical nuances.

*Taste:* Sulfurous, alliacious, cooked roasted, with meaty, cereal and nutty nuances.

*Possible Applications:* Meat, savory nuances, nut, tropical fruit,

grapefruit, alliacious nuances in egg, tomato, and potato, apricot, peach, and pulpy fruit.

## 4,5-Dimethyl-2-ethyl-3-thiazoline

Source: IFF

FEMA# 3620, CAS# 76788-46-0, Artificial, Not found in nature

*Odor:* @ 0.5%. Nut skin, musty, sulfurous, coffee, brown, pyrazine, chocolate and raw vegetable.

*Taste:* Nut skin, raw vegetable, nutty, cocoa powdery, earthy, musty, licorice nuances.

*Possible Applications:* Potato, coffee, nut skin, grilled meat, condensed milk, chocolate and cocoa powder.

## Allyl Mercaptan

Source: Oxford

FEMA# 2035, CAS# 870-23-5, Artificial, Nature identical

*Natural Occurrence:* Onion and garlic.

*Odor:* @ 0.1%. Sulfurous, alliacious, onion, garlic, roasted fishy meaty, vegetable, savory soupy.

*Taste:* Garlic, fresh onion, savory, anchovy tin, tropical fruit pan drippings, horseradish, liver.

*Possible Applications:* Meaty, garlic, liver, tinny, fruity, horseradish, onion, savory and soupy notes, onion and garlic, toasted and roasted sulfurous notes, coffee.

## Angelica Root Oil

Source: Berje

FEMA# 2088, CAS# 8015-64-3, Natural

*Natural Occurrence:* Angelica root.

*Odor:* @ 1.0%. Green woody celery, aromatic, spicy herbal and vegetative, berry, terpy, floral, soapy.

*Taste:* Spicy aromatic, green celery herbal.

*Possible Applications:* Apricot, peach, sen-sen, parsley, celery, citrus, tobacco, gin, refreshing notes.

### **bis-(2-Methyl-3-furyl)-disulfide**

*Source:* Oxford

FEMA# 3259, CAS# 28588-75-2, Artificial, Nature identical

*Natural Occurrence:* cooked beef, maillard reaction in 20 min by heating xylos-glycine, alanin and chicken hydrolyzed by enzymes.

*Odor:* Sulfureous, meaty, roasted, scallion, onion, savory, with a beef savory nuance.

*Taste:* sulfureous, roasted, burnt meat, onion and metallic.

*Possible Applications:* Roasted meat, onion, garlic, savory coffee, broth, meat body.

### **Buchu Leaves Oil**

*Source:* Payan & Bertrand

FEMA# 2169, Natural

*Natural Occurrence:* Buchu leaves.

*Odor:* @ 1%. Sulfurous, green, minty, cooling camphoraceous, sweet, fruity, dirty, berry, musty, catty, with vegetative and fruity nuances of peach and apricot.

*Taste:* Minty camphoraceous, sweet berry, catty, tropical guava, apricot and peach, green herbal nuances.

*Possible Applications:* Peach, mint, berry, raspberry, grapefruit, apricot, strawberry, mango, guava, herbal nuances.

### **cis-3 and T-2 Hexenyl Propionate (Green Note Propionate)**

*Source:* Bedoukian

FEMA# 3778, CAS# 33467-74-2, Artificial, nature identical

*Natural Occurrence:* Black tea and mango.

*Odor:* Green, fresh fruity, apple, pear, vegetative melon with a banana and tropical peacy nuance.

*Taste:* Green, apple, pear, banana, tropical fruity, with a mango and melon nuance.

*Possible Applications:* Melon, apple, pear, peach, banana, tropical mango.

### **Ethone (1-P-methoxy-1-penten-3-one)**

*Source:* Fontarome

FEMA# 2673, Artificial, Not found in nature

*Odor:* Sweet, powdery, cherry, almond, vanillin, vanitrope, coumarin, anisic heliotropine.

*Taste:* Sweet, powdery, vanilla, butter, creamy anisic cherry fruity, good mouthfeel.

*Possible Applications:* Butter, almond, vanilla, coumarin, cherry.

### Ethyl Pyruvate

*Source:* Aldrich

FEMA# 2457, CAS# 617-35-6, Artificial, Nature identical

*Natural Occurrence:* Cocoa, grape brandy, wine.

*Odor:* Ethereal, sweet, fruit cake, rum, caramellic, vanilla, casky nuances, fermented, wine with grape nuances, acidic sharpness.

*Taste:* Sweet, ethereal, rum, caramellic and slightly burnt, fruit cake.

*Possible Applications:* Caramel, rum fruit cake, butterscotch, vanilla, fermented nuances, brandy.

### bis-(Methylthio) Methane, 2,4-Dithiopentane

*Source:* Oxford Chemical

FEMA# 3878, CAS# 1618-26-4, Artificial, Nature identical.

*Odor:* @ 0.1% PG. Alliaceous, garlic, sulfurous, pungent, green, with a spicy, savory, slightly sautéed meaty nuance.

*Taste:* Alliaceous, garlic, sautéed and roasted meaty with a slight spicy nuance.

*Possible Applications:* Onion, garlic, savory nuances, gravies, worcestershire sauce.

### Cinnamon Bark Oil Ceylon

*Source:* Phoenix Aromas & Flavors

FEMA# 2291, CAS# 8015-91-6, Natural

*Natural Occurrence:* Cinnamon bark.

*Odor:* @ 1.0%. Cinnamon, sweet, spicy, aromatic, well-rounded and woody.

*Taste:* Cinnamon, woody, spicy, clean and sweet.

*Possible Applications:* Colas, cinnamon spice blends, apple pie spices, baked goods, chewing gum.

### $\alpha$ -Furfuryl Mercaptan

*Source:* O'Laughlin, Fleurchem, Oxford

FEMA# 2493, CAS# 98-02-2, Artificial, nature identical

*Natural Occurrence:* Coffee, cooked beef.

*Odor:* @ 0.1% PG. Sulfurous, roasted, coffee, meaty, alliaceous, beany, meaty with beef and chicken notes with a smoky nuance.

*Taste:* Sulfurous, roasted coffee, cooked and roasted beef, meaty, with eggy and sulfurous nuances.

*Possible Applications:* Roast beef, caramel, butterscotch, roasted coffee, egg, chicken.

### Orange Oil Florida

*Source:* Sunkist

FEMA# 2825, CAS# 8028-48-6, Natural

*Natural Occurrence:* Oranges.

*Odor:* Sweet, fresh, juicy, tangy orange with peely and pulpy citrus nuances.

*Taste:* Sweet juicy orange with fresh pulpy notes and a peely, slightly biting nuance.

*Possible Applications:* Orange juice, fruit punch, tropical nuances, cola nuances, general fruit modifier.

### Tangerine Oil

*Source:* Sunkist

FEMA# 3041, CAS# 8008-31-9, natural

*Natural Occurrence:* Tangerine.

*Odor:* Sweet, fresh juicy, tangerine citrus with a rich body and a slight fruity nuance.

*Taste:* Sweet, juicy, mandarin, tangerine citrus with a slightly pelly and pulpy nuance.

*Possible Applications:* Juicy notes in orange, fruit punches, tropical nuances, tutti frutti notes, bubble gum flavors.

### Violet Leaf Absolute

*Source:* IFF

FEMA# 3110, CAS# 8024-08-6, Natural

*Natural Occurrence:* Violet leaves.

*Odor:* @ 0.1%. Green, sweet, floral, leafy, aromatic, tea-like on dry out, hay, herbal and grassy.

*Taste:* Green, slight vegetative, hay, tea, grassy, herbal and leafy.

*Possible Applications:* Tea, hay, strawberry, fresh fruit flavors in general, good green note.

### para-Mentha-8-thiol-3-one (5% Solution Mangone)

*Source:* IFF

FEMA# 3177, CAS# 38462-22-5, Natural

*Odor:* @ 5.0%. Sulfurous, peach, green, minty, tropical, fuzzy, pulpy, fruity, clean and fresh.

*Taste:* Sulfurous, tropical, peach, fuzzy, mango, green, kiwi.

*Possible Applications:* Black currant, mango, pineapple, peach, apricot, tropicals in general.

### cis-3-Hexenyl Propionate

*Source:* Bedoukian

FEMA# 3933, CAS# 33467-74-2, Artificial

*Odor:* @ 1.0%. Green, pear, apple, fresh fruity, sweet with a fresh leafy nuance, sweet-grassy.

*Taste:* Fresh green, apple, pear, fruity, oily and waxy with a slight citrus nuance.

*Possible Applications:* Apple, pear, green mango, guava, pineapple, spice, tropical nuances, banana, tomato, kiwi, watermelon, raspberry.

### Fenugreek Absolute

*Source:* Phoenix Aromas & Essences

FEMA# 2486, CAS# 84625-40-1, Artificial

*Natural Occurrence:* Clover, cooked artichoke, peas, soybeans, wheat.

*Odor:* @ 1.0%. Sweet, maple, lovage, brown, molasses, caramel, herbal, rich.

*Taste:* Maple, sweet, celery, lovage, sweet, caramellic.

*Possible Applications:* Maple, butterscotch, caramel, molasses. ■