



Organoleptic Characteristics of Flavor Materials

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Alfalfa SE FR, #3327300901.33

Source: Frutarom

FEMA# 2013, CAS# 84082-36-0

Natural

Odor: @ 100%. Brown, haylike, molasseslike, caramellic, cocoalike and sweet.

Taste: @ 0.1%. Herbal, bitter, brown, astringent, slightly spicy and dried fruitlike.

Taste: @ 0.2%. Brown, dried fruitlike, herbal and astringent.

Possible applications: With its brown, dried fruit notes this alfalfa extract will lend character and depth to fig, raisin, prune, date, apricot and tamarind flavors. Other areas where it fits well are sweet spice, BBQ, cocoa, molasses, vanilla, cola, caramel and other brown flavors.

►Frutarom; <http://frutarom.com/>

Apple NFB #885 13-17% Alc 40#, 3336304001.33

Source: Frutarom

GRAS

Natural

Odor: @ 100%. Brown, cooked, tobacco-like and fruity.

Taste: @ 0.05%. Brown, cooked, fruity and slightly woody.

Taste: @ 0.1%. Whiskeylike, brown, sweet, fruity and fermented.

Possible applications: The brown, fruity notes of this material will nicely enhance dried fruit flavors like raisin, fig, prune, tamarind and apricot. Other flavors where it can be used are alcoholic flavors such as sweet

wine, brandy and whiskey. It also fits well with other fermented flavors like balsamic vinegar and cider as well as molasses and vanilla.

►Frutarom; <http://frutarom.com/>

Bergamot oil, colorless

Source: Ungerer

FEMA# 2153, CAS# 8007-75-8

Natural

Odor: @ 100%. Citrus, fresh, peppery, sweet and slightly dry.

Taste: @ 2 ppm. Citrus, candylike, floral and fresh.

Taste: @ 5 ppm. Citrus, floral, candylike, fruity and fresh.

Possible applications: This version of bergamot oil blends well with citrus flavors especially lemon and lime as well as its blends. It is a staple for Earl Grey tea. Its floral, fruity notes will add interest to grape, blueberry, peach, apricot and tropical fruit flavors like mango and papaya.

►Ungerer; www.ungererandcompany.com

Grapefruit oil colorless

Source: Ungerer

FEMA# 2530, CAS# 8016-20-4

Natural

Odor: @ 100%. Citrus, peely, grapefruit, fresh, fruity with a tangerine nuance.

Taste: @ 5 ppm. Citrus, peely, fresh, fruity and sweet.

Taste: @ 10 ppm. Grapefruit, peely, bitter, astringent and sweet.

Possible applications: This very characteristic oil can be used by itself to impart true grapefruit character. Used in combination with other citrus oil blends, it adds depth and interest.

►Ungerer; www.ungererandcompany.com

Grapefruit oil 5x colorless

Source: Ungerer

GRAS, CAS# 90045-43-5

Natural

Odor: @ 100%. Citrus, orange, aldehydic, peely, terpenelike and slightly woody.

Taste: @ 1 ppm. Waxy, aldehydic, citruslike and slightly woody.

Taste: @ 3 ppm. Waxy, aldehydic, citrus and peely.

Possible applications: This version of grapefruit oil offers some variation on the theme. Its peel notes will contribute to the heart of citrus flavors and lend weight to the profile especially in grapefruit, tangerine and orange.

► **Ungerer; www.ungererandcompany.com**

2-Hepten-4-one

Source: Fontarome

FEMA# 3399, CAS# 4643-25-8

Natural occurrence: Roasted hazelnuts, beer, asparagus

Odor: @ 0.1%. Pungent, gassy, alliaceous, vegetablelike and earthy.

Taste: @ 0.1 ppm. Earthy, green, alliaceous, vegetablelike, oily and gas grill-like.

Taste: @ 0.2 ppm. Green, alliaceous, earthy, vegetable-like and gas grill-like.

Possible applications: This interesting component will fit nicely into cruciferous vegetable flavors like watercress, horseradish, broccoli, cauliflower and the like. It will also add subtle tropical notes to guava and durian below 0.1 ppm. Another unique application for this product is in charcoal and/or gas grilled-type flavors.

► **Frutarom; <http://frutarom.com/>**

2-Octen-4-one

Source: Fontarome

FEMA# 3603, CAS# 4643-27-0

Natural occurrence: Wheat bread.

Odor: @ 0.1%. Fruity, sweet and green with a musty, earthy undertone.

Taste: @ 0.2 ppm. Green, sweet, vegetablelike and fruity.

Taste: @ 0.5 ppm. Green, sweet, fruity, vegetablelike and earthy.

Possible applications: This chameleonlike compound is a multitasker. Depending on what its brother/sister materials are, it can go sweet-fruity or savory-vegetable. Fruit flavors that it complements are pineapple, pear, apple, peach, rhubarb and strawberry. Its green, earthy notes will reinforce character in jicama, potato, mushroom; cruciferous vegetables like watercress, mustard, horseradish, wasabi; and alliaceous vegetables like onion, garlic and shallot.

► **Fontarome; www.fontaromechemical.com/**

Orange oil 5x colorless

Source: Ungerer

FEMA# 2821 CAS# 84012-28-2

Natural

Odor: @ 100%. Aldehydic, citrus, orange, waxy, terpenelike and candylike.

Taste: @ 2 ppm. Citrus, sweet, fruity, waxy and candylike.

Taste: @ 5 ppm. Orange, citrus, peely, sweet, fruity, candylike and slightly floral.

Possible applications: This material possesses the heavier qualities of orange oil and will anchor those flavors as well as other citrus especially grapefruit, mandarin and all combinations thereof.

► **Ungerer; www.ungererandcompany.com/**

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