

Organoleptic Characteristics of Flavor Materials

Gerard Mosciano; gerardmoscianoflavorist@gmail.com

9-Decenoic Acid

Source: Bedoukian Research FEMA# 3660, CAS# 14436-32-9

Natural occurrence: Beer, wine and Parmesan cheese.

Odor: @ 1.0%. Waxy, oily fatty lard, deep aged cheese rind, lamb fatty, stale milky with dry soapy nuances.

Taste: @ 10 ppm. Dirty fatty waxy, dairy, lard rancid, hard

cheese rind, creamy milk and slightly lamb fatlike.

Possible applications: Butter, citrus lard, coconut, tallow, milk mushroom, ghee, cream, Romano and Parmesan

➤ Bedoukian Research; www.bedoukian.com

Dihydro-β-lonone

Source: Givaudan

FEMA# 3626, CAS# 17283-81-7

Natural occurrence: Champaca absolute and concrete, and raspberry plant.

Odor: @ 1.0%. Woody cedar, berry seedy, oily, raspberry with floral, tea and leafy nuances.

Taste: @ 5 ppm. Woody, seedy, berry, raspberry, with leafy and spicy nuances.

Possible applications: Berry, raspberry, blackberry and whiskey nuances.

➤ Givaudan; www.givaudan.com

Dihydro Cuminyl Alcohol

Source: IFF

FEMA# 2664, CAS# 57717-97-2

Natural occurrence: Caraway seed oil, gingergrass, lavandin, perilla oil, Scotch spearmint, angelica root, rose otto, tumeric root oil and wormseed oil Spanish.

Odor: @ 1.0%. Sweet, woody, aromatic spicy cardamom and green cuminlike, with dried orange peel and green waxy, floral nuances.

Taste: @ 25 ppm. Woody, herbal, slightly brown earthy spicy with floral lilac and balsamic nuances.

Possible applications: Root beer, vanitrope, vanilla, Dr. Pepper-type flavors, cardamom and cumin nuances and liqueur flavors.

➤ IFF; www.iff.com

Dihydro Linalool Oxide

Source: Bedoukian Research FEMA#3759, CAS# 13679-86-2

Natural occurrence: Petitgrain oil, passion fruit, osmanthus, honey, grape, coffee and brandy.

Odor: @ 1.0%. Sweet woody, floral, citrus lemon, lime and orange, tropical body, and fruity with berry, spice and floral nuances.

Taste: @ 10 ppm. Tropical fruity body, mango and guava, petitgrain citrus with sweet, floral, geranium and tealike nuances.

Possible applications: Pepper, mango, lime, citrus, tropical berry, seedy, tea, logan, muscat grape and cola flavors.

➤ Bedoukian Research; www.bedoukian.com

Epsilon Decalactone

Source: SAFC

FEMA# 3613, CAS# 5579-78-2

Natural occurrence: Not yet found in nature. Odor: @ 1.0%. Sweet, coconut creamy, milky with a phthalate celerylike note, and a fatty melted butter and dry lactonic cheeselike nuance.

Gerard Mosciano is joined by Judith Michalski, flavor consultant; Carl Holmgren, consulting flavor chemist; William Jaggard, Bell Flavors; and Douglas Young, principal flavorist, Symrise, in the organoleptic evaluations presented here. Natural occurrence information is from Leffingwell & Associates.

Address correspondence to Gerard Mosciano, c/o *Perfumer & Flavorist* magazine, 336 Gundersen Drive, Suite A, Carol Stream, IL 60188-2403.

Suppliers of most materials found in this report can be located in Allured's *Flavor & Fragrance Materials*, published by Allured Business Media, 336 Gundersen Drive, Suite A, Carol Stream, IL 60188-2403 USA; telephone 1-630-653-2155; fax 1-630-653-2192; *www.PerfumerFlavorist.com*.

53

Taste: @ 10 ppm. Waxy, sweetened coconut, dairy creamy with a melted butter, slightly brown butter and toffee-like nuance.

Possible applications: Coumarin, vanilla, dairy cheese, cream and butter, coconut and peach.

➤ **SAFC**; www.sigmaaldrich.com

Fluid Extract Licorice (#610925)

Source: Naturex

Odor: Neat. Brown, slightly roasted soylike with slight herbal licorice root nuance.

Taste: @ 0.5%. Brown, woody and slightly astringent, with a lingering sweet licorice aftertaste.

Possible applications: Root beer, bitterness modifiers, confections and grain maskers.

➤ Naturex; www.naturex.com

Possible applications: Apple, pear, pineapple, banana, citrus fresh notes, coconut and dairy nuances.

➤ SAFC; www.sigmaaldrich.com

Methyl trans-3-Hexenoate

Source: SAFC

FEMA# 3364, CAS# 2396-78-3

Natural occurrence: Guava, pineapple and Virginia tobacco. Odor: @ 1.0%. Sharp, sweet, green, fresh, fruity apple and pear with a slight floral nuance.

Taste: @ 5 ppm. Sharp, green, unripe fruity pineapple and applelike with a slight astringent aftertaste.

Possible applications: Apple, pear, pineapple, cheese, honey and tropical nuances.

➤ **SAFC**; www.sigmaaldrich.com

4-Hydroxy Benzaldehyde

Source: SAFC FEMA# 3984, CAS# 123-08-0

Natural occurrence: Bilberry and vanilla.

Odor: @ 1.0%. Slightly nutty almond, balsamic vanillalike with slight brown honey nuance and a faint metallic character.

Taste: @10 ppm. Imparts a creamy mouthfeel, slightly musty nutty with vanilla and honey nuances.

Possible applications:

Depth note for vanilla extract, cocoa extracts and nut complexes, cherry and grape.

➤ SAFC; www.sigmaaldrich.com

Methyl Heptanoate

Source: SAFC FEMA# 2705, CAS# 106-73-0

Natural occurrence:
Apple, hop oil,
peas, pineapple and
strawberry.

Odor: @ 1.0%. Sweet, fruity, green, waxy apple, and melon-like with vegetative nuances.

Taste: @ 10 ppm. Fruity, green, sweet, fresh, waxy and vegetative.

Ocimene Quintoxide

Source: SAFC

FEMA# 3665, CAS# 7416-35-5

Natural occurrence: Lime oil Peru, cherimoya and grape. Odor: @ 1.0%. Citrus cooling lime, slightly camphoraceous, woody, minty green, spice fresh with nuances of mango and grapefruit.

Taste: @ 5 ppm. Green terpy oily, woody, citrus lime, fresh cooling, with tropical mango and spicy cuminlike nuances.

Possible applications: Tropical cherimoya lime, mango, herbal parsley, cumin, fresh mint, monastery cordial grape and citrus flavors.

➤ **SAFC**; www.sigmaaldrich.com

(+/-)-Octan-3-yl Formate

Source: Fontarome

FEMA# 4009, CAS# 84434-65-1

Natural occurrence: Not yet found in nature.

Odor: @ 1.0%. Green, juicy, fruity apple and pear, waxy, and tropical with citrus nuances.

Taste: @ 10 ppm. Waxy, fruity, green, pear, banana, golden delicious apple and peach with vegetative nuances.

Possible applications: Banana, pear, apple, peach, tangerine and vegetative nuances.

➤ Fontarome; www.fontaromechemical.com

2-Pentyl Acetate

Source: Treatt

FEMA# 4012, CAS# 626-38-0

Natural occurrence: Not yet found in nature.

Odor: @ 1.0%. Orange juicy, impacting, musty green, unripe, fruity reminiscent of banana and vegetative nuances with a slight nutty note.

Taste: @ 10 ppm. Orange tingle, tropical and tongue raspy with fruity and nutty nuances.

Possible applications: Orange, banana, wine notes and peanut and hazelnut nuances.

➤ Treatt; www.treatt.com

Solid Extract Buchu no PG (#620085)

Source: Naturex

Odor: Neat. Aromatic, slight cooling herbal, sweet tobacco and haylike with a green fruity and slight berry tealike nuance.

Taste: @ 0.25%. Astringent, tea and haylike with a brown berry, jammy and menthofuran lactonelike nuance.

Possible applications: Tea, tobacco, oral care, cordials and

berry flavor depth.

➤ Naturex; www.naturex.com

Solid Extract Oak Chip (#621115)

Source: Naturex

Odor: @ 5.0% water. Dry, brown, smoky and caramellic with toasted woody and vanilla beany nuances.

Taste: @ 0.25%. Dry, astringent, woody, smoky and caramellic.Possible applications: Tobacco, whiskey blenders, vanilla, woody extractive nuances for brown fruity flavors.

➤ Naturex; www.naturex.com

Solid Extract Tamarind Ex 5 Fold (#320337)

Source: Naturex

Odor: Neat. Slight fruity, sweet syrupy, stewed raisin and prunelike.

Taste: @ 0.25%. Sweet, acidic, astringent, sour, reminiscent of citric and malic acids with a lingering fruity aftertaste. Possible applications: Tamarind, fruit notes for raisin and prune, and jammy nuances.

➤ Naturex; www.naturex.com

To purchase a copy of this article or others, visit www.PerfumerFlavorist.com/magazine.