



Organoleptic Characteristics of Flavor Materials

Gerard Mosciano

Gerard Mosciano is joined by Judith Michalski, chief flavorist, Edlong Flavors; 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.

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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.

Acetaldehyde Ethyl cis-3-Hexenyl Acetal (synonym: Leaf Acetal)

Source: Cargill Flavor Systems

FEMA# 3775, CAS# 28069-74-1, Natural

Natural occurrence: Guava and plum.

Odor: @ 1.0%. Sharp fresh green rind and green beanlike character.

Taste: @ 1 ppm. Dry, green rindy with a fruity finish, slightly buttery and mushroomlike with metallic nuances.

Possible applications: Apple, pear, melon, cucumber, mushroom and green pepper.

► Cargill Flavor Systems; cargillflavorsystems.com

Acetic Acid

Source: Vigon International

FEMA# 2006, CAS# 64-19-7, Natural

Natural occurrence: Vinegar, bergamot, cornmint oil, bitter orange oil, lemon petitigrain, various dairy products.

Odor: @ 1.0%. Sour pungent, cider vinegar, slightly malty with a brown nuance.

Taste: @ 15 ppm. Sour, acidic tangy.

Possible applications: Salad dressings, vinegar, general fruit flavors, dairy nuances.

► Vigon International; vigoninternational.com



Anise Infusion

Source: Bontoux Inc.

Natural

Odor: Neat. Anise, sweet spicy, chavicol and black licoricelike.

Taste: @ 0.10%. Sweet anise, ouzo liqueurlike, black licorice and black cough droplike.



Possible applications: Licorice, cough cold preparations, mouthwashes, herbal and mint nuances, liqueur flavors.

► Bontoux Inc.; bontoux.com

Cilantro Oleoresin

Source: Kalsec Inc.

Natural, organic compliant

Odor: @ 1.0%. Oily, spicy cilantro, soapy, fresh herbal with oily nuances

Taste: @ 10 ppm. Oily rue, cilantrolike with herbal ketonic leafy nuances.

Possible applications: Savory nuances, chicken fat, spice blends.

► Kalsec Inc.; kalsec.com



Cinnamon Bark Oil P&N

Source: Bontoux Inc.

Natural

Odor: @ 1.0%. Warm, spicy cinnamon, woody barklike, sweet aromatic with citrus nuances.

Taste: @ 10 ppm. Spicy, woody cinnamon bark with confection and bakery nuances.

Possible applications: Bakery emulsions, confections, spice nuances, cola flavors, apple pie spices.

► Bontoux Inc.; bontoux.com



δ-Dodecalactone

Source: Citrus & Allied Essences Ltd.

FEMA# 2401, CAS# 713-95-1, Natural

Natural occurrence: Apricot, butter, cheddar cheese, coconut, cooked beef, milk products, peach, pineapple and strawberry.

Odor: @ 1.0%. Waxy, fatty dairylike, lactonic, milky creamy after note with a fruity strawberry nuance.

Taste: @ 10 ppm. Strong fatty creamy, stale milky, lactic massoia notes with a dairy mouthfeel.

Possible applications: Butter, cream, dairy notes, peach, strawberry and meaty fatty nuances.

► Citrus & Allied Essences Ltd.; citrusandallied.com

Furfuryl Mercaptan

Source: Advanced Biotech

FEMA# 2493, CAS# 98-02-2, Natural

Natural occurrence: Coffee, cooked beef, sesame seed oil.

Odor: @ 0.01%. Intense sulfurous onion impact, lacrimator, slightly skunklike with a dairy nuance and a hint of savory and coffeelike notes.

Taste: @ 0.2–1 ppb. Sulfurous, roasted, onion, garlic and coffee.

Possible applications: Coffee, savory roasted meats, cooked poultry, seafood, chocolate and coffee.

► Advanced Biotech Inc.; adv-bio.com



Grapefruit Oil 5X Agres Cleaned

Source: Global Essence

Natural

Odor: @ 1.0%. Dry citrusy grapefruitlike, musty with some fruity orange notes and a terpy and aldehydic nuance.

Taste: @ 10 ppm. Dry, citrusy, mildly metallic and juicy aldehydic aftertaste.

Possible applications: Grapefruit, citrus blends and fruit punches.

► Global Essence; globalescence.com



Green Tea CO₂ Extract

Source: Cargill Flavor Systems

Natural

Odor: Neat. Strong floral linalool, slightly iononelike in character, musty tealike with a green fatty violet leaf finish.

Taste: @ 100 ppm. Strong floral front, dry, mildly herbal green fatty finish.

Possible applications: Tea, plum, melon, cucumber, squash, berry and nut nuances.

► Cargill Flavor Systems; cargillflavorsystems.com

Guaiacol

Source: Advanced Biotech

FEMA# 2532, CAS# 90-05-1, Natural

Natural occurrence: Beer, barley, tobacco, cocoa, coffee, dried bonito, licorice, malt, rum, tea, whiskey, hardwood smoke.

Odor: @ 1.0%. Phenolic, smoky, spicy, medicinal, vanilla, savory meaty, woody with a bourbon whiskey casky nuance.

Possible applications: Vanilla, smoke, bourbon and whiskey cask notes, bacon and ham, woody nuances.

► Advanced Biotech Inc.; adv-bio.com



trans-2-Hexenol

Source: WEN International Inc.

FEMA# 2562, CAS# 2305-21-7,

Natural

Natural occurrence: Apple, kiwi, peach,



strawberry, tamarind, tomato and tea.

Odor: @ 1.0%. Fresh, fatty green, tomato vegetative with leafy, green fruity and herbal nuances.

Taste: @ 5 ppm. Fresh, leafy green, slightly fatty with grassy, fruity and juicy nuances, tomato and celery nuances.

Possible applications: Juicy green nuances, apple and berry, pear, strawberry, green banana, tomato, tea, vegetative and fresh minty nuances, kiwi and cherry.

► WEN International Inc.; weninternational.com

3-Methyl-2,4-nonandione

Source: Vigon International

FEMA# 4057, CAS# 113486-29-6, Nature identical

Natural occurrence: Chinese green tea powder, Japanese green tea, boiled carp, soybean oil, black tea and anchovy.

Odor: @ 1.0%. Sweet, waxy, creamy dairy, condensed milky and dried milk powder, slightly coconut and musty mushroom nuances, grape and haylike nuances.

Taste: @ 1–5 ppm. Sweet, milky creamy, condensed milk and dried milk powder, slightly fruity coconut, creamy and fruity notes reminiscent of banana, grape skin, green tea and aged cheeses, good mouthfeel.

Possible applications: Milk powder, cheese, dairy notes, condensed milk, cream, vanilla, butter, fruity notes for banana, grape and coconut, green tea and aged cheeses.

► Vigon International; vigoninternational.com

Methyl p-Tert Butyl Phenyl Acetate

Source: Cargill Flavor Systems

FEMA# 2690, CAS# 3549-23-3, Artificial

Odor: @ 1.0%. Musty meaty, chicken fatty, cocoa honey, floral, sour, fatty milky, dairy and fishy nuances.

Taste: @ 5 ppm. Sweet cocoa, honey, buttery creamy, fatty milky dairylike with fishy nuances.

Possible applications: Butter, honey, cocoa, meaty HVP notes, peach, fruity mouthfeel notes, vegetable notes, cream and sour cream, cheese nuances, nut and vanilla.

► Cargill Flavor Systems; cargillflavorsystems.com



Phenylethyl Alcohol

Source: Robertet

FEMA# 2858, CAS# 60-12-8, Natural

Natural occurrence: Apple, apricot, bilberry, cherry, grapefruit, guava, orange peel, peach, raisin, grape, asparagus, blackberry, papaya, melon and cabbage.

Odor: @ 1.0%. Floral honey, yeasty bready, musty fresh and sweet.

Taste: @ 20 ppm. Mushroomlike, rose floral, bready with honey nuances.

Possible applications: Melon, cocoa, honey, strawberry, caramel, bread, nut, yeasty notes, rose, citrus, tea, banana, malt and tomato.

► Robertet; robertet.com