



# 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 Publishing Corporation, 336 Gundersen Drive, Suite A, Carol Stream, IL 60188-2403 USA; telephone 1-630-653-2155; fax 1-630-653-2192; [www.PerfumerFlavorist.com](http://www.PerfumerFlavorist.com).

## Basmati Brown Rice Distillate

*Source:* Mooreganics by A.M. Todd Natural

*Odor:* Neat. Warm nutty and toasted brown, brown rice and cereal-like, slightly sulfurous nacho corn chiplike.

*Taste:* @ 0.05%. Toasted brown, cooked brown rice, nutty pyrazinelike, corn chiplike, Rice Krispies with caramellic and toffee nuances.

*Possible applications:* Bread, fried flavors, peanut and peanut butter, roasted beef pork and chicken, bread, popcorn, corn chips.

► A.M. Todd; tel: 1-513-881-7144; [www.moorelab.com](http://www.moorelab.com)



*Odor:* @ 1.0%. Estry, sweet fruity, slightly juicy with green waxy nuances reminiscent of pineapple, apple, pear and tropical notes.

*Taste:* @ 10 PPM. Estry fruity, juicy with green waxy notes, reminiscent of pear, banana and strawberry.

*Possible applications:* Pineapple, pear, tutti-frutti, banana, strawberry, tallow.

► Fleurchem; tel: 1-845-341-2100; [www.fleurchem.com](http://www.fleurchem.com)

## 2,5-Dimethyl Furan

*Source:* SAFC

FEMA# 4106, CAS# 625-86-5, Nature identical

*Natural occurrence:* Beef, chicken, cocoa, coffee, egg, malt, rice and rum.

*Odor:* @ 1.0%. Impacting, solventlike, rum and cognaclike, meaty boiled beef with vitamin, chicken notes and bread crust nuances.

*Taste:* @ 5 PPM. Meaty boiled beef with nutty and vitamin notes, coffee, baked cookie-like, brown sugar, rummy, burnt with cocoa and chocolate nuances.

*Possible applications:* Savory beef, poultry and turkey, dairy nuances, cocoa, chocolate, cognac, rum, bread and coffee.

► SAFC; tel: 1-800-227-4563; [www.safcsupplysolutions.com](http://www.safcsupplysolutions.com)

## Benzyl Cinnamate

*Source:* SAFC

FEMA# 2142, CAS# 103-41-3, Nature identical

*Natural occurrence:* Copaiba balsam, balsam Peru and balsam Tolu.

*Odor:* @ 1.0%. Sweet spicy cinnamon, floral, powdery balsamic with a heavy fruity nuance.

*Taste:* @ 10 PPM. Spicy, floral, fruity, balsamiclike with jammy and candy fruity nuances of cherry and strawberry.

*Possible applications:* Cherry, strawberry, raspberry, balsamic nuances for vanilla and honey.

► SAFC; tel: 1-800-227-4563; [www.safcsupplysolutions.com](http://www.safcsupplysolutions.com)

## Butyl Hexanoate

*Source:* Fleurchem

FEMA# 2201, CAS# 626-82-4, Natural

*Natural occurrence:* Apple, banana, grape, mango, pear and whiskey.



## Ethyl 4-Pentenoate

*Source:* Bedoukian Research Inc.

FEMA# 4360, CAS# 1968-40-7, Artificial

*Odor:* @ 1.0%. Slightly nutty, musty oily, earthy and herbal, reminiscent of ripe green olives, sour with a hint of fruitiness reminiscent of apple, pineapple and tropical fruits.



*Taste:* @ 2.5 PPM. Sour with a hint of fruitiness, musty and green and acidic reminiscent of green olives.  
*Possible applications:* Cheese and fruit nuances for tropical body such as mango, pineapple and green olives.

► **Bedoukian Research Inc.;** *tel:* 1-203-830-4000;  
*www.bedoukian.com*

## 2-Hepten-4-one

*Source:* Fontarome Chemical Inc.  
 FEMA# 3399, CAS# 4632-25-8, Nature identical  
*Natural occurrence:* Asparagus, beer and roasted filbert.  
*Odor:* @ 1.0%. Pungent, ethereal, musty dry nutty with brown fruity and citrus nuances.

*Taste:* @ 1 PPM. Brown nut skin, creamy, earthy, dirty coffeelike with citrus nuances.  
*Possible applications:* Citrus, rum, nut skin notes, hazelnut.

► **Fontarome Chemical Inc.;** *tel:* 1-414-744-3993;  
*www.fontaromechemical.com*

## Lemon Fresh

*Source:* Lionel Hitchen (Essential Oils) Ltd.  
 Natural

*Odor:* @ 1.0%. Clean, sweet fresh juicy lemon with a slight green peely hint of lime.

*Taste:* @ 10 PPM. Clean, sweet fresh juicy lemon, citral-like with a slight peely lime nuance.

*Possible applications:* Lemon and lime beverages, citrus and cocktail mixes as well as lemon and lime alcoholic flavors.

► **LHEO Ltd.;** *tel:* 44-(0)-1962-760815; *www.lheo.co.uk*



## 1-Methyl-2,3-cyclohexadione

*Source:* Treatt  
 FEMA# 3305, CAS# 3008-43-3, Nature identical  
*Natural occurrence:* Coffee.

*Odor:* @ 1.0%. Sweet caramellic brown, cooked with maple syrup nuances.

*Taste:* @ 30 PPM. Sweet brown caramellic with an astringent, slightly bitter coffee nuance.

*Possible applications:* Brown sugar, caramel, maple syrup, coffee, butterscotch and shellfish.

► **Treatt USA;** *tel:* 1-863-668-9500; *www.treatt.com*

## Nerolidol

*Source:* Charabot  
 FEMA# 2771, CAS# 7212-44-4, Natural

*Natural occurrence:* Citrus fruit, strawberry, tomato, ginger, pepper, thyme, hop oil, cognac, tea, mushroom and rice.

*Odor:* @ 1.0%. Floral rosey, green waxy, citrus fruity, pear, seedy strawberry with nuances of melon and tropical fruits.

*Taste:* @ 15 PPM. Fruity green, soapy, red licorice, orange, strawberry, apple, melon, woody powdery with rosey floral nuances.

*Possible applications:* Rose, ginger ale flavors, lemon and orange citrus, strawberry, apple, melon, mango, papaya, guava, pear, blueberry and red licorice.

► **Charabot;** *tel:* 33-(0)4-93-09-33-33; *www.charabot.com*

## 3-Nonanone (synonym: ethyl hexyl ketone)

*Source:* Bedoukian Research Inc.  
 FEMA# 3440, CAS# 925-78-0, Nature identical  
*Natural occurrence:* Banana, chervil, cooked beef and passion fruit.

*Odor:* @ 1.0%. Waxy, cheeselike, fruity mango, green aldehydic with tropical nuances.

*Taste:* @ 20 PPM. Waxy, creamy, cheesy, earthy with a tropical fruit nuance.

*Possible applications:* Blue and Parmesan cheese.

► **Bedoukian Research Inc.;** *tel:* 1-203-830-4000;  
*www.bedoukian.com*

## Olive Oil Distillate

*Source:* Mooreganics by A.M. Todd  
 Natural

*Odor:* Neat. Strong oily and dienal fatty, green, slightly fruity, slightly cooked nutty but characteristic of olive oil.

*Taste:* @ 0.05%. Oily, green, cooked with a faint fruity nuance.

*Possible applications:* Olive oil flavors, tomato, avocado, walnut, macadamia nutty nuances, low calorie salad dressings.

► **A.M. Todd;** *tel:* 1-513-881-7144; *www.moorelab.com*



## 2,4,5-Trimethyl-δ-3-oxazoline

*Source:* Oxford Chemicals Ltd.  
 FEMA# 3525, CAS# 22694-96-8, Nature identical  
*Natural occurrence:* Cooked chicken, cooked beef and roasted peanut.

*Odor:* @ 1.0%. Musty, toasted nutty, vegetative, cocoalike, brown bready and caramellic with a slight popcorn note.

*Taste:* @ 10 PPM. Musty, toasted nutty, cocoa, brown, vegetative with a bready nuance.

*Possible applications:* Cocoa, nut, coffee, mocha, vanilla, bread, peanut, popcorn, caramel.

► **Oxford Chemicals Ltd.;** *tel:* 44-(0)-1429-863555;  
*www.oxfordchemicals.com*

## Tuscan Herb Soluble Oleoresin

*Source:* Lionel Hitchen (Essential Oils) Ltd.  
 Natural

*Odor:* @ 1.0%. Green, spicy, herbal oregano, basil and aniselike with a green tomato stem note and a character reminiscent of Italian and French herbal liqueurs.

*Taste:* @ 5 PPM. Green herbal, spicy with oregano and green pinelike nuances.

*Possible applications:* Pizza spice, Italian spice blends, European herbal liqueurs and digestive cordials.

► **LHEO Ltd.;** *tel:* 44-(0)-1962-760815; *www.lheo.co.uk*

