



Organoleptic Characteristics of Flavor Materials

Gerard Mosciano

Gerard Mosciano is joined by Judith Michalski, chief flavorist, Edlong Flavors; Carl Holmgren, consulting flavor chemist; and Douglas Young, principal flavorist, Symrise, in the organoleptic evaluations presented here.

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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, 362 South Schmale Road, Carol Stream, IL 60188-2787 USA; telephone 630-653-2155; fax 630-653-2192; www.perfumerflavorist.com.



Absolute Pine Needle

Source: Robertet
Natural

Odor: @ 0.5% BA. Fresh green pine, fresh-cut woody and balsamic.

Taste: @ 0.5 PPM. Balsamic, woody pine, green with a slight fruitlike nuance.

Possible applications: Herbal nuances, toiletries, oral-care products, mint enhancers.

► **Robertet**; tel: 201-337-7100; www.robertet.com

Cassia Super Soluble S/S

Source: Thwaites, Inc.
Natural

Odor: @ 1.0%. Spicy, cinnamon, warm, slight nasal tingle, herbal, sweet with slight clove and cinnamon bark nuances.

Taste: @ 5 PPM. Sweet, spicy cinnamon, slightly woody and barklike, tongue biting with an oily Dentyne-type aftertaste.

Possible applications: Cola blends, spice blends, Dentyne-type chewing gums and other confections, barbecue spice blends, root beer, apple pie spices, cordial flavors.

► **Thwaites, Inc.**; tel: 781-935-8461; www.thwaitesinc.com



2-Hexyl Thiophene

Source: Oxford
Chemicals Ltd.

FEMA# 4137,

CAS# 18794-77-9, Nature identical

Natural occurrence: Grilled beef, cooked lamb, cranberry, mushrooms.

Odor: @ 1.0%. Sharp, impacting sulfurous, savory, metallic, green vegetative with mushroom and fermented nuances.

Taste: @ 1.0–5.0 PPM. Green, cruciferous vegetative, mushroom metallic, musty with a sulfurous tropical nuance.

Possible applications: Onion, garlic, leek, tomato, peppers, durian, wasabi, radish, tropical and peach nuances, chicken and beef, mushroom nuances.

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

Infusion Chinotto

Source: Cargill Flavor Systems
Natural

Odor: Neat. Alcoholic, woody herbal, brown davana-like, haylike with a horehound phenolic note and a slightly medicinal aromatic bitter character.

Taste: @ 0.1%. Woody, herbal, bitter, astringent with a Ricola-type herbal nuance and hints of thyme and oregano.

Possible applications: Herbal liqueurs, cough/cold notes, herbal teas.

► **Cargill Flavor Systems**; tel: 33(0) 493-093-000; www.cargillflavorsystems.com

2-Mercaptoanisole

[synonym: 2-(Methoxy)-Benzene-1-Thiol]

Source: Treatt USA

FEMA# 4159, CAS# 7217-59-6, Artificial

Natural occurrence: None found.

Odor: @ 1.0%. Sweet, smoky, earthy with a slight methyl salicylate nuance, aromatic with a vanillalike nuance, sulfurous, eggy.

Taste: @ 1.0 PPM. Slightly cooling, methyl salicylate-like with a smoky vanilla aftertaste, sulfurous, fruity grape methyl anthranilate and slightly tropical.

Possible applications: Vanilla, smoke flavors, grape, wintergreen nuances.

► **Treatt USA**; tel: 863-688-9500; www.treatt.com

2-Methyl Piperidine 98%

Source: SAFC

FEMA# 4244, CAS# 109-05-7,

Nature identical

Natural occurrence: Boiled and roasted beef.

Odor: @ 1.0%.

Ammonia impact, fishy shrimplike, nutty popcorn with meaty and soy sauce nuances.

Taste: @ 100 PPM. Popcorn, brown nutty, slightly metallic fishy.

Possible applications: Popcorn, corn chips, shellfish, ripe pineapple, shrimp notes, umami, roasted savory and vegetative notes.

► **SAFC**; tel: 314-771-5765; www.safcsupplysolutions.com



Oleic Acid*

Source: Advanced Biotech

FEMA# 2815, CAS# 112-80-1, Natural

Natural occurrence: Blue cheese, cheddar,

Swiss cheese, cooked beef, mutton and pork, roasted peanuts, and various vegetable oils.

Odor: @ 5.0%. Waxy with lard and tallow notes, chicken fat and savory meaty nuances.

Taste: @ 50 PPM. Fatty, vegetable oil-like with lard and tallow nuances of fried potatoes, chicken fat notes, good mouthfeel with dairy

and milky nuances.

Possible applications: Peanut butter, lard, tallow, fat replacer, olive oil, fried nuances, pork and beef, chicken, coconut and creamy dairy mouthfeel.

► **Advanced Biotech**; tel: 973-357-0577; www.adv-bio.net

Oleoresin Vanilla Bourbon Twentyfold*

Source: Danisco

Natural

Odor: @ 10%. Sweet balsamic, beany, vanilla with slight animal barky notes, powdery and full-bodied.

*This material also can be used in fragrance formulations.

Taste: @ 100 PPM in 5% sugar milk. Sweet woody, balsamic vanilla, creamy and beany with a brown phenolic nuance.

Possible applications: Vanilla notes in general, baked goods, chocolate, cola beverages, chocolate beverages.

► **Danisco**; tel: 800-255-6837; www.danisco.com

Orange Oil Fivefold*

Source: F.D. Copeland & Sons Ltd.

Natural

Odor: @ 10%. Heavy, citrus orange, aldehydic, pulpy and meaty with a woody valencene and sinensal-like sweetness.

Taste: @ 10 PPM in 5% sugar + 0.1% CA.

Citrus orange, pulpy, slightly waxy aldehydic and valencenelike.

Possible applications: General citrus orange types such as confections, beverages and various fruit nuances.

► **F.D. Copeland & Sons Ltd.**; tel: 44(0) 870-460-8101; www.fdcopeland.com

Styrallyl Acetate

(synonym: Methyl Phenyl Carbinyl Acetate and Gardenol)*

Source: International Flavors & Fragrances

FEMA# 2684, CAS# 93-92-5, Natural

Natural occurrence: Cloves, avocado, gardenia flowers.

Odor: @ 1.0%. Sweet fruity tropical mango, woody, musty honey with powdery green floral nuances.

Taste: @ 5 PPM. Fruity raisin, berry, pear, woody tropical green, citruslike with a green vegetative nuance.

Possible applications: Fig, raisin, honey, strawberry, peach, grape, apricot, mango, spice anise, grapefruit, mango body, peach.

► **International Flavors & Fragrances**; tel: 732-329-4600; www.iff.com



*This material also can be used in fragrance formulations.

*Attention, Perfumers

Although Gerard Mosciano's column focuses on the odor and taste characteristics of flavor materials, many of these ingredients can be used for fragrances. If you are a perfumer, make sure to check out Mosciano's column in every issue of *P&F* magazine for unique ingredients to be used in the fragrance field! These materials will be noted with an asterisk.

Treattrome Cantaloupe Melon

Source: Treatt USA

Natural

Odor: Neat. Very sweet estry, fatty and waxy with a slight green melon rind note.

Taste: @ 0.1%. Sweet fruity, fatty watermelon, honeydew melon rind, cantaloupe flesh.

Possible applications: Cantaloupe, honeydew, melon, fruit blends for beverages, tropical nuances.

► **Treatt USA**; tel: 863-688-9500; www.treatt.com

Treattrome Tomato

Source: Treatt USA

Natural

Odor: Neat. Ripe tomato, sulfurous, pulpy, cooked, woody with a green viny vegetative nuance.

Taste: @ 0.1–0.2%. Cooked tomato, pulpy, sulfurous, slightly fruity, floral, woody and earthy.

Possible applications: Tomato juice beverage top notes, salad dressing, sauces, tea and pepper, banana, savory meaty nuances.

► **Treatt USA**; tel: 863-688-9500; www.treatt.com

2,3,5-Trimethyl Pyrazine

Source: Advanced Biotech

FEMA# 3244, CAS# 14667-88-1, Natural

Natural occurrence: French fried and baked potato, Swiss and Gruyère cheese, grilled beef, cocoa and coffee, roasted barley, peanut, mushroom, crab, hydrolyzed vegetable protein (HVP) and fermented soy sauce.

Odor: @ 1.0%. Musty peanut shell, coffee and cocoa with slightly powdery, toasted and potato nuances.

Taste: @ 5 PPM. Musty, nutty, peanut shell-like with coffee and cocoa notes, and with toasted and roasted nuances.

Possible applications: Peanut, general nut flavors, coffee, cocoa, bread and potato notes, browned butter, popcorn, Swiss cheese and malt.

► **Advanced Biotech**; tel: 973-357-0577; www.adv-bio.net



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