



Organoleptic Characteristics of Flavor Materials

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2-Acetyl-5-Methyl Thiophene

Source: Treatt

FEMA# 4643, CAS# 13679-74-8, Nature identical

Natural occurrence: Coffee, krill, pork liver and boiled beef.

Odor: @ 1.0%. Sweet toasted almond marzipan, cherry, with a nutty and slightly powdery coumarin vanilla note and a slight sulfurous meaty pork nuance.

Taste: @ 1–2 ppm. Dry, sweet almondlike nutty, coumarin and vanillalike with a cold coffee and savory nuance.

Possible applications: Almond, amaretto, marzipan, coconut, coumarin, vanilla, cherry, pork nuances; coffee and nutty nuances.

► **Treatt**; www.treatt.com

Benzodihydropyrone Natural

Source: Advanced Biotech

FEMA# 2381, CAS# 119-84-6, Nature identical

Natural occurrence: Sweet clover and deer tongue.

Odor: @ 1.0%. Sweet, creamy vanillin and coumarin with balsamic, toasted coconut, tobacco and tonkalike nuances.

Taste: @ 10 ppm. Sweet creamy vanillin, coumarin, powdery balsamic tonkalike with nuances of herbal celery.

Possible applications: Vanilla, coumarin replacements, balsamic notes, toffee, bourbon whiskey notes and tobacco.

► **Advanced Biotech**; www.adv-bio.com

Cherry Bark Extract Natural (#0227601)

Source: Mooreorganics/AM Todd

Odor: Neat. Woody, dry astringent, with whiskey, tobacco nuances.

Taste: @ 0.20%. Woody, astringent, cherry pit, cherry cordial notes, black walnut hulllike nuances.

Possible applications: Tobacco, tea, cherry cordials, ginger and whiskey nuances.

► **Mooreorganics/AM Todd**; www.moorelab.com

Coffee Aroma Oil Based (Af-11050)

Source: Allen Flavors

Natural

Odor: @ 10%. Coffee, burnt, roasted, savory meaty, nutty and slightly beany.

Taste: @ 0.05%. Intense roasted/toasted grainy, savory meaty, caramellic, chocolate and coffee.

Possible applications: Tobacco, savory burnt notes, roasted coffee, caramel.

► **Allen Flavors**; www.allenflavors.com

Cucumber Essence Conc. Natural (#Cue-101)

Source: Sensus Flavors

Odor: Neat. Fresh, green cucumber, melon with fatty vegetative and chickenlike nuances.

Taste: @ 0.50%. Fresh cucumber, green, watermelonlike with juicy, grassy green applelike nuances.

Possible applications: Prickly pear, apple, watermelon, cucumber, green vegetative and fruity nuances; cucumber and other salad dressings.

► **Sensus Flavors**; www.sensusflavors.com

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.

4,5-Dimethyl-2-Isobutyl Thiazole

Source: Treatt

FEMA# 4647, CAS# 53498-32-1, Nature identical

Natural occurrence: Potato, beans and cooked beef.

Odor: @ 1.0%. Green tomato stem, musty, brown savory beef, potato skin, tomato paste, vegetative rhubarb, tropical fruity with an osmanthuslike nuance.

Taste: @ 1–2 ppm. Tomato paste, herbaceous, savory meaty, baked potato-like with vegetative nuances.

Possible applications: Tomato, potato, melon, mango tropical nuances, rhubarb, cucumber, peppers and other vegetative nuances.

► **Treatt;** www.treatt.com

Isopropyl 3-Methylthio-2-Butenoate

Source: Oxford (now Frutarom)/Charkit

FEMA# 4260, CAS# 34365-79-2, Nature identical

Odor: @ 0.10%. Sulfurous, onionlike, rubber tires with meaty undernotes.

Taste: @ 1.5 ppm. Sulfurous eggy, roasted meaty and slightly fruity nuance.

Possible applications: Alliums, meat flavors such as lamb, durian, mango, black currant, cherry and strawberry.

► **Oxford (Frutarom)/Charkit;** www.charkit.com

3-Mercapto Propyl Amine

Source: Treatt

FEMA# 4649, CAS# 4104-45-4, Nature identical

Odor: @ 1.0%. Vegetative raw potato, jicamalike with beany and waxy cheese rind nuances.

Taste: @ 1–2 ppm. Dry, earthy, raw potato, jicamalike with vegetative notes reminiscent of green beans, peas and nutty peanut shells.

Possible applications: Raw potato skin, mushroom, beet, musty apple, jicama, green beans, peas, peanut shell and other nut nuances.

► **Treatt;** www.treatt.com

2-(Methylthio)-Ethyl Acetate

Source: Treatt

FEMA# 4560, CAS# 5682-47-5, Nature identical

Natural occurrence: Apple, melon and apple brandy.

Odor: @ 1.0%. Sulfurous, penetrating mustard and horseradishlike with fruity peach, apple and ripe cantaloupe, and a green wasabi acrylatelike nuance.

Taste: @ 1–2 ppm. Sulfurous wasabi, mustard and horseradish with strong notes of tropical fruit, pineapple, apple and grape.

Possible applications: Wasabi, horseradish, mustard, tropical fruit nuances and fruity nuances for peach and grape, brandy and apple cider.

► **Treatt;** www.treatt.com

Methyl Octyl Sulfide

Source: Treatt

FEMA# 4573, CAS# 3698-95-1, Nature identical

Natural occurrence: Boiled, cooked beef.

Odor: @ 1.0%. Green, sulfurous, dirty juicy pineapple, fruity tropical with onion and wasabi metallic nuances.
Taste: @ 1–2 ppm. Musty dirty, tropical fruity juice body, pineapple, with wasabi and radish notes and a stewed tomato nuance.

Possible applications: Pineapple, tropical nuances, melon notes, cucumber and wasabi.

► **Treatt;** www.treatt.com

Oregano Essence Natural Conc. (#Ore-101)

Source: Sensus Flavors

Odor: Neat. Oregano, spicy, herbal and dry with slight harsh phenolic and carvacrollike notes.

Taste: @ 0.25%. Fresh herbal oreganolike with woody, spicy and phenolic nuances.

Possible applications: Pizza spice emulsions, V8 vegetable drinks, salad dressings.

► **Sensus Flavors;** www.sensusflavors.com

Phenyl Acetaldehyde Natural

Source: SAFC

FEMA# 2874, CAS# 122-78-1, Nature identical

Natural occurrence: Bilberry, cherry, grapefruit, guava, orange peel, peach, raisin, grape, asparagus, blackberry, papaya, melon, cabbage, sweet pepper and celery.

Odor: @ 1.0%. Floral rosy, animal nuance, hint of green, with honey, cocoa and tomato nuances.

Taste: @ 0.2 ppm. Honey, animal, full-mouth feel with fruity and tobacco notes.

Possible applications: Honey, chocolate, tea, wines, whiskey, beer, breads, stone fruits and strawberry, tropical nuances.

► **SAFC;** www.sigmaladrich.com

Red Tomato Essence Conc. Natural (# 16304)

Source: Sensus Flavors

Odor: Neat. Ripe tomato, fresh with meaty slightly cooked tomato paste notes and sweet, dimethyl sulfide and vegetative nuances.

Taste: @ 0.75%. Pulpy American beefsteak tomato, ripe with thiazolelike tomato paste and seedy nuances.

Possible applications: Tomato juice top notes and tomato paste, V8 type beverages, soups and salad dressings.

► **Sensus Flavors;** www.sensusflavors.com

Tea Extract, Darjeeling Black Natural (#04-071-01)

Source: Mooreganics/AM Todd

Odor: Neat rosy floral, leafy, tealike, with a linalool oxide, woody, slightly citrus black tea character.

Taste: @ 0.20%. Rose floral, tea, woody, leafy, woody and haylike.

Possible applications: Tea.

► **Mooreganics/AM Todd;** www.moorelab.com

Vanillyl Butyl Ether

Source: Shijiazhuang Donglian Aroma Chemicals Ltd. Artificial

FEMA# 3796, CAS# 82654-98-6, Not yet found in nature.

Odor: @ 1.0%. Musty, cardboard, coumarin, vanillinlike, with creamy and sweet fruity nuances.

Taste: @ 20 ppm. Vanillalike, slightly creamy and brown, with musty coumarin and figlike fruity nuances.

Possible applications: Vanilla and coumarin.

► **Shijiazhuang Donglian Aroma Chemicals Ltd;** www.dlflavor.com

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