



Organoleptic Characteristics of Flavor Materials

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Ethyl-2-methyl pentanoate

Source: Sigma-Aldrich

FEMA# 3488, CAS# 39255-32-8

Natural occurrence: Red clover, plum and wine.

Odor: @ 100%. Sweet, fruity, fresh, applelike, slightly green and slightly waxy, with a hint of cheese.

Taste: @ 5 ppm. Sweet, fruity, overripe and ethereal.

Taste: @ 10 ppm. Sweet, fruity, fresh, berrylike and ethereal.

Possible applications: Fruit flavors are the prime target of this ester. Its sweet ripe profile will benefit cider-type and fruit flavors like apple, pear, strawberry, blueberry, melon, pineapple, mango and papaya. At low levels it will also fit into the fruity complex of aged cheeses like Parmesan.

4-Hydroxybutyric acid lactone, natural (synonym: γ -butyrolactone)

Source: M & U

FEMA# 3291, CAS# 96-48-0, natural

Natural occurrence: Apricot, beer, coffee, lavender, honey, passion fruit, guava and wine.

Odor: @ 100%. Mild, slightly brown, fatty and waxy.

Taste: @ 30 ppm. Mild and creamy.

Taste: @ 50 ppm. Milk and creamy, with body and a nutty aftertaste.

Possible applications: This product will add fatty, creamy notes to dairy flavors like milk, cream, fresh cheeses, dulce de leche, caramel and butter. Nut flavors like pecan, macadamia and walnut are also good destinations for this material.

5-Ethyl-3-hydroxy-4-methyl-2(5H)-furanone, natural (synonym: ethyl fenugreek lactone, maple furanone)

Source: Aromiens International Inc.

FEMA# 3153, CAS# 144810-13-9, natural

Natural occurrence: Blackberry, raspberry, blueberry, coffee and soy sauce.

Odor: @ 100%. Sweet, brown and slightly woody, with a hint of celery.

Taste: @ 1 ppm. Sweet, brown and slightly woody.

Taste: @ 2 ppm. Sweet, brown, slightly celerylike and maplelike.

Possible applications: Sweet brown flavors like maple, caramel, rum, cocoa and toffee will be enhanced by this chemical. Other areas where it should be used are in nut flavors like pecan, walnut and hazelnut, coffee, and even brown fruits like prune and tamarind.

Ethyl cyclopentenolone, natural

Source: Aromiens International Inc.

FEMA# 3152, CAS# 21835-01-8, natural

Natural occurrence: Coffee, pork and tobacco.

Odor: @ 1%. Sweet, brown, brown sugarlike, jammy and ashy.

Taste: @ 20 ppm. Sweet, brown, burnt, slightly rummy and caramellic.

Taste: @ 40 ppm. Sweet, slightly rummy, caramellic, maplelike, and nutty.

Possible applications: This is another welcome addition for natural brown flavors, especially brown sugar, chocolate, maple, nut, coffee, bread crust, baked notes, rum, honey, whiskey, caramel and jammy notes in fruits.

Benzyl isovalerate, natural

Source: Advanced Biotech

FEMA# 2152, CAS# 103-38-8, natural

Natural occurrence: Cherimoya, tobacco and wormwood.

Odor: @ 100%. Fruity, slightly floral and berrylike.

Taste: @ 5 ppm. Fruity, green and berrylike.

Taste: @ 10 ppm. Fruity, floral, green and berrylike.

Possible applications: This versatile, old-line ester will reinforce the fruity notes of berry flavors like blueberry, grape, dark cherry, blackberry and cranberry. Other flavors where it will lend support are in apple, pear, pomegranate and red licorice.

α -Methylbenzyl alcohol, natural (synonym: styrallyl alcohol)

Source: Wen International

FEMA# 2685, CAS# 98-85-1, natural

Natural occurrence: Mushroom, tea, tobacco, cranberry and spearmint.

Odor: @ 100%. Chemical, mothball-like, sweet, balsamic, floral and slightly indolelike.

Taste: @ 10 ppm. Slightly fruity, green and slightly floral.

Taste: @ 20 ppm. Slightly fruity, floral, green and metallic.

Possible applications: Pome fruits like apple, pear and quince are good applications for this material. Other flavors where it can be used are strawberry, grape and cactus fruit.

White Thyme Oil

Source: Berjé

FEMA# 3065, CAS# 8007-46-3, natural, *Thymus vulgaris* L.

Odor: @ 100%. Green, cooling, earthy, herbal and fresh.

Taste: @ 1 ppm. Cooling, fresh, green, herbal and slightly woody, with a peppery prickle.

Taste: @ 2 ppm. Slightly bitter, cooling, fresh, herbal and green, with a peppery prickle.

Possible applications: This essential oil will fit very well into mint and oral care flavors and herb and spice blends. At very low levels it can add a subtle note of freshness to melon and tropical flavors.

Ethyl oleate, natural

Source: Advanced Biotech

FEMA# 2450, CAS# 111-62-6, natural

Natural occurrence: Beer, black currant, whiskey, rum and cooked rice.

Odor: @ 100%. Oily, fatty, and slightly lardlike.

Taste: @ 5 ppm. Fatty, waxy and lardlike.

Taste: @ 10 ppm. Oily, fatty, waxy, and hints of rum and whiskey.

Possible applications: This is definitely one of those materials that will enhance fat replacers like lard, tallow and schmaltz. It can also be used in olive and nut flavors to fortify oily notes.

γ -Octalactone, natural

Source: M & U

FEMA# 3214, CAS# 698-76-0, natural

Natural occurrence: Apricot, butter, cheese, coconut, cream, papaya and passion fruit.

Odor: @ 100%. Coconutlike, coumarinic and creamy.

Taste: @ 1 ppm. Creamy, milky and fatty.

Taste: @ 2 ppm. Creamy, milk, slightly buttery and coconutlike.

Possible applications: This material will enhance the rich creaminess of milk, butter, cream, cheese and most other dairy flavors. It can also be used in nut flavors like coconut, walnut and pecan as well as vanilla, graham cracker, peach, mango and apricot flavors.

3,5-Dimethyl-1,2-cyclopentadione, natural

Source: Aromiens International Inc.

FEMA# 3269, CAS# 13494-07-0, natural

Natural occurrence: Bacon and coffee.

Odor: @ 1%. Sweet, brown, toasted, caramellic and burnt sugarlike.

Taste: @ 5 ppm. Sweet, brown and caramellic.

Taste: @ 10 ppm. Sweet, brown sugarlike, burnt sugarlike, toasted and maplelike.

Possible applications: This close relative of cyclotene will add sweet, brown, caramellic notes to flavors like toffee, nuts, honey, cotton candy, brittle, maple, vanilla, custard, rum, coffee and chocolate. It will also add to the "baked" quality of cookies and bread and the sweet, cooked meat notes in roasted meats and bacon.