



# Organoleptic Characteristics of Flavor Materials

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## Organoleptic Evaluation Panel

- Judith Michalski
- Tom Gibson, Creative Director, Silesia Flavors
- Carl Holmgren, Consulting Flavor Chemist
- Cyndie Lipka, Senior Flavorist, Bell Flavors & Fragrances
- Gerard Mosciano, Consulting Flavor Chemist
- Robert Pan, Senior Flavorist, Bell Flavors & Fragrances
- Deborah Barber, Senior Scientist, Kraft Foods
- Susie Sadural, Master Flavorist, Sensient Flavors

### Dominion nat coffee FI #425, product no. TE07

Source: Virginia Dare

GRAS, Natural

**Odor:** @ 100%. Roasted, brown, coffee, slightly burnt with a smoky nuance.

**Taste:** @ 0.15%. Roasted, smoky, coffee and brown.

**Taste:** @ 0.25%. Roasted smoky, coffee, cocoa-like, brown, bitter and slightly maple-like.

**Possible applications:** It's no surprise that this characteristic concentrate will reinforce coffee character in all flavors of its ilk. Other flavors where it will lend roasted, brown notes are in nuts, caramel, toffee, chocolate, mocha and barbeque.

► **Virginia Dare;** [www.virginiadare.com](http://www.virginiadare.com)

### Coffee concentrate nat. #14673, product no. TB66

Source: Virginia Dare

GRAS, Natural

**Odor:** @ 100%. Slightly acidic, slightly roasted, meaty, coffee, caramellic and burnt with a hint of soy sauce.

**Taste:** @ 0.15%. Ashy, roasted, brown, coffee and beany.

**Possible applications:** @ 0.25%. Ashy, bitter, brown, roasted, dark cocoa, coffee and slightly smoky.

**Possible applications:** The complex profile of this product will not only enhance coffee, but will add interest and depth to chocolate flavors, especially dark chocolate, fudge and mocha, and sweet browns like caramel, toffee, maple, etc. Other flavors to consider are on the savory side like soy, mole, meat and grilled types.

► **Virginia Dare;** [www.virginiadare.com](http://www.virginiadare.com)

### Phenyl ethyl isobutyrate, natural, ABT# 1590

Source: Advanced Biotech

FEMA# 2862, CAS# 103-48-0

**Natural occurrence:** Beer, cider, blue cheese, cognac, olive oil, peppermint.

**Odor:** @ 100%. Sweet, floral, honeylike, fruity and perfumy with a yeasty undertone.

**Taste:** @ 10 ppm. Floral, waxy, honeylike and fruity.

**Taste:** @ 20 ppm. Floral, waxy, ripe, fruity, honeylike and perfumy.

**Possible applications:** This old-timer chemical will add ripe, fruity pulp notes to apple, pear, apricot, rhubarb, dark cherry, plum, strawberry, quince and pineapple flavors. In red wine flavors, phenylethyl isobutyrate will contribute a sweet, dark fruit character. In honey, the floral notes will be enhanced.

► **Advanced Biotech;** [www.adv-bio.com](http://www.adv-bio.com)

### Ethyl pyruvate, natural, ABT# 1006

Source: Advanced Biotech

FEMA# 2457, CAS# 617-35-6

**Natural occurrence:** Brandy, bread, cocoa, white wine.

**Odor:** @ 100%. Ethereal, acidic, solventlike, sweet, fermented, brown, rumlike and bready.

**Taste:** @ 30 ppm. Fermented, astringent, fruity, bready and winy.

**Taste:** @ 80 ppm. Bready, brown, astringent, fermented, slightly burnt and slightly fruity.

**Possible applications:** The brown, fermented notes of this material will enhance alcoholic-type flavors like rum, Kahlúa, black Russian and various wines. It can also be used to bring out part of the flavor complex to simulate cask notes in wood-aged liquors like whisky, brandy and tequila. Alcohol aside, it will add depth and impact to cocoa, bread, yeast, brown sugar, caramel, brown sugar, grape and apple flavors.

► **Advanced Biotech;** [www.adv-bio.com](http://www.adv-bio.com)

### Bee propolis fluid extract, ref: AJ610145

Source: Naturex

GRAS, CAS# 85665-41-4, Natural

**Odor:** @ 100%. Sweet, estery, winy, rumlike and dried fruitlike.

**Taste:** @ 0.01%. Sweet estery, winy and dried fruitlike.

**Taste:** @ 0.03%. Sweet, fruity and winy, with a rich mouthfeel.

**Possible applications:** Propolis is produced by bees from plant resins, which they encounter in their environments, and varies in composition from colony to colony. As a food, it is touted as an anti-inflammatory and immune support agent. Its flavor properties are very interesting, and can be considered for use in dried fruits like raisin, date, prune and apricot, as well as apple, strawberry, black cherry, peach and berries. Its winy notes will also contribute to red wines, whiskey and yeast flavors.

► **Naturex;** [www.naturex.com](http://www.naturex.com)

### **Red clover tops solid extract, ref: AJ621260**

*Source:* Naturex

FEMA# 2326, CAS# 85085-25-2, Natural

*Odor:* @ 100%. Slightly tart, brown, sweet, herbal, tealike and slightly tobacco-like.

*Taste:* @ 0.02%. Sweet, brown, tealike and fruity.

*Taste:* @ 0.05%. Brown, tealike, herbal, astringent, woody and tobacco-like.

*Possible applications:* Red clover is another old line botanical that will add warm mellow notes to maple, honey, tobacco and tea flavors. Other types that will benefit are dried fruit flavors like prune, apricot and tamarind, and herbal flavors like chamomile and horehound.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

### **Passion flower herb solid extract, ref: AJ621170**

*Source:* Naturex

21CFR 172.510, CAS# 8057-62-3, Natural

*Odor:* @ 100%. Sweet, brown, tobacco-like, herbal, dried fruit-like and tealike.

*Taste:* @ 0.01%. Sweet, fruity and herbal.

*Taste:* @ 0.02%. Sweet, herbal, dried fruitlike and brown.

*Possible applications:* This botanical will add body and warmth to peach, apricot, apple and pear flavors, as well as to dried fruits like date, fig and raisin. Its herbal notes will emphasize tea and tobacco flavors, while its brown side will enhance maples, caramel, brown sugar and vanilla flavors.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

### **Arnica solid extract, ref: AJ620045 (synonym: wolfsbane)**

*Source:* Naturex

21CFR 172.510, CAS# 68990-11-4, Natural

*Odor:* @ 100%. Brown, sweet, herbal and tobacco-like.

*Taste:* @ 0.02%. Herbal, dried fruitlike and slightly woody.

*Taste:* @ 0.05%. Bitter, herbal, astringent and nutshelllike.

*Possible applications:* This product is limited for use in alcoholic beverages only in the United States. Its bitter, astringent quality will fit well into herbal cordials like Chartreuse and Campari, and add interest to wines and nutty liqueurs.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

### **Aruscol 1% in triacetin (synonym: (S)-1-methoxy-3-heptane thiol)**

*Source:* Vigon

FEMA# 4162, CAS# 400052-49-5

*Natural occurrence:* Clary sage and fringed rue.

*Odor:* @ 0.1%. Slightly savory, fruity and tropical, with a grapefruitlike undertone.

*Taste:* @ 0.1 ppm. Fruity, tropical and apricot/peachlike.

*Taste:* @ 0.2 ppm. Body, tropical, warm and apricot/peachlike.

*Possible applications:* This powerful material will find its best uses in peach, apricot and persimmon flavors, as well as tropical flavors like guava, mango, durian, lychee, rambutan, grapefruit and passion fruit.

► **Vigon**; [www.vigon.com](http://www.vigon.com)

### **Hops solid extract, ref: AJ620815**

*Source:* Naturex

FEMA# 2579, CAS# 8016-25-9, Natural

*Odor:* @ 100%. Fermented, herbal, brown, woody and celerylike.

*Taste:* @ 0.02%. Woody, brown and herbal.

*Taste:* @ 0.05%. Herbal, woody, brown, celerylike and astringent.

*Possible applications:* The herbal, celery-like notes of this botanical can fit well into savory herbal blends for chicken soup and seasoned salt. Its brown astringent notes will add depth and interest to black walnut and the skin character of other nuts. And, of course, it should be considered for use in beer-type flavors.

► **Naturex**; [www.naturex.com](http://www.naturex.com)

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