



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.

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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, Carol Stream, IL 60188-2403 USA; telephone 1-630-653-2155; fax 1-630-653-2192; www.PerfumerFlavorist.com.

Butyl 2-Methyl Butyrate



Source: Advanced Biotech

FEMA# 3393, CAS# 15706-73-7, Natural

Natural occurrence: Apple, banana, melon and strawberry.

Odor: @ 1.0%. Sweet fruity, juicy tropical reminiscent of ripe pineapple, apple, mango and peach with honey and cherrylike nuances.

Taste: @ 10 PPM. Fruity tropical, ripe juicy with pineapple, apple and papayalike notes.

Possible applications: Mango, pineapple, apple, peach, apricot and papaya.

► **Advanced Biotech**; tel: 1-973-357-0577; www.adv-bio.net

2,6-Dimethyl Pyrazine

Source: SAFC

FEMA# 3273, CAS# 108-50-9,

Artificial and nature identical

Natural occurrence: Coffee, tomato puree, baked potato, cocoa, corn, krill, licorice, mushroom, roasted filbert, tamarind and whiskey.

Odor: @ 1.0%. Cocoa, tobacco, vanilla, roasted potato, savory meaty, roasted peanut nutty and coffee.

Taste: @ 5 PPM. Musty, roasted nutty, cocoa, yeasty, woody and peanutlike.

Possible applications: Cocoa, roasted nuts, potato, yeast, coffee, tobacco, vanilla, hazelnut and as nuances in roasted meats.

► **SAFC**; tel: 1-800-227-4563; www.safcsupplysolutions.com

Fenchyl Alcohol

Source: Natural Advantage

FEMA# 2480, CAS# 1632-73-1, Natural

Natural occurrence: Beer, distilled lime oil, grape, grape brandy, hops oil, rosemary.

Odor: @ 1.0%. Woody, slightly cooling camphoraceous and eucalyptuslike, woody cedar and pine, citrus lime with earthy and musty nuances.

Taste: @ 5 PPM. Bitter, musty and earthy, camphoraceous, slightly spicy with a citrus lime nuance.

Possible applications: Mint enhancers, citrus lemon/lime, spice nuances for black pepper, parsley and thyme, cola nuances, raspberry, oral hygiene products, confections and patchouli.

► **Natural Advantage**; tel: 1-732-274-9217; www.natural-advantage.net



4-Mercapto-4-Methyl-2-Pentanone



Source: Natural Advantage
FEMA# 3997, CAS# 19872-52-7,
Natural and kosher

Natural occurrence: Not found.
Odor: @ 0.001%. Sulfurous, ripe
tropical mango and peach with
savory roasted meaty nuances.

Taste: @ 10 PPB. Tropical fruity,
ripe juice, fuzzy peach and mango, reminiscent of
buchu sulfurous top notes, black currantlike with a
slight vegetative nuance.

Possible applications: Mango, peach, apricot,
black currant and durian, as well as vegetative
and savory nuances.

► **Natural Advantage;** *tel:* 1-732-274-9217;
www.natural-advantage.net

S-Methyl Thiopropionate



Source: Treatt USA
FEMA# 4172, CAS# 5925-75-7,
Artificial and nature identical
Natural occurrence: Muenster and
Camembert cheeses, fish oil.
Odor: @ 1.0%. Sulfurous, ripe
cultured cheeselike, moldy, raw

vegetative, savory meaty with a slight tropical
pineapplelike fruity nuance.

Taste: @ from 0.2–5 PPM. Dry, sulfurous, creamy,
moldy cheeselike and vegetative cabbage.

Possible applications: Ripe nuances for Muenster,
Liederkranzlike and Camembert cheeses;
butter; cabbage; tropical nuances for durian
and cantaloupe.

► **Treatt USA;** *tel:* 1-863-688-9500; *www.treatt.com*

Methyl Undecylenate (synonym: Methyl 10-Undecenoate)

Source: Advanced Biotech
FEMA# 4253, CAS# 111-81-9, Natural
Natural occurrence: None found.

Odor: @ 1.0%. Waxy, fruity pineapple and apple, fatty,
milky and dairylike with a citrusy lemon nuance.

Odor: @ 5PPM. Waxy, soapy, cheesy, fatty, tallowlike
with citrus and vegetative nuances.

Possible applications: Fat and tallow replacers, various
cheese and other dairy applications.

► **Advanced Biotech;** *tel:* 1-973-357-0577;
www.adv-bio.net

Oil Elemi*

Source: A Woman of Uncommon Scents
FEMA# 2408, CAS# 8023-89-0

Odor: @ 1.0%. Woody piney, terpy, black pepper spicy,
tropical papaya with resinous nuances.

Taste: @ 10 PPM. Woody, peppery,
terpy pinene, citruslike with slightly
minty and cooling nuances.



Attention, Perfumers

Although Gerard Mosciano's column focuses on the odor and taste characteristics of flavor materials, many of these ingredients also 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.

Possible applications: Spice blends, black
pepper nuances, tropical fruit nuances.

► **A Woman of Uncommon Scents;**

tel: 1-717-530-0609;

www.awomanofuncommonscent.com

Ortho Vinyl Anisole

Source: SAFC

CAS# 612-15-7, Artificial and nature
identical

Natural occurrence: Oregano.

Odor: @ 1.0%. Impacting musty, chemical-
like, leather and rubber tirelike with
medicinal, woody and estragolelike
nuances.

Taste: @ 2 PPM. Woody, bitter, musty,
rooty and earthy.

Possible applications: Earthy and musty
notes for vegetables and various spice
nuances.

► **SAFC;** *tel:* 1-800-227-4563;

www.safcsupplysolutions.com

1-Penten-3-ol Natural (synonym: Ethyl Vinyl Carbinol)

Source: Advanced Biotech
FEMA# 3584, CAS# 616-25-1

Natural occurrence: Asparagus, cooked
pork, fish, kiwi, leek, native spearmint,
peppermint, raspberry, Scotch spear-
mint, strawberry, tea and tomato.

Odor: @ 1.0%. Sharp and pungent, musty,
acrylatelike with vegetative broccoli,
wasabi and mustardlike notes.

Taste: @ 10 PPM. Sharp and pungent,
horseradish vegetative and
diffusive with cabbage and
tomato nuances.

Possible applications:

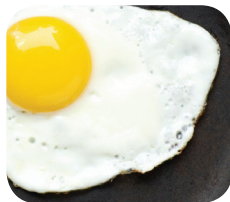
Horseradish, wasabi,
tomato, broccoli, cabbage,
and impacting mint and
vegetative nuances.

► **Advanced Biotech;**

tel: 1-973-357-0577; *www.adv-bio.net*



*This material also can be used in fragrance formulations.



Propanethiol (synonym: Propyl Mercaptan)

Source: SAFC

FEMA# 3521, CAS# 107-03-9,

Artificial and nature identical

Natural occurrence: Beans, coffee,

cooked beef, cauliflower, cooked

chicken and onion, durian, leek,

onion, potato chip, shallot and tea.

Odor: @ 0.1%. Sulfurous, onion and meaty with eggy burnt rubber depth notes.

Taste: @ 0.1 PPM. Meaty, beef brothy with nuances of cooked onion and garlic.

Possible applications: Cooked onion and garlic, savory notes for beef and egg, horseradish and tropical durian nuances.

► **SAFC;** tel: 1-800-227-4563;

www.safcsupplysolutions.com



Propyl Propionate

Source: Cargill Flavor Systems

FEMA# 2958, CAS# 106-36-5, Natural

Natural occurrence: Apple, banana, cider, coffee, plum and whiskey.

Odor: @ 1.0%. Sweet fruity pineapple, apple, grape with tutti-frutti notes.

Taste: @ 20 PPM. Fruity grape, apple, sweet bubble gumlike with a floral nuance.

Possible applications: Tutti-frutti bubble gum and confections; fruit notes for apple, grape, peach, apricot and pineapple; tropical notes for mango and papaya.

► **Cargill Flavor Systems;**

tel: 1-800-669-9263 or 1-513-539-7373;

www.cargillflavorsystems.com

Sour Cherry Top Note Aroma Natural

Source: Frutarom

Odor: @ 1.0%. Ripe cherry/kirsch-like fruity, tingling benzaldehyde pitty, maraschinolike with a balsamic floral heliotropinelike nuance.

Taste: @ 0.2%. Ripe black cherry fruity with an alcoholic woody kirschlike nuance.



Possible applications: Cherry and fruit punch beverage top notes, kirsch enhancers, as well as cordial applications.

► **Frutarom;** tel: 1-201-861-9500;

www.frutarom.com

3,5,5-Trimethyl Cyclohexanol

Source: Penta Manufacturing Co.

FEMA# 3962, CAS# 116-02-9,

Artificial

Natural occurrence: None found.

Odor: @ 1.0%. Slightly cooling camphoraceous and chemical-like, musty with dry notes of tobacco, honey and molasses.

Taste: @ 5 PPM. Musty, woody, honey and tealike with herbaceous camphorlike nuances.

Possible applications: Molasses, tobacco, tea, mint enhancers, molasses and vegetative nuances.

► **Penta Manufacturing Co.;** tel: 1-973-740-2300;

www.pentamfg.com



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