Kurt Bauer, Dorothea Garbe, Horst Surburg

Common Fragrance and Flavor Materials



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Preparation, Properties and Uses Fourth, Completely Revised Edition



Dr. Kurt Bauer, Chem.-Ing. Dorothea Garbe, Dr. Horst Surburg Haarmann & Reimer GmbH RD Fragrances/Aroma Chemicals PO Box 1253 37601 Holzminden Germany

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Preface to the Fourth Edition

The constant interest in "Common Fragrance and Flavor Materials" has encouraged us to proceed with the publication of a new edition within a relatively short period of time. The proven concept of the book has remained unchanged because of positive feedback from readers.

After a critical examination of the text, some material that has lost significance has been removed. A certain amount of new material, mainly components that have influenced modern fragrance trends over the past few years, have been added. The literature references in the chapter on "Natural Raw Materials" have been updated and the newest international standards for the characterization of materials have been included.

The authors would like to point out particularly that the present book can only provide a selection of the many commercially available fragrance and flavor materials. Also not included are compounds with exclusive uses that are not commonly/generally available ("captives") as well as substances that are too new to be judged as to whether they will find a successful place in the market. Analytical data on natural raw materials that can be obtained by means of new analytical techniques are not explicitly mentioned if the analytical techniques have not yet reached international standardization. However, reference is made to this in the corresponding literature and in the chapter on "Quality Control."

We thank our critics for numerous suggestions and we especially thank our colleagues, who prompted our work on the new edition through their kind support.

Holzminden, June 2001

K. Bauer

D. Garbe

H. Surburg

Preface to the Third Edition

Twelve years after its first publication comes the third edition of "Common Fragrance and Flavor Materials". The content has been updated in many respects while retaining the proven concept.

In the case of the single-component fragrance and flavor materials, those compounds have been included which have become established on the market, as well as those which have attracted considerable interest on account of their outstanding organoleptic properties and have contributed to the composition of new fragrance types. The production processes for all fragrance and flavor materials described in the book have been critically reviewed. New processes have been taken into account, and those that are clearly outdated have been eliminated. A few compounds that have declined in importance or whose use is now restricted for toxicological reasons have been removed from the text, as have several essential oils. The latest publications and standards concerning essential oils and natural raw materials have been included in the new edition, making it an up-to-date reference work. For the first time references are cited for all essential oils, giving newcomers to the field a quick overview of the original literature. The chapters on quality control and product safety have been expanded and brought up to date.

The authors wish to thank all the colleagues whose specialist advice assisted us in revising the book.

Holzminden, February 1997

K. Bauer

D. Garbe

H. Surburg

Preface to the Second Edition

Within three years of publication the first edition of "Common Fragrance and Flavor Materials" was out of print and is now followed by this second edition. As in the case of the first edition this book is based mainly on a chapter on "Flavors and Fragrances" which has since been published in English in Ullmann's Encyclopedia of Industrial Chemistry.

We would like to thank our readers for their suggestions for improvement and further development of the contents which were contained in several book reviews. We have not followed up all the suggestions for the simple reason that we did not wish to change the character of the book, which is expressely aimed at a general audience interested in commonly used fragrance and flavor materials, and not at experts in the field.

The chapter on "Single Fragrance and Flavor Compounds" has been updated to include new developments. production methods have been brought up-to-date and CAS registry numbers have been added to all single compounds described. The former chapters "Essential Oils" and "Animal Secretions" have been grouped together under the heading "Natural Raw Materials in the Flavor and Fragrance Industry" and thoroughly revised to include new literature references.

Holzminden, February 1990

K. Bauer

D. Garbe

H. Surburg

Preface to the First Edition

Fragrance and flavor materials are used in a wide variety of products, such as soaps, cosmetics, toiletries, detergents, alcoholic and non-alcoholic beverages, ice cream, confectioneries, baked goods, convenience foods, tobacco products, and pharmaceutical preparations. This book presents a survey of those natural and synthetic fragrance and flavor materials which are produced commercially on a relatively large scale, or which are important because of their specific organoleptic properties. It provides information concerning their properties, methods employed in their manufacture, and areas of application. Therefore, the book should be of interest to anyone involved or interested in fragrance and flavor, *e.g.*, perfumers, flavorists, individuals active in perfume and flavor application, food technologists, chemists, and even laymen.

The book is, essentially, a translation of the chapter on fragrance and flavor materials in *Ullmanns Encyklopädie der technischen Chemie*, Volume 20, 4th Edition, Verlag Chemie GmbH, Weinheim (Federal Republic of Germany), 1981. The original (German) text has been supplemented by inclusion of recent developments and of relevant information from other sections of the Encylopedia. The present English version will make the information available to a wider circle of interested readers.

The condensed style of presentation of "Ullmann's" has been maintained. A more detailed treatment of various items and aspects was considered but was believed to be outside the scope of this book. Additional information, however, can be obtained from the literature cited.

To improve its usefulness, the book contains

- a formula index, including CAS registry numbers;
- an alphabetical index of single fragrance and flavor compounds, essential oils, and animal secretions.

Starting materials and intermediates are not covered by these indexes.

The authors wish to express their gratitude to:

- Haarmann & Reimer Company, in particular to its General Manager, Dr. C. Skopalik, who suggested the publication of this book in English and who, at an earlier stage, provided time and facilities for writing the chapter on fragrance and flavor materials in *Ullmanns Encyklopädie der technischen Chemie* (1981), and to Dr. Hopp, Vice President Research, for valuable additions to his book;
- all others who provided information and suggestions for the chapter in Ullmann's Encyclopedia and thereby for this book.

The authors are most grateful to Dr. J. J. Kettenes-van den Bosch and Dr. D. K. Kettenes for translating the original German text into English and for their suggestions and help in shaping the present book. Drs. Kettenes thank Mr. W. S. Alexander, Hockessin, Delaware (USA), for critically reviewing the English.

Holzminden, June 1984

K. Bauer

D. Garbe

Contents

1	Introduction	1
1.1 1.2	History	1 2
1.3	Physiological Importance	2
1.4	Natural, Nature-identical, and Artificial Products	3
1.5	Sensory Properties and Structure	3
1.6	Volatility	4
1.7	Threshold Concentration	4
1.8	Odor Description	5
2	Single Fragrance and Flavor Materials	7
2.1	Aliphatic Compounds	8
2.1.1	Hydrocarbons	8
2.1.2	Alcohols	8
2.1.3	Aldehydes and Acetals	11
2.1.4	Ketones	16
2.1.5	Acids and Esters	17
2.1.6	Miscellaneous Compounds	23
2.2	Acyclic Terpenes	24
2.2.1	Hydrocarbons	24
2.2.2	Alcohols	24
2.2.3	Aldehydes and Acetals	36
2.2.4	Ketones	42
2.2.5	Acids and Esters	43
2.2.5.1		43
	Linalyl and Lavandulyl Esters	44
	Citronellyl and Dihydromyrcenyl Esters	46
2.2.6	Miscellaneous Compounds	47
2.3	Cyclic Terpenes	48
2.3.1	Hydrocarbons	48
2.3.2	Alcohols and Ethers	52
2.3.3	Aldehydes and Ketones	59
2.3.4	Esters	70
2.3.5	Miscellaneous Compounds	74
2.4	Other Cycloaliphatic Compounds	75
2.4.1	Alcohols and Ethers	76
2.4.2	Aldehydes	82
2.4.3	Ketones	84

2.4.4	Esters	91
2.5 2.5.1 2.5.2	Aromatic Compounds Hydrocarbons Alcohols and Ethers	96 96 97
2.5.3 2.5.4	Aldehydes and Acetals	103 111
2.5.5 2.5.6 2.5.7	Esters of Araliphatic Alcohols and Aliphatic Acids	116 119 119
2.5.7.1 2.5.7.2	Benzoates	120 120
2.5.8	Cinnamates	121 122
2.6 2.6.1	Phenols and Phenol Derivatives	125 125
2.6.1	Phenols, Phenyl Esters, and Phenyl Ethers	132
2.6.3	Phenol Aldehydes	133
2.6.4	Phenol Ketones	138
2.6.5	Phenolcarboxylates	139
2.6.5.1 2.6.5.2	Salicylates	139 140
2.7	O- and O,S-Heterocycles	141
2.7.1	Cyclic Ethers	141
2.7.2 2.7.3	Lactones	152 161
2.7.3	Glycidates	162
2.8	N- and N,S-Heterocycles	162
3	Natural Raw Materials in the Flavor and Fragrance Industry	167
3.1	Introduction	167
3.2	Isolation of Natural Fragrance and Flavor Concentrates	168
3.2.1	Essential Oils	169
3.2.2	Extracts.	170
3.3	Survey of Natural Raw Materials	171
4	Quality Control	227
5	Safety Evaluation and Legal Aspects	229
5.1	Flavoring Substances.	229
5.2	Fragrance Materials	230
6	References	233
	Formula index; CAS registry number index	269
	Subject index	283

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Subject Index

Amboise 89
Ambrein 146, 174
Ambretone 88
Ambrette seed oil 35, 172
Ambrettolide 157, 172
Ambrinol 80
α -Ambrinol 174
Ambrox 146
Ambroxan 146
Ambrox DL 146
Ambroxid 146
α -Amylcinnamaldehyde 110
Amyris oil 173
Anethole 127 , 176, 195, 196, 219, 220, 223
Angelica root oil 155, 173
Angelica seed oil 173
Animal secretions 173
p-Anisaldehyde 133
Anise alcohol 132
Anise oil 127, 176
Anisyl acetate 133
Anisylpropanal 134
Anther 99
Aphermate 70
Apiol 211
Applinal 151
Aquanal 138
Armoise oil 176
Arova N 159
Artemisia oil 176
β-Asarone 179
Atralone 141
Atranol 209
Atranorin 209
Auralva 125
Aurantesin 125
Aurantha 125
Aurantiol Pure 125
Aurantion 125
Bacdanol 77
Balsam turpentine oil 222
Bangalol 77
Basic oil, methylchavicol-type 176
Basil oil, Indian 177
Basil, oil, linalool-type 177
Bay oil 177
Beeswax absolute 175
Benzaldehyde 104 , 110, 178
Benzoe Siam resinoid 177
Benzoe Sumatra resinoid 177
Benzophenone 112
2H-1-Benzopyran-2-one 159

Benzyl acetate 116, 200, 226	Caprylaldehyde 12
Benzylacetone 112	Caraway oil 61, 180
Benzyl alcohol 97, 116	Cardamom oil 180
Benzyl benzoate 120 , 213, 221	3-Carene 49, 173, 193, 196, 214, 223
Benzyl cinnamate 121 , 213, 221	(+)-3-Carene 54
2-Benzyl-1,3-dioxolan-4-methanol 150	Carotol 181
Benzyl isovalerate 116	Carrot seed oil 181
Benzyl propionate 116	Carvacrol 210, 219
Benzyl salicylate 140	Carvone 61 , 180, 193, 194, 206
Bergamot oil 45, 186	(–)-Carvone 61
α-Bergamotene 209	(+)-Carvone 61
Bergaptene 186	Caryophyllene 49, 190, 191, 214, 226
α -Bisabolene 209	Caryophyllene oxide 141
Bisabolol 183	Cashmeran 86
Bitter almond oil 104, 178	Cassia oil 109, 184
Blackcurrant absolute 178	Cassis absolute 178
Boisambrene forte 81	Castoreum 175
Bois de rose oil 216	Catechol 137
2-Bornanol 58	Cedar leaf oil 181
2-endo-Bornanyl acetate 72	Cedarwood oil 69, 74, 182
2-exo-Bornanyl acetate 73	Cedarwood oil, Chinese 182
Borneol 58 , 191	Cedarwood oil, Texas 182
Bornyl acetate 72, 214, 215, 223	Cedarwood oil, Virginia 182
(–)-Bornyl acetate 223	Cedramber 59
	Cedranfix 59
Bornyl isovalerate 223	
Boronal 83	α -Cedrene 49, 70, 182
Bourgeonal 107	β -Cedrene 49
Bourgeons de cassis absolute 178	α -Cedrene oxide 142
Brahmanol 76	Cedrol 59, 182
ω -Bromostyrene 96	Cedroxyde 145
Buchu leaf oil 178	Cedryl acetate 74, 182
$(+)$ - α -Bulnesene 212	Cedryl methyl ether 59 , 182
Bulnesol 199	Cedryl methyl ketone 69 , 182
2,3-Butanedione 17	Celery seed oil 182
2-(2-Buten-2-yl)-5,5-	Celestolide 113
dimethyltetrahydrofuran 188	Cepionate 95
Butyl acetate 19	Cervolide 158
Butyl butyrate 20	Cetalox 146
2- <i>tert</i> -Butylcyclohexyl acetate 91	Chamazulene 183
4- <i>tert</i> -Butylcyclohexyl acetate 91	Chamomile oil, blue 183
3-Butyl-4,5-dihydrophthalide 183	Chamomile oil, German 183
3-Butylidene-4,5-dihydrophthalide 203	Chamomile oil, Roman 184
S-sec-Butyl 3-methyl-2-butenethioate 196	Chavicol 177
4-tert-Butyl-	Chloroatranorin 209
α -methyldihydrocinnamaldehyde 109	Choroatranol 209
Schiff's base with methyl anthranilate 125	1,4-Cineole 141, 188
3-Butylphthalide 183	1,8-Cineole 143 , 180, 181, 188, 194, 195, 201,
	202, 204, 214, 216, 217, 218
Calamus oil (sweet flag oil) 179	Cinnamaldehyde 103, 109 , 184, 185
Calarene 199	Cinnamalva 123
Calone 1951 151	Cinnamic acid 93, 220
Camphene 49, 73, 79, 223	Cinnamic alcohol 103, 119
Campholenaldehyde 77	Cinnamon bark oil 109, 185
Camphor 62 , 176, 180, 201, 202, 216, 217, 218	Cinnamonitrile 123
Camphor oil 180	Cinnamon leaf oil 130, 184
Camphor oil, brown 180	Cinnamon oil, Chinese 184
Camphor oil, white 180	Cinnamyl acetate 118
Candalum 79	Cinnamyl cinnamate 221
Cananga oil 225	Cistus oil 201
Canthoxal 134	Citral 32, 36 , 39, 65, 66, 187, 188, 189, 192,
Caprinaldehyde 13	198, 203, see also geranial, neral
Caproaldehyde 12	Citral a 36
Capitoaidenyde 12	Citial a 30

Citral b 36	Damascones 66
Citral diethyl acetal 38	Davana oil 193
Citralva 47	2-trans,4-trans-Decadienal 12
Citronella oil 191	(z,z)-4,7-Decadienal 179
Citronella oil, Java 32, 191	Decahydro-β-naphthyl acetate 92
Citronella oil, Sri Lanka 191	δ -Decalactone 155
Citronellal 38, 40, 191, 192, 195	γ -Decalactone 153
(-)-Citronellal 38	Decanal 13, 186, 188, 189
(+)-Citronellal 32, 38 , 53, 56	2-Decenal 191
Citronellene 33	9-Decen-1-ol 10
Citronellic acid 43	
	Dehydrolinalool 30, 37, 45, 65
Citronellic acid nitrile 48	Delphone 84
Citronellol 31 , 39, 40, 143, 191, 192, 195, 197,	Delta Damascone 68
216	Diacetyl 17
Citronellyl acetate 46 , 192	Diallyl disulfide 172
Citronellyl formate 46	1,1-Diethoxy-3,7-dimethyl-2,6-octadiene 38
Citronellyl isobutyrate 47	2,5-Diethyltetrahydrofuran 142
Citronellyl isovalerate 47	3,4-Dihydro-2 <i>H</i> -benzopyran-2-one 160
Citronellyl nitrile 48	Dihydrocinnamaldehyde 105
Citronellyl propionate 46	Dihydrocinnamic alcohol 100
Citronellyl tiglate 47	Dihydrocoumarin 160
Citronitril 123	γ -Dihydroionone 174
Citrus essence oils 185	Dihydrojasmone 85
Citrus peel oil 49, 169, 185	Dihydromyrcenol 33
Civet 88, 175	Dihydromyrcenyl acetate 47
Civetone 88 , 175	6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5 <i>H</i>)-
Clary sage oil 45, 217	indanone 86
Clove bud oil 190	Dihydrotagetone 220
Clove leaf oil 130, 190	Dihydroterpinyl acetate 71
Clove oil 131, 190	3,4-Dihydroxybenzaldehyde 133
Clove stem oil 190	(+)-Dill ether 193, 194
Cognac oil 203	Dill oil 61, 193
Concretes 170	Dill oil, Indian 194
α-Copaene 199	Dill seed oil 194
Copaiba balsam oils 190	Dill weed oil 193
Coriander oil 28, 191	3,4-Dimethoxybenzaldehyde 136
Cornmint oil 52, 53, 204	1,4-Dimethoxybenzene 129
Coumarin 159 , 221	8,8-Dimethoxy-2,6-dimethyloctan-2-ol 41
p-Cresol 225	1,1-Dimethoxy-2,2,5-trimethyl-4-hexene 16
p-Cresyl methyl ether 133, 226	α, α -Dimethyl benzyl carbinol 101
p-Cresyl phenylacetate 132	(-)-2-(6,6-Dimethylbicyclo[3.1.1]hept-2-en-2-yl)-
Cuminaldehyde 108	ethyl acetate 72
	2,4-Dimethyl-3-cyclohexene carbaldehyde 82
Cyclacet 92	
Cyclal 82	Schiff's base with methyl anthranilate 125
Cyclamenaldehyde 107	2-(2,4-Dirnethyl-3-cyclohexenyl)-5-methyl-5-
Cyclododecyl methyl ether 81	(methylpropyl)-1,3-dioxane 81
Cyclogalbanat 93	1-(5,5-Dimethyl-1-cyclohexen-1-yl)-4-penten-1-
Cyclogalbaniff 93	one 89
Cycloheptadecanone 175	1-[[2-(l,1-Dimethylethyl)cyclohexyl]oxy]-2-
6-cis-Cycloheptadecenone 175	butanol 80
9-Cycloheptadecen-1-one 88	3-[4-(1,1-Dimethylethyl)phenyl]propanal 108
Cyclohexadecanone 175	2,5-Dimethyl-3(2 <i>H</i>)-furanone 142
5-Cyclohexadecen-1-one 88	4,5-Dimethyl- $2(5H)$ -furanone 154
Cyclohexyloxyacetic acid allyl ester 93	2,6-Dimethyl-2-heptanol 9
Cyclohexyl salicylate 140	2,6-Dimethyl-5-hepten-1-al 15
Cyclopentadecanolid 156	2,5-Dimethyl-4-hydroxy-2 <i>H</i> -furan-3-one 146
Cyclopentadecanone 86	3,7-Dimethyl-7-hydroxyoctan-1-al 40
Cymbopogon oils 191	5,6-Dimethyl-8-isopropenylbicyclo[4.4.0]-1-decen-
<i>p</i> -Cymene 96, 115, 210	3-one 69
Cypress oil 193	3,7-Dimethyl-7-methoxyoctan-1-al 41
Cypicos on 193	3,7-Dimethyl-7-methoxyoctan-1-ar 41 3,7-Dimethyl-7-methoxyoctan-2-ol 34
β -Damascenone 68 , 215	
p-Damaschone vo , 213	2,2-Dimethyl-3-(3-methylphenyl)propanol 101

3,7-Dimethyl-2,6-octadien-1-al 36	Ethyl caprylate 22
3,7-Dimethyl-1,6-octadiene 32, 33	Ethyl chlorohematommate 209
3,7-Dimethyl-1,6-octadien-3-ol 28	Ethyl 2-trans-4-cis-decadienoate 22
3,7-Dimethyl- <i>cis</i> -2,6-octadien-1-ol 27	2-Ethyl-3,5-dimethylpyrazine 164
3,7-Dimethyl- <i>trans</i> -2,6-octadien-1-ol 25	3-Ethyl-2,5-dimethylpyrazine 164
3,7-Dimethyloctan-1-ol 33	Ethyl enanthate 21
2,6-Dimethyl-2-octanol 34	Ethylene brassylate 159
3,7-Dimethyloctan-3-ol 34	Ethyl 2-ethyl-6,6-dimethyl-2-
3,7-Dimethyl-6-octen-1-al 38	cyclohexenecarboxylate 93
3,7-Dimethyl-6-octen-1-ol 31	Ethyl fenugreek lactone 155
2,6-Dimethyl-7-octen-2-ol 33	Ethyl formate 18
2,6-Dimethyl-7-octen-2-yl acetate 47	Ethyl hematommate 209
α, α -Dimethylphenethyl acetate 118	Ethyl heptanoate 21
α, α -Dimethylphenethyl alcohol 101	Ethyl hexanoate 21
α, α -Dimethylphenethyl butyrate 118	5-Ethyl-3-hydroxy-4-methyl-2(5)-furanone 154
α, α -Dimethylphenethyl carbinol 101	5-Ethyl-4-hydroxy-2-methyl-3($2H$)-
2,3-Dimethylpyrazine 164	furanone 147
2,5-Dimethylpyrazine 164	2-Ethyl-4-hydroxy-5-methyl-3(2 <i>H</i>)-
2,6-Dimethylpyrazine 164	furanone 147
3,6-Dimethyl-4,5,6,7-tetrahydrobenzofuran 144	2-Ethyl-3-hydroxy-4 <i>H</i> -pyran-4-one 148
2,4-Dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-	Ethyl isovalerate 21
<i>m</i> -dioxin 151	Ethylmaltol 148
2,4-Dimethyl-2-(5,6,7,8-tetrahydro-5,5,8,8-	Ethyl 2-methylbutyrate 21
tetramethyl-2-naphthalenyl)-1,3-	Ethyl 2-methyl-1,3-dioxolane-2-acetate 151
dioxolane 115	Ethyl 2-rnethylpentanoate 21
2,5-Dimethylthiazole 164	Ethyl 3-methyl-3-phenylglycidate 161
3,3-Dimethyl-5-(2,2,3-trimethyl-3-cyclopenten-1-	Ethyl octanoate 22
yl)-4-penten-2-ol 78	Ethyl 3-oxobutanoate 22
6,10-Dimethyl-5,9-undecadien-2-one 42	Ethyl phenylacetate 121
Dimetol 9	3-(4-Ethylphenyl)-2,2-dimethylpropanal 106
3,5-Dinitro-2,6-dimethyl-4- <i>tert</i> -	Ethyl 3-phenylglycidate 161
butylacetophenone 123	Ethyl propionate 20
Dipentene 49	Ethyl safranate 73
Diphenyl ether 125	Ethyl 2,3,6,6-tetramethyl-2-
Diphenyl ketone 112	
	cyclohexenecarboxylate 93
Diphenylmethane 96	Ethyl 2,6,6-trimethyl-1,3-cyclohexadiene-1-
Dipropyl disulfide 172	carboxylate 73
Dodecanal 13	2-Ethyl-4-(2,2,3-trimethyl-3-cylopenten-1-yl)-
2-Dodecenal 191	buten-1-ol 77
1,12-Dodecanedioic acid ethylene ester 159	Ethylvanillin 136
Dwarf pine-needle oil 215	
	Eucalyptol 143
Dynascone 10 89	Eucalyptol 143 Eucalyptus citriodora oil 32, 39, 195
Dynascone 10 89	
Dynascone 10 89 Ebanol 78	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195
Ebanol 78	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195
Ebanol 78 Efetaal 99	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194
Ebanol 78 Efetaal 99 Elemi oil 194	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β -Eudesmol 173 10 -epi- γ -Eudesmol 173, 197
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oils, Australian 194 Eucalyptus oils 143, 194 $β$ -Eudesmol 173 10-epi- $γ$ -Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oils, Australian 194 Eucalyptus oils 143, 194 $β$ -Eudesmol 173 10-epi- $γ$ -Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131 4-(1-Ethoxyvinyl)-3,3,5,5-	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156 Farenal 41
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemi resinoid 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131 4-(1-Ethoxyvinyl)-3,3,5,5- tetramethylcyclohexanone 91	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156 Farenal 41 Farnesene 24
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131 4-(1-Ethoxyvinyl)-3,3,5,5- tetramethylcyclohexanone 91 Ethyl acetate 19 Ethyl acetoacetate 22	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β -Eudesmol 173 10-epi- γ -Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156 Farenal 41 Farnesene 24 Farnesol 35, 172 Farnesyl acetate 172
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131 4-(1-Ethoxyvinyl)-3,3,5,5- tetramethylcyclohexanone 91 Ethyl acetate 19 Ethyl acetoacetate 22 Ethyl 2-tert-butylcyclohexyl carbonate 94	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β-Eudesmol 173 10-epi-γ-Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156 Farenal 41 Farnesene 24 Farnesol 35, 172 Farnesyl acetate 172 FEMA 230
Ebanol 78 Efetaal 99 Elemi oil 194 Elemi resinoid 194 Elemol 173, 194 Empetal 82 1,8-Epoxy-p-menthane 143 Essential oils 169 Estragole 127, 176, 177, 196, 214, 221 3-Ethoxy-4-hydroxybenzaldehyde 136 (Ethoxymethoxy)cyclododecane 81 2-Ethoxy-5-(1-propenyl)phenol 131 4-(1-Ethoxyvinyl)-3,3,5,5- tetramethylcyclohexanone 91 Ethyl acetate 19 Ethyl acetoacetate 22	Eucalyptus citriodora oil 32, 39, 195 Eucalyptus dives oil 50, 54, 195 Eucalyptus globulus oil 143, 195 Eucalyptus oil, Australian 194 Eucalyptus oils 143, 194 β -Eudesmol 173 10-epi- γ -Eudesmol 173, 197 Eugenol 129, 130, 177, 184, 190, 201, 214, 226 Eugenol methyl ether 131 Eugenyl acetate 131, 190 Evernyl 141 Exaltex 156 Exaltolide 156 Farenal 41 Farnesene 24 Farnesol 35, 172 Farnesyl acetate 172

Fenugreek lactone 154	Heliotropin 136, 180
Fir needle oil, Canadian 215	Hemlock oils 215
Fir needle oil, Siberian 214	Heptanal dimethyl acetal 12
Fleuramone 84	cis-4-Heptenal 15
Florol 148	Heptone 84
Floralozone 106	2-Heptylcyclopentanone 84
Floramat 99	Herbaflorat 92
Florazon 106	9-Hexadecen-16-olide 157
Florhydral 108	(Z)-7-Hexadecen-16-olide 172
Floropal 150	cis-Hexahydrocuminyl alcohol 58
Florosa Q 148	1,3,4,6,7,Sa-Hexahydro-1,1,5,5-tetramethyl-2H-
Folione 22	2,4a-methanonaphthalen-8(5H)-one 69
Frambinon 138	4,6,6,7,8,8-Hexamethyl-1,3,4,6,7,8-
Freesiol 9	hexahydrocyclopenta[g]benzopyran 149
Fructone 151	Hexanal 12
Frutalone 84	trans-2-Hexenal 14
2-Furaldehyde 142	cis-3-Hexen-l-ol 9
Furaneol 146	trans-2-Hexen-1-ol 9
Furfuryl mercaptan 162	cis-3-Hexenyl acetate 20
2-Furylmethanethiol 162	trans-2-Hexenyl acetate 19
	cis-3-Hexenyl formate 19
Galaxolide 149	cis-3-Hexenyl isobutyrate 20
Galbanum oil 8, 196	(Z)-3-Hexenyl methyl carbonate 22
Galbanum resinoid 196	cis-3-Hexenyl salicylate 140
Ganolide 114	Hexyl acetate 19
	•
Garlic oil 172	Hexyl benzoate 120
Geranial 36 , 186, 187, 192, 203	Hexyl butyrate 20
Geranic acid 43	α -Hexylcinnamaldehyde 110
Geranic acid nitrile 47	2-Hexyl-5-methyl-3(2H)-furanone 172
Geraniol 25 , 32, 37, 39, 191, 192, 193, 197, 216	2-Hexyl-3-phenyl-2-propenal 110
Geranium oil 32, 143, 197	Hexyl salicylate 139
Geranonitrile 47	Homofuronol 147
Geranyl acetate 26, 44 , 192, 226	Ho oil 28 , 180
Geranylacetone 36, 42	Hacinth Body 99
Geranyl formate 43	Hydratropaldehyde 105
Geranyl isobutyrate 44	Hydratropaldehyde dimethyl acetal 106
Geranyl isovalerate 44	Hydroquinone dimethyl ether 129
Geranyl phenylacetate 121	
	3-Hydroxy-2-butanone 17
Geranyl propionate 44	3-Hydroxy-2-butanone 17 'Hydroxycitronellal' 40
Geranyl propionate 44 Gingergrass oil 193	'Hydroxycitronellal' 40
Gingergrass oil 193	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40
Gingergrass oil 193 Ginger oil 198	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4 <i>H</i> -pyran-4-one 147
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4 <i>H</i> -pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212 Guaiol 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-\(^{2}\)-\(^{2	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4 <i>H</i> -pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 1BCH 79 1FRA 231
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212 Guaiol 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-\(^{2}\)-\(^{2	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2 <i>H</i>)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4 <i>H</i> -pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 1BCH 79 1FRA 231
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 ($-$) α -Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolal 151
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (-)-α-Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α-Gurjunene 199	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolal 151 Indolarome 151
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (-)-α-Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α-Gurjunene 199 Habanolide 156	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolal 151 Indolal 151 Indolarome 151 Indole 163, 175, 200, 207
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α-Gurjunene 199 Habanolide 156 Hedion 95	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolar 151 Indolarome 151 Indolarome 151 Indole 163, 175, 200, 207 Inonyl acetate 19
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α-Gurjunene 199 Habanolide 156 Hedion 95 Heliobouquet 138	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolal 151 Indolal 151 Indole 163, 175, 200, 207 Inonyl acetate 19 IOFI 229
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 ($-$)- α -Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α -Gurjunene 199 Habanolide 156 Hedion 95 Heliobouquet 138 Heliofolal 138	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indolar 151 Indolar 151 Indolar 151 Indolar 163, 175, 200, 207 Inonyl acetate 19 IOFI 229 α-Ionone 63, 64
Gingergrass oil 193 Ginger oil 198 Ginger oleoresin 198 Gingerols 198 Givescone 93 Globalide 156 Grapefruit oil 69, 186 Greenylacetate 92 Guaiac wood oil 73, 199 Guaiacol 79, 129, 134 6,9-Guaiadiene 197 Guaiazulene 199 (—)-α-Guajene 212 Guaiol 199 Guaiyl acetate 73 Gurjun balsam oil 199 α-Gurjunene 199 Habanolide 156 Hedion 95 Heliobouquet 138	'Hydroxycitronellal' 40 Hydroxydihydrocitronellal 39, 40 Schiff's base with methyl anthranilate 125 7-Hydroxydihydrocitronellal 40 Hydroxydihydrocitronellal dimethyl acetal 41 4-Hydroxy-3-methoxybenzaldehyde 134 4-Hydroxy-5-methyl-3(2H)-furanone 142 4-(4-Hydroxy-4-methylpentyl)-3-cyclohexene carboxaldehyde 83 3-Hydroxy-2-methyl-4H-pyran-4-one 147 16-Hydroxy-12-oxahexadecanoic acid lactone 158 15-Hydroxypentadecanoic acid lactone 155 4-(4-Hydroxyphenyl)-2-butanone 138 IBCH 79 IFRA 231 Indoflor 151 Indolal 151 Indolal 151 Indole 163, 175, 200, 207 Inonyl acetate 19 IOFI 229

γ -Ionone 63, 64	Khusimol 223, 224
Iridales 211	Khusimyl acetate 74
α -Irone 63, 64	Koavone 17
β -Irone 63, 64	Kohinool 11
cis - α -Irone 210	Kovanol 83
cis-γ-Irone 210	Kovanor 05
	I -1-111 200
γ -Irone 63	Labdanum absolute 200
Isoamyl acetate 19	Labdanum oil 200
Isoamyl angelate 184	Laurel leaf oil 143, 200
Isoamyl butyrate 20	Lauric aldehyde 13
Isoamyl salicylate 139	Laurinal 41
Isoamyl tiglate 184	Lauryl acetate 18
Isoananat 93	Lavandin oil 45, 202
cis-Isoasarone 179	Lavandin oil <i>abrial</i> 202
Isoborneol 58	Lavandin oil grosso 202
Isobornyl acetate 73	Lavandulol 25
Isobutyl angelate 184	Lavandulyl acetate 46, 201
2-Isobutyl-4-methyltetrahydro-2 <i>H</i> -pyran-	Lavender and lavandin extracts 202
4-ol 148	Lavender oil 45, 57, 201
6-Isobutylquinoline 163	Leaf alcohol 9
2-Isobutylthiazole 164	Leaf aldehyde 14
Isobutyl tiglate 184	Lemongrass oil 192
3- <i>trans</i> -Isocamphylcyclohexanol 78	Lemongrass oil, Indian 192
Isodamascon 68	
	Lemongrass oil, West Indian 192
Iso E Super 89	Lemon oil 186
Isoeugenol 129, 132, 134, 226	Lie de vin oil 203
Isoeugenol methyl ether 130, 191	Liffarome 22
Isoisopulegol 54	Ligantraal 125
Isolongifolanone 69	Lignofix 70
(+)-Isomenthol 52	Ligustilide 203
Isomenthone 197	Ligustral 82
(+)-Isomenthone 60 , 205	Lilestralis 109
(\pm) -Isomenthone 60	Lilial 109
'Isomer G' 70	Lilialdehyde 109
α -Isomethylionone 63, 64	Lime oil 187
β -Isomethylionone 63, 64	Lime oil, distilled 188
Isononyl acetate 19	Lime oil, pressed 188
4-Isopropylbenzaldehyde 108	Limonene 49 , 173, 185, 187, 188, 206, 214
2-Isopropyl-5-methylphenol 126	(–)-Limonene 49
3-(3-Isopropylphenyl)butanal 107	(+)-Limonene 49, 61, 178, 180, 183, 186, 189
Isopulegol 195	Linalool 27, 28 , 36, 177, 186, 197, 201, 202,
(–)-Isopulegol 39, 54, 55	207, 213, 216, 217
Isosafrole 132, 137, 180	(+)-Linalool 191
Isovalencenol 223, 224	(-)-Linalool 226
Isovaleric acid 223	Linalool oxide 145
180 valetic acid 223	
T 1 204	Linalyl acetate 26, 45, 186, 201, 202, 214, 217
Japanese mint oil 204	Linalyl butyrate 45
Jasmacyclene 92	Linalyl formate 44
Jasmal 149	Linalyl isobutyrate 46
Jasmaprunat 151	Linalyl propionate 45
Jasmin absolute 94, 116, 200	Lindestrene 207
Jasmolactone 155	Litsea cubeba oil 37, 203
<i>cis</i> -Jasmone 85 , 200	Lixetone 70
Jasmonyl LG 149	Lolitol 9
Jasmophyll 149	Longifolene 49
Jasmopol 95	Lorysia 92
Jasmopyrane 149	Lorysia 92 Lovage oils 203
JECFA 223	Lyral 83
Juniper berry oil 200	Lysmeral 109
W 1 01	
Karanal 81	Mace oil 207
Kephalis 91	Madrol 76

Magnolan 151	Schiff's base with 2,4-dimethyl-3-cyclohexene
Majantol 101	carbaldehyde 125
Maltol 147	Schiff's base with 4-tert-butyl- α -
Mandarin oil 124, 188	methyldihydrocinnam-aldehyde 125
Manzanate 21	Methyl benzoate 120, 225
Marjoram oil 204	7-Methyl-2H-1,5-benzodioxepin-3(4H)-one 151
Marjoram oil, Spanish 204	2-Methyl-3-(4- <i>tert</i> -butyl-phenyl)propanal 109
Matsutake alcohol 10	Methylchavicol 176, 177, see also Estragole
Mayol 58	Methyl cinnamate 121
MDJ Super 95	3-Methylcyclopentadecanone 87
Mefranal 106	3-Methyl-2-cyclopenten-2-ol-1-one 90
Mefrosol 102	2-Methyldecanal 13
Melonal 15	4-Methyl-3-decen-5-ol 11
1,4- <i>p</i> -Menthadiene 50	5-Methyl-6,7-dihydro[5 <i>H</i>]cyclo-
1,5-p-Menthadiene 50	pentapyrazine 164
1,8- <i>p</i> -Menthadiene 49	Methyl dihydrojasmonate 94
1,8-p-Menthadien-6-one 61	Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 141
Menthane-8-thiol-3-one 179	Methyl 2,4-dihydroxy-3-methylbenzoate 141
Menthane-8-thiol-3-one S-acetate 179	Methyl 3,6-dimethylresorcylate 141
<i>p</i> -Menthan-3-ol 52	2-Methyl-1,3-dioxolane-2-acetic acid ethyl
<i>p</i> -Menthan-7-ol 58	ester 151
<i>p</i> -Menthan-3-one 60	2-Methylene-4-(2,2-dimethyl-6-
p-Menthanyl acetate 70	methylenecyclohexyl)butanal 174
(–)-p-Menthan-3-yl acetate 70	3,4-Methylenedioxybenzaldehyde 136
1,3,8-Menthatriene 211	2-Methylfuran-3-thiol 142
1-p-Menthene-8-thiol 75	Methyl 2-furoate 142
1-p-Menthen-4-ol 57	5-Methyl-3-heptanone oxime 23
1-p-Menthen-8-ol 56	6-Methyl-5-hepten-2-one 29, 42
8- <i>p</i> -Menthen-3-ol 55	Methyl 2-hexyl-3-
1-p-Menthen-8-yl acetate 71	oxocyclopentanecarboxylate 95
Menthofuran 144	3-Methylindole 163
(+)-Menthofuran 205	α -n-Methylionone 63, 64
Menthol 52	β -n-Methylionone 63, 64
(-)-Menthol 39, 52 , 195, 204, 205	2-Methyl-3-(4-isopropylphenyl)propanal 107
(\pm) -Menthol 52	Methyl jasmonate 94 , 200
Menthone 60 , 206	2-Methyl-3-(4-methoxyphenyl)propanal 134
(-)-Menthone 60 , 205	Methyl <i>N</i> -methylanthranilate 124 , 188, 213
(\pm) -Menthone 60	α -Methyl-3-(3,4-
(–)-Menthyl acetate 70 , 205	methylenedioxyphenyl)propanal 138
(±)-Menthyl acetate 71	2-Methyl-6-methylene-7-octen-2-ol 30
3-Mercapto-2-butanone 23	1-Methyl-4-(4-methyl-3-penten-1-yl)-3-
3-Mercaptohexanol 23, 152	cyclohexene carboxaldehyde 82
8-Mercapto- <i>p</i> -menthan-3-one 75	4-Methyl-2-(2-methyl-1-
4-Mercapto-4-methyl-2-pentanone 23	propenyl)tetrahydrofuran 143
4,7-Methano-3a,4,5,6,7,7a-hexahydro-5 (or 6)-	Methyl 3-methylresorcylate 141
indenyl acetate 92	Methyl β -naphthyl ketone 112
4-Methoxyacetophenone 138	Methylnonylacetaldehyde 14
1-Methoxy-4-allylbenzene 127	Methyl 2-nonynoate 22
2-Methoxy-4-allylphenol 130	β -Methyl- γ -octalactone 154
4-Methoxybenzaldehyde 133	Methyloctylacetaldehyde 13
4-Methoxybenzyl alcohol 132	Methyl 2-octynoate 22
2-Methoxycinnamaldehyde 184	Methyl (3-oxo-2-pentylcyclopentyl)acetate 94
Methoxycyclododecane 81	Methyl Pamplemousse 16
Methoxydihydrocitronellal 41	2-Methyl-2-pentenoic acid 18
2-Methoxy-3-isobutylpyrazine 164, 196	4(4-Methyl-3-penten-1-yl)-3-cyclohexene
2-Methoxy-3-isopropylpyrazine 163	carboxaldehyde 82
4-Methoxy-2-methyl-2-butenethiol 178	3-Methyl-2-(cis-penten-1-yl)-2-cyclopenten-1-
1-Methoxy-4-(1-propenyl)benzene 127	one 85
2-Methoxy-4-(1-propenyl)phenol 129	3-Methyl-2-pentyl-2-cyclopenten-1-one 85
4-Methylacetophenone 111	4-Methylphenylacetaldehyde 106
Methyl anthranilate 124	Methyl phenyl ketone 111
Schiff's base with hydroxycitronellal 125	3-Methyl-5-phenylpentanal 106

2-Methyl-5-phenylpentanol 102	2-trans-6-cis-Nonadien-1-ol 11
3-Methyl-5-phenylpentanol 102	γ -Nonalactone 153
Methyl propyl disulfide 172	Nonanal 12
2-Methyl-4-propyl-1,3-oxathiane 152	Nootkatone 69 , 186
6-Methylquinoline 163	Nopyl acetate 72
	Normatahaulanal 212
Methyl salicylate 139	Norpatchoulenol 212
4-Methyl-2-(2-methyl-1-	Nutmeg oil 207
propenyl)tetrahydropyran 143	
4-Methyl-5-thiazolethanol 164	Oakmoss absolute 141, 208
3-Methylthiohexanol 23	Ocimene 24
3-Methyl-5-(2,2,3-trimethyl-3-cyclopenten-1-yl)-4-	<i>cis</i> -Ocimene 201, 220
penten-2-ol 78	trans-Ocimene 201
2-Methyl-4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2-	cis-Ocimenone 220
butenal 83	trans-Ocimenone 220
	[(1R*,2R*,8aS*)-1,2,3,5,6,7,8,8a-Octahydro-
Methyl 2,6,10-trimethyl-2,5,9-cyclododecatrien-1-	
yl ketone 90	1,2,8,8-tetramethylnaphthalen-2-yl]ethan-1-
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-	one 89
yl)butanol 76	γ -Octalactone 153
2-Methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-	Octanal 12 , 186
buten-1-ol 76	Octanal dimethyl acetal 12
2-Methylundecanal 14	3-Octanol 9
2-Methyl-2-vinyl-5-	3-Octanone 17
$(\alpha$ -hydroxyisopropyl)tetrahydrofuran 145	1-Octen-3-ol 10
2-Methyl-2-vinyl-5-	Okoumal 115
isopropenyltetrahydrofuran 145	Oleoresins 171
Mimosa absolute 204	Olibanum oil 209
Mint oils 60, 204	Olibanum resinoid 209
Muscone 87 , 176	Oncidal 16
Musk 87, 169	Onion oil 172
Musk 50 149	Opopanax oil 209
Musk 781 158	Opopanax resinoid 209
Musk C14 159	Orange flower absolute 207
Musk ketone 123	Orange flower water absolute 207
Musk MC-4 159	Orange oil, bitter 189
Musk MC-5 159	Orange oil, sweet 189
Musk R1 158	Orcinol 208
Musk T 159	β -Orcinol 208
Musk TM 88	Orcinol monomethyl ether 208
Musk xylol 122	β-Orcinol monomethyl ether 208
Myrac aldehyde 82	Origanum oils 126, 210
Myraldene 82	Orivone 86
Myrcenal 82	Orris root oil 210
Myrcene 24 , 26, 31, 40, 89, 177	Ortholate 91
Myrcenol 30 , 83	Oryclon 92
Myristicin 208, 211	Osyrol 34
Myrrh oil 206	Oxacycloheptadec-10-en-2-one 157
Myrrh resinoids 206	10-Oxa-16-hexadecanolide 158
Wiyiin resinoids 200	11-Oxa-16-hexadecanolide 158
@ Manhthyl athyl athan 120	12-Oxa-16-hexadecanolide 158
β-Naphthyl ethyl ether 128	
β-Naphthyl isobutyl ether 128	Oxalide 158
β -Naphthyl methyl ether 128	Oxane 152
(+)-Neoisomenthol 52	3-Oxo-2-(2-cis-pentenyl)cyclopentane-acetic acid
Neoisoisopulegol 54	methyl ester 94
Neoisopulegol 54	Oxyphenylon 138
(+)-Neomenthol 52	Ozonil 24
Neral 36 , 187, 192, 203	
Nerol 27, 32, 39, 216	Palisandin 81
Nerolidol 35 , 213	Palmarosa oil 26, 193
Neroli oil 124, 207	Parslev leaf oil 211
Nerol oxide 141	
	Parsley seed oil 211 (-)-β-Patchoulene 212
Neryl acetate 26, 44 2-trans-6-cis-Nonadienal 12, 225	Patchouli oil 212

Patchoulol 212	cis-Pinane 29
Pearlide 149	cis-/trans-Pinane hydroperoxide 29
Pelargonaldehyde 12	cis-/trans-Pinanol 29
15-Pentadecanolide 155, 173	α -Pinene 29, 51 , 57, 173, 193, 196, 200, 208,
15-Pentadec-11-enolide/15-Pentadcc-12-enolide	214, 216, 222, 223
(mixture of cis and trans isomers) 157	β-Pinene 26, 51 , 59, 72, 185, 187, 196, 208, 214,
Pentalide 155	223
3,4,5,6,6-Pentamethyl-3-(or -4)-hepten-2-ol 10	2-Pinene 51
3,4,5,6,6-Pentamethyl-3-hepten-2-one 17	2(10)-Pinene 51
4- <i>tert</i> -Pentylcyclohexanone 86	Pine-needle oil 215
2-Pentylcyclopentanone 84	Pine oil 222
Pentyloxyacetic acid allyl ester 23	Piperine 213
2-Pentyl-3-phenyl-2-propenal 110	(+)-trans-Piperitol 54
3-Pentyltetrahydro-2 <i>H</i> -pyran-4-ol acetate 149	(-)-Piperitone 54, 195
Peppermint oil 52, 70, 144, 205	Piperonal 136
Pepper oil 212	Polysantol 78
Pepper oleoresin 212	Pomades 170
Peru balsam oil 120, 213	Precyclemone B 82
Petitgrain oil bigarade 214	Preisocalamendiol 179
Petitgrain oil mandarinier 213	Profarnesal 16
Petitgrain oil Paraguay 213	
	Projasmon P 84
Petitgrain oils 124, 213	Propenylguethol 131
Phantolide 113	2-Propenyl heyanosta 21
α -Phellandrene 50 , 193, 194, 195, 196, 214 β -Phellandrene 48, 173, 214	2-Propenyl hexanoate 21
	Propenyl propenyl disulfide 172
Phenethyl acetate 117	Protocatechu aldehyde 133
Phenethyl alcohol 98	Pseudoionone 65
Phenethyl isographyl other 00	Pulegone 75, 144
Phenethyl isoamyl ether 99	D 120
Phenethyl isopyalarete 117	Raspberry ketone 138
Phenethyl isovalerate 117	Resinoids 171
Phenethyl methyl ether 99	RIFM 231
Phenethyl methyl ethyl carbinol 102	Rosalva 10
Phenethyl phenylacetate 121	Rosaphen 102
Phenethyl salicylate 140	Rose absolute 216
Phenirat 128	Rose furan 141
Phenoxanol 102	Rose oil 25, 31, 68, 98, 141, 143, 215
Phenoxyacetic acid allyl ester 126	Rose oxide 143, 216
Phenoxyacetic acid 2-propenyl ester 126	Rosemary oil 216
2-Phenoxyethyl iosbutyrate 128	Rosewood oil 28, 216
Phenylacetaldehyde 104	Calinary 200 212
Phenylacetaldehyde dimethyl acetal 105	Sabinene 208, 213
Phenylacetaldehyde glycerine acetal 150	cis-Sabinene hydrate 204
Phenylacetic acid 119	Safrole 180, 219
Phenyl-3-butanone 112	Sage oil, Dalmatian 217
l-Phenylethyl acetate 117	Sage oils 217
Phenylethyl alcohol 98, 215, 216	Sage oil, Spanish 218
1-Phenylethyl alcohol 100	Salicylaldehyde 160
2-Phenylethyl alcohol 98	Sandalmysore Core 76
Phenylhexanol 102	Sandalore 77
4-Phenyl-2-methyl-2-butanol 101	Sandalwood oil, East Indian 218
1-Phenyl-3-methyl-3-pentanol 102	Sandalwood oil, West Indian 173
5-Phenyl-3-methyl-2-pentenonitrile 123	Sandela 79
1-Phenyl-2-methyl-2-propanol 101	Sandel H&R 79
2-Phenylpropanal 105	Sandelice 76
3-Phenylpropanal 105	Sandiff 79
3-Phenylpropanol 100	Sandolene 77
3-Phenyl-2-propenal 109	Sandranol 77
3-Phenyl-2-propen-1-ol 103	α-Sauitalene 209
Piconia 69	Santalex 79
Pimento oils 214	α-Santalol 218
Pinaceae needle oils 214	β-Santalol 218

Sassafras oil 219	2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydro-2-
Sassafras oil, Brazilian 219	naphthalenyl methyl ketone 89
Sassafras oils, Chinese 180, 219	Thuja oil 181
Savory oil 219	α -Thujone 176, 181, 218
Sclareol 146, 217	β -Thujone 176, 218
Seamoss 141	Thujopsene 49, 70, 182
Sedanenolide 183	Thyme oil 126, 221
β -Selinene 183	Thymol 55, 126 , 210, 221
·	
β-Sesquiphellandrene 198	Timberol 79
(–)-Seychellene 212	Tinctures 171
Shogaols 198	Tolu balsam resinoid 221
Shyobunone 179	p-Tolyl methyl ketone 111
Silver fir oil, European 214	Tonalide 114
α -Sinensal 188, 189	Tonka bean absolute 221
β -Sinensal 189	Traseolide 114
Skatole 163, 175	Tree moss absolute 208
Solanone 42	α -Trichloromethylbenzyl acetate 117
Sotolone 154	Tridecanal 13
Spearmint oil 61, 206	1,13-Tridecanedioic acid ethylene ester 159
Spike lavender oil 202	13-Tridecanolide 173
Spruce oils 215	'Tridecen-2-nitril' 24
	'Tridecene-2-nitrile' 24
Star anise oil 127, 220	
Stemone 23	2-Tridecenenitrile 24
Strawberriff 18	1,3,3-Trimethylbicyclo[2.2.1]heptan-2-one 62
Strawberry aldehyde 161	1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one 62
Strawberry pure 161	1-(2,6,6-Trimethyl-1,3-cyclohexadienyl)-2-buten-
Styrallyl acetate 117	1-one 68
Styrallyl alcohol 100	α ,3,3-Trimethylcyclohexane-1-methanol
	formate 70
Styrax oil 220	
Styrax resinoid 220	1-(2,4,4-Trimethyl-2-cyclohexen-1-yl)-2-buten-1-
Sugar lactone 154	one 68
Sulfate turpentine oil 222	1-(2,6,6-Trimethylcyclohexenyl)-2-buten-1-
Sulfox 75	ones 67 , 68
Synambrane 146	1-(2,6,6-Trimethyl-1-eyclohexenyl)-2-buten-1-
•	one 67
Tagetes oil 220	1-(2,6,6-Trimethyl-2-cyclohexenyl)-2-buten-1-
Tagetone 42, 220	one 67
Tarragon oil 220	
	1-(2,6,6-Trimethyl-3-cyclohexenyl)-2-buten-1-
Tea tree oil 221	one 68
α -Terpinene 48, 185	trans-1-(2,6,6-Trimethyl-1-cyclohexenyl)-2-buten-
γ -Terpinene 50 , 187, 188, 210	1-one 67
1-Terpinen-4-ol 57 , 200, 201, 204, 208, 220,	trans-1-(2,6,6-Trimethyl-3-cyclohexenyl)-2-buten-
221	1-one 68
α -Terpineol 56 , 222	1-(2,2,6-Trimethylcyclohexyl)hexan-3-ol 79
cis-Terpin hydrate 57	5-(2,2,3-Trimethyl-3-cyclopenten-1-yl)-3-
Terpinolene 48, 58	methylpentan-2-ol 77
α -Terpinyl acetate 71 , 181	*. *
α -respinys acetate 71, 181	
(Z)-5-Tetradecen-14-olide 172	3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol 35
Tetrahydrogeraniol 33	3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol 35
1-(5,6,7,8-Tetrahydro-3,5,5,6,8,8-hexamethyl-2-	3,5,5-Trimethylhexyl acetate 19
naphthalenyl)-ethanone 114	2,5,5-Trimethyl-1,2,3,4,4a,5,6,7-
4,4a,5,9b-Tetrahydroindeno[1,2-d]- <i>m</i> -dioxin 151	octahydronaphthalen-2-ol 80
Tetrahydrolinalool 34	1,5,9-Trimethyl-13-oxabicyclo[10.1.0]trideca-4,8-
Tetrahydromethylionones 65	diene 145
Tetrahydromyrcenol 34	2,2,5-Trimethyl-5-pentylcyclopentanone 84
Tetrahydro-6-(3-pentenyl)-2 <i>H</i> -pyran-2-one 155	2,4,6-Trimethyl-4-phenyl-1,3-dioxane 150
Tetralide 114	Trimethylpyrazine 164
Tetralol 34	2,6,10-Trimethyl-5,9-undecadienal 16
2,3,4,5-Tetramethoxyallylbenzene 211	2,6,10-Trimethyl-9-undecenal 41
3a,6,6,9a-Tetramethyldodecahydronaphtho-	2,2,6-Trimethyl-6-vinyltetrahydropyran 188
[2,1-b]furan 146 , 174	2,2,6-Trimethyl-6-vinyltetrahydro-2 <i>H</i> -pyran-
3,5,6,6-Tetramethyl-4-methyleneheptan-2-ol 10	3-ol 145

Trimofix 'O' 90 2,4,6-Trinitro-1,3-dimethyl-5-tertbutylbenzene 122 Triplal 82 Tuberose absolute 222 Turpentine oils 51, 222

 γ -Undecalactone 153 Undecanal 13 (E,Z)-1,3,5-Undecatriene 196 1,3-trans-5-cis-Undecatriene 8 1,3-trans-5-trans-Undecatriene 8 Undecavertol 11 10-Undecenal 15 10-Undecen-1-ol 10

Valanone B 69
(+)-Valencene 49, 69
Valerian oil 223
Vanilla extract 134, 223
Vanillin 134, 178, 213, 223
Vanoris 19
Veloutone 84
Velvione 88
Veramoss 141
Veratraldehyde 136
Verbenone 216
Verdantiol 125

Verdox 91
Verdylacetate 92
Verotyl 99
Vertacetal 150
Vertenex 92
Vertocitral 82
Vertofix 70
Vertomugal 82
Vertosine 125
Vetiver oil 74, 224
Vetiver oil 74, 224
Vetiveryl acetate 74, 224 α -Vetivone 224 β -Vetivone 224
Violet leaf absolute 225
Violet leaf alcohol 11
'Violet leaf aldehyde' 11, 225
Violet leaf oil 11
Viridiflorol 206

Watermelon ketone 151 Whiskey lactone 154 Wine lees oil 203 Wood turpentine oils 222 Woodyflor 70

Ylang-ylang oil 120, 225

Zingiberene 198