

Contents

PREFACE	v
PEOPLE	xi
NEW AND CHANGED	xiii
GENERAL PROVISIONS AND REQUIREMENTS APPLYING TO SPECIFICATIONS, TESTS, AND ASSAYS OF THE FOOD CHEMICALS CODEX	1
MONOGRAPHS	9
IDENTITY STANDARDS	1269
GENERAL TESTS AND ASSAYS	1275
Appendix I: Apparatus for Tests and Assays	1279
Appendix II: Physical Tests and Determinations	1282
A. Chromatography	1282
B. Physicochemical Properties	1290
C. Others	1302
Appendix III: Chemical Tests and Determinations	1321
A. Identification Tests	1321
B. LIMIT TESTS	1323
C. OTHERS	1339
Appendix IV: Chewing Gum Base Polymers	1360
Appendix V: Enzyme Assays	1364
Appendix VI: Essential Oils and Flavors	1395
Appendix VII: Fats and Related Substances	1400
Appendix VIII: Oleoresins	1415
Appendix IX: Rosins and Related Substances	1418
Appendix X: Carbohydrates (Starches, Sugars, and Related Substances)	1423
Appendix XI: Flavor Chemicals (Other Than Essential Oils)	1434
Appendix XII: Microbiological Tests	1440
A. Media and Reagents	1440
B. Microbiological Enumeration Tests	1441
C. Tests for Absence of Specific Microorganisms	1441
Appendix XIII: Adulterants and Contaminants in Food Ingredients	1443
Appendix XIV: Markers for Authenticity Testing	1447
Appendix XV: Microbial Food Cultures Including Probiotics	1453
Appendix XVI: Protein-Based Ingredients	1465
Appendix XVII: Guidance on Food Fraud Mitigation	1473
A. General Guidance for Food Ingredients	1475
Appendix XVIII: USP Guidance on Developing and Validating Non-Targeted Methods for Adulteration Detection	1510
SOLUTIONS AND INDICATORS	1523
GENERAL INFORMATION	1537
INDEX	I-1

Index

Titles of monographs are shown in the boldface type.

A

Abbreviations, 6
 Absolute Alcohol (Reagent), 5
 Acacia, 556
 "Accuracy", Defined, 1538
 Acesulfame K, 9
Acesulfame Potassium, 9
 Acetal, 10
Acetaldehyde, 10
Acetaldehyde Diethyl Acetal, 10
 Acetaldehyde Test Paper, 1535
 Acetals (Essential Oils and Flavors), 1395
Acetanilole, 11
 Acetate C-10, 361
 Acetate Identification Test, 1321
 Acetegenol, 464
 Acetic Acid Furfurylester, 504
Acetic Acid, Glacial, 12
 Acetic Acid TS, Diluted, 1524
 Acetic Acid TS, Strong, 1524
 Acetic Acid, Zinc Salt, Dihydrate, 1264
 Acetic Aldehyde, 10
 Acetic and Fatty Acid Esters of Glycerol, 19
 Acetic Periodic Acid TS, 1524
 Acetoacetic Ester, 424
 Acetoglycerides, 19
Acetoin (Dimer), 12
Acetoin (Monomer), 13
 α -Acetolactatedecarboxylase, 414
 2-Acetonaphthone, 779
Acetone, 13
Acetone Peroxides, 14
Acetophenone, 15
 2-Acetopyridine, 20
 N-Acetyl-L-2-amino-4-(methylthio)butyric Acid, 17
 3-Acetyl-6-methyl-1,2-pyran-2,4(3H)-dione, 363
3-Acetyl-2,5-Dimethyl Furan, 16
 4-Acetylanisole, 11
 Acetylated Mono- and Diglycerides, 19
Acetylated Monoglycerides, 19
 Acetylbenzene, 15
 Acetyl Eugenol, 464
 Acetyl Groups, 1423
N-Acetyl-L-Methionine, 17
 Acetyl Methyl Carbinol, 13
 Acetyl Propionyl, 899
2-Acetylpyrazine, 19
2-Acetylpyridine, 20
3-Acetylpyridine, 21
2-Acetylpyrrole, 21

2-Acetyl Thiazole, 18
 Acetyl Valeryl, 562
 Acetyl Value, 1400
 Achilleic Acid, 24
 Acid (Reagent), 5
 Acid-Hydrolyzed Milk Protein, 22
 Acid-Hydrolyzed Proteins, 22
 Acid Calcium Phosphate, 219
Acid Hydrolysates of Proteins, 22
 Acidic Sodium Aluminum Phosphate, 1065
Acidified Sodium Chlorite Solutions, 23
 Acidity Determination by Iodometric Method, 1437
 Acid Magnesium Phosphate, 730
 Acid Number (Rosins and Related Substances), 1418
 Acid Phosphatase Activity, 1367
 Acid Phthalate Buffer, 1523
 Acid Sodium Pyrophosphate, 1062
 Acid Trisodium Pyrophosphate, 1220
 Acid Value
 Fats and Related Substances, 1400
 Flavor Chemicals (Other than Essential Oils), 1438
 Acid Value (Essential Oils and Flavors), 1395
Aconitic Acid, 24
 Activated Carbon, 240
 Active Oxygen Method, 1411
 Added Substances, 2
 Adenosine 5'-monophosphate, 25
 Adenosine 5'-phosphoric Acid, 25
 Adenylic Acid, 25
5'-Adenylic Acid, 25
Adipic Acid, 28
 Adulterants and Contaminants in Food
 Ingredients, 1443
 Diethylene Glycol and Ethylene Glycol in Glycerin, 1443
 Pesticide Residues, 1443
Advantame, 28
 Ag, 1060
Agar, 32
DL-Alanine, 33
L-Alanine, 34
 Alcohol, 426, 1524
 Alcohol (Reagent), 5
 Alcohol, 70%, 1524
 Alcohol, 80%, 1524
 Alcohol, 90%, 1524
 Alcohol, Absolute, 1524
 Alcohol, Aldehyde-Free, 1524
 Alcohol C-6, 579

Alcohol C-8, 863
 Alcohol C-9, 854
 Alcohol C-10, 362
 Alcohol C-11, 1231
 Alcohol C-12, 681
 Alcohol C-16, 569
 Alcohol Content of Ethyl Oxyhydrate
 Flavor Chemicals (Other than Essential Oils), 1437
 Alcohol, Diluted, 1524
 Alcoholic Potassium Hydroxide TS, 1524
 Alcoholometric Table, 1644
 Aldehyde C-6, 571
 Aldehyde C-7, 561
 Aldehyde C-8, 857
 Aldehyde C-9, 848
 Aldehyde C-10, 358
 Aldehyde C-11 Undecyclic, 1226
 Aldehyde C-11 Undecylenic, 1229
 Aldehyde C-12, 682
 Aldehyde C-12 MNA, 812
 Aldehyde C-14 Pure, So-Called, 1225
 Aldehyde C-16, 446
 Aldehyde C-18, So-Called, 847
 Aldehydes (Essential Oils and Flavors), 1395
 Aldehydes and Ketones
 Flavor Chemicals (Other than Essential Oils), 1435
 Hydroxylamine Method, 1435
 Hydroxylamine *tert*-Butyl Alcohol Method, 1435
 Aldehydes and Ketones (Essential Oils and Flavors), 1395
 Algin, 58, 192, 967, 1063
Alginate-Konjac-Xanthan Polysaccharide Complex, 34
 Alginates Assay, 1339
 Algin Derivative, 1004
Alginic Acid, 36
Alltame, 36
 Alkaline Borate Buffer, 1523
 Alkaline Cupric Tartrate TS, 1524
 Alkaline Mercuric Potassium Iodide TS, 1524, 1527
 All-*trans*-Retinol, 1239
 Allspice Oil, 930
 All-*trans*-Lycopene, 713, 716
Allura Red, 38
 Allura Red AC, 38, 471
p-Allylanisole, 421
Allyl Anthranilate, 39
 Allyl Beta-phenylacrylate, 40
 Allyl Butanoate, 39

Allyl Butyrate, 39

Allyl Caproate, 43

Allyl Cinnamate, 40**Allyl Cyclohexane Valerate**, 40**Allyl Cyclohexanepropionate**, 40

Allyl-3-cyclohexanepropionate, 40

Allyl Cyclohexyl Valerate, 40

4-Allyl-1,2-dimethoxy Benzene, 794

Allyl Disulfide, 41

4-Allylguaiacol, 464

Allyl Heptanoate, 42

Allyl Heptoate, 42

Allyl Hexanoate, 43

Allyl Ionone, 44

Allyl α -Ionone, 44

Allyl Isopentanoate, 45

Allyl Isothiocyanate, 44, 1439**Allyl Isovalerate**, 45**Allyl Mercaptan**, 46

4-Allyl-2-methoxyphenol, 464

4-Allyl-2-methoxy-phenyl Acetate, 464

Allyl Phenoxy Acetate, 47**Allyl Propionate**, 48

Allyl Sulfhydrate, 46

Allyl Sulfide, 49

Allylthiol, 46

Almond Oil, Bitter, FFPA, 49 α -Amyl-beta-phenylacrolein

Dimethyl Acetal, 72

 α -n-Amyl-beta-phenylacryl Acetate,

73

 α -Amyl-beta-phenylacryl Formate,

74

Alpha-Amylcinnamaldehyde**Dimethyl Acetal**, 72 α -Amylcinnamic Aldehyde

Dimethyl Acetal, 72

Alpha-Amylcinnamyl Acetate, 73**Alpha-Amylcinnamyl Alcohol**, 73**Alpha-Amylcinnamyl Formate**, 74 α -(Benzylthio)toluene, 132**(-)- α -Bisabolol**, 153 α -D(x) Ribofuranose, 1029 α -Mercaptoluene, 135 α -(Methylthio)toluene, 135 α -Pentylcinnamaldehyde Dimethyl

Acetal, 72

 α -Pentylcinnamyl Acetate, 73 α -Pentylcinnamyl Alcohol, 73 α -Pentylcinnamyl Formate, 74

Alphazurine 2G, 1533

Alternative Analytical Procedures, 2

Aluminum Ammonium Sulfate, 50

Aluminum Identification Test, 1321

Aluminum Limit Test, 1323

Aluminum Potassium Sulfate, 51

Aluminum Silicate, 121

Aluminum Sodium Sulfate, 51**Aluminum Sulfate**, 52**Amaranth**, 53

Ambrette Seed Liquid, 56

Ambrette Seed Oil, 56

N-[4-[(2-Amino-1,4-dihydro-4-oxo-6-pteridiny) methyl]amino]benzoyl]-L-glutamic Acid, 494

L- α -Amino- β -phenylpropionic Acid, 912

L-2-Amino-3-hydroxybutyric Acid, 1195

4-Amino-3-hydroxybutyric Acid

Trimethylbetaine, 247

DL-2-Amino-3-hydroxypropanoic Acid, 1055

L-2-Amino-3-hydroxypropanoic Acid, 1056

DL- α -Amino- β -phenylpropionic Acid, 920DL- α -Amino-3-indolepropionic Acid, 1220L- α -Amino-3-indolepropionic Acid, 1221

L-2-Amino-3-mercaptopropanoic Acid Monohydrochloride, 348

L-2-Amino-3-methylbutyric Acid, 1235

DL-2-Amino-3-methylvaleric Acid, 640

L-2-Amino-3-methylvaleric Acid, 641

L- α -Amino-4(or 5)-imidazolepropionic Acid, 589L- α -Amino-4(or 5)-imidazolepropionic Acid Monohydrochloride, 590

DL-2-Amino-4-(methylthio)butyric Acid, 764

L-2-Amino-4-(methylthio)butyric Acid, 765

N-[p-[(2-Amino-4-hydroxy-6-pteridiny)methyl]amino]benzoyl]glutamic Acid, 494

DL-2-Amino-4-methylvaleric Acid, 691

L-2-Amino-4-methylvaleric Acid, 692

L-2-Amino-5-guanidinovaleric Acid, 89

L-2-Amino-5-guanidinovaleric Acid Monohydrochloride, 90

Aminoacetic Acid, 548

L-2-Aminoglutaric Acid, 534

 α -Amino Nitrogen Determination, 1340

N-[4-[(2-Amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridiny)methyl]amino]benzoyl]-L-glutamic Acid, Calcium Salt (1:1), 210

N-[4-[(2-Amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-(6S)-pteridiny)methyl]amino]benzoyl]-L-glutamic Acid, Calcium Salt (1:1), 210

2-Aminoethanesulfonic Acid, 1176**2-Aminoethylsulfonic Acid**, 1176

L-2-Aminopentanedioic Acid, 532

2-Aminopentanedioic Acid

Hydrochloride, 533

Aminopeptidase Activity, 1368

Aminopeptidase, Leucine, 414

DL-2-Aminopropanoic Acid, 33

L-2-Aminopropanoic Acid, 34

L- α -Aminosuccinic Acid, 93

DL-Aminosuccinic Acid, 97

L-Aminosuccinic Acid, 98

Ammonia-Ammonium Chloride Buffer TS, 1524

Ammoniacal Silver Nitrate TS, 1524

Ammonia Detector Tube, 1535

Ammonia Nitrogen Determination, 1340

Ammonia Solution, 57**Ammoniated Glycyrrhizin**, 57

Ammonia TS, 1524

Ammonia TS, Stronger, 1524

Ammonium Acetate TS, 1525

Ammonium Alginate, 58

Ammonium Alum, 50

Ammonium Bicarbonate, 58**Ammonium Carbonate**, 59

Ammonium Carbonate TS, 1525

Ammonium Chloride, 59

Ammonium Chloride TS, 1525

Ammonium Citrate, Dibasic, 60**Ammonium Citrate, Tribasic**, 60

Ammonium Dihydrogen Phosphate, 62

Ammonium Glutamate, 819

Ammonium Glycyrrhizinate, 820

Ammonium Glycyrrhizinate,

Pentahydrate, 820

Ammonium Hydroxide, 57

Ammonium Hydroxide (Reagent), 5

Ammonium Identification Test, 1321

Ammonium Iron (II) Phosphate, 483

Ammonium Magnesium Potassium Chloride, Hydrate, 721

Ammonium Molybdate TS, 1525

Ammonium Oxalate TS, 1525

Ammonium Peroxodisulfate, 61

Ammonium Persulfate, 61**Ammonium Phosphate, Dibasic**, 62**Ammonium Phosphate, Monobasic**, 62

Ammonium Phosphatides, 63

Ammonium Polyphosphate, 65**Ammonium Saccharin**, 66**Ammonium Salts of Phosphatidic Acid**, 63

Ammonium Salts of Phosphorylated Glyceride, 63

Mixed Ammonium Salts of

Phosphorylated Glycerides, 63

Ammonium Standard Solution, 1524

Ammonium Sulfanilate TS, 1525

Ammonium Sulfate, 67

Ammonium Sulfide TS, 1525

Ammonium Thiocyanate, 0.1 N, 1529

Ammonium Thiocyanate TS, 1525

AMP, 25, 63

Amyl Acetate, 615

1-Amyl Alcohol, 68

Amylase, 413

 α -Amylase Activity (Bacterial), 1370 α -Amylase Activity (Nonbacterial), 1368 α -Amylase, 1368 β -Amylase, 416**Amyl Butyrate**, 68, 617

Amyl Caprylate, 69

Amylcinnamaldehyde, 71

 α -Amylcinnamaldehyde, 71

n-Amylcinnamic Alcohol, 73

Amyl Formate, 68, 619**Amyl Heptanoate**, 69

Amyl Hexanoate, 620

Amyl Isovalerate, 622

Amyl Octanoate, 69
 Amyloglucosidase, 1365
 Amyloglucosidase Activity, 1374
Amyl Propionate, 70
 Amyl Salicylate, 623
 Amyl Valerate, 622
 Amyl Vinyl Carbinol, 860
Amyris Oil, West Indian Type, 74
 Analytical Samples, 4
Anethole, 75, 1439
trans-Anethole, 75
 Aneurine Hydrochloride, 1192
Angelica Root Oil, 75
Angelica Seed Oil, 76
Angelica Seed Oleoresin, 1133
 Angular Rotation, 1292
 Anhydrous Alcohol (Reagent), 5
***o*-Anisaldehyde**, 77
p-Anisaldehyde, 767
Anise Oil, 77
 Anise Oleoresin, 1133
 Anisic Alcohol, 80
 Anisic Aldehyde, 767
 Anisidine Value, 1400
Anisole, 78, 1439
Anisyl Acetate, 79
 Anisyl Acetone, 813
Anisyl Alcohol, 80
 Anisyl α -Toluene, 82
Anisyl Butyrate, 81
Anisyl Formate, 81
Anisyl Phenylacetate, 82
 Anisyl Propanoate, 83
Anisyl Propionate, 83
Annatto Extracts, 83
 Anthrone TS, 1525
 Antimony Trichloride TS, 1525
 APDC Extraction Method (for Lead), 1335
 APM, 94
 APM-Ace, 96
 APO, 84
 Apocarotenal, 84
 β -Apo-8'-Carotenal, 84
 Apparatus for Tests and Assays, 4, 1279
Arabinogalactan, 89
 D-Araboascorbic Acid, 418
 Arachidonic Acid-Rich Oil, 84
ARA from Fungal (*Mortierella alpina*) Oil, 84
 ARA Fungal Oil, 84
 ARA-Rich Oil, 84
 ARA-Rich Single Cell Oil, 84
 Argentum, 1060
L-Arginine, 89
L-Arginine Monohydrochloride, 90
 Arsenic Limit Test, 1323
 Arsenic Limit Test (Chewing Gum Base Polymers), 1362
Ascorbic Acid, 91
 L-Ascorbic Acid, 91
Ascorbyl Palmitate, 91
Ascorbyl Stearate, 92
 L-Ascorbyl Stearate, 92
 Ash (Acid-Insoluble), 1302
 Ash (Total), 1302

L-Asparagine, 93
Aspartame, 94
Aspartame-Acesulfame Salt, 96
DL-Aspartic Acid, 97
L-Aspartic Acid, 98
N-L- α -Aspartyl-L-phenylalanine 1-Methyl Ester, 94
L- α -Aspartyl-*N*-(2,2,4,4-tetramethyl-3-thietanyl)-D-alaninamide, hydrated, 36
Aspergillus niger, 1364
Aspergillus niger var., 1367
 Astaxanthin, 99
 Astaxanthin Esters, 99
Astaxanthin Esters from *Haematococcus pluvialis*, 99
 Astaxanthin Fatty Acid Esters, 99
 Atomic Absorption Spectrophotometric Graphite Furnace Method (for Lead), 1333
 Atomic Absorption Spectroscopy, 1561
 Atomic Weights, 4, 1646
 Au, 548
 Aurum, 548
 Autolyzed Yeast, 1257
 Autolyzed Yeast Extract, 1260
Azodicarbonamide, 103
 Azodicarboxylic Acid Diamide, 103
Azorubine, 104
 Azo Violet, 1533

B

Bacillus coagulans GBI-30, 6086, 108
 Baker's Yeast Beta Glucan, 139
 Baking Soda, 1068
 Balsam Fir Oil, 492
Balsam Peru Oil, 115
 Barium Chloride TS, 1525
 Barium Diphenylamine Sulfonate TS, 1525
 Barium Hydroxide, 0.2 N, 1529
 Barium Hydroxide TS, 1525
 Barium Standard Solution, 1524
 Barley, 1364
 Barley Malt, 1364
 Basic Sodium Aluminum Phosphate, 1065
Basil Oil, Comoros Type, 116
Basil Oil, European Type, 117
 Basil Oil Exotic, 116
 Basil Oil, Italian Type, 117
 Basil Oil, Réunion Type, 116
Basil Oleoresin, 1133
 Bay Leaf Oil, 680
Bay Oil, 118
 BCD, 339
 BDS, 132
Beeswax, White, 119
Beeswax, Yellow, 120
 Beet Fiber, 1159
 Beet Sugar, 1153
 1,3-Behenic-2-oleic Glyceride, 154
 Benedict's Qualitative Reagent, 1525
Bentonite, 121
Benzaldehyde, 122
Benzaldehyde Glyceryl Acetal, 122
Benzaldehyde Propylene Glycol Acetal, 123
 Benzene (in Paraffinic Hydrocarbon Solvents), 1341
 1,3-Benzenediol, 5-[(*E*)-2-(4-hydroxyphenyl)ethenyl], 1022
 Benzenemethanethiol, 135
Benzenethiol, 123
 Benzidine TS, 1525
 1,2-Benzisothiazole-3(2*H*)-one-1,1-Dioxide, 1039
 1,2-Benzisothiazole-3(2*H*)-one 1,1-Dioxide Sodium Salt, 1110
 1,2-Benzisothiazolin-3-one-1,1-Dioxide, Calcium Salt, 222
 1,2-Benzisothiazolin-3-one 1,1-Dioxide Ammonium Salt, 66
 Benzoate Identification Test, 1321
1,2-Benzodihydropyrene, 124
Benzoic Acid, 125
 Benzoic Acid, Hexahydro, 347
Benzophenone, 126
 4*H*-1-Benzopyran-4-one, 7-[[6-*O*-(6-deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(3-hydroxy-4-methoxy, 568
o-Benzosulfimide, 1039
 Benzoylbenzene, 126
Benzoyl Peroxide, 127
3-Benzyl-4-Heptanone, 133
 Benzyl 3-oxobutanoate, 128
Benzyl Acetate, 127
Benzyl Acetoacetate, 128
 Benzyl Acetylacetate, 128
Benzyl Alcohol, 129
Benzyl Benzoate, 129
 Benzyl beta-Ketobutyrate, 128
Benzyl Butyrate, 130
 Benzyl *n*-Butyrate, 130
Benzyl Cinnamate, 131
 Benzyl Dipropyl Ketone, 133
Benzyl Disulfide, 132
Benzyl Formate, 132
 2-Benzylideneheptanol, 73
Benzyl Isobutyrate, 133
Benzyl Isovalerate, 134
Benzyl Mercaptan, 135
 Benzyl 3-Methyl Butyrate, 134
 Benzyl 2-Methyl Propionate, 133
Benzyl Methyl Sulfide, 135
Benzyl Phenylacetate, 136
 Benzyl Propanoate, 137
Benzyl Propionate, 137
Benzyl Salicylate, 137
 Benzylthiol, 135
Bergamot Oil, Coldpressed, 138
 Beta-1,3-glucan, 334
 Beta-Carotene, 251
beta-Cyclodextrin, 339
Beta Glucan from Baker's Yeast (*Saccharomyces cerevisiae*), 139
Betaine, 142
BHA, 143

BHT, 144

Bibenzene, 151

Bicarbonate Identification Test, 1321

Bifidobacterium animalis ssp. lactis
BI-07, 144**Bifidobacterium animalis ssp. lactis**
BI-04, 146**Bifidobacterium animalis ssp. lactis**
HN019, 149Bile-Tolerant Gram-Negative Bacteria,
1442Biobased Content of 1,3-Propanediol,
1447**Biotin**, 151*d*-Biotin, 151**Biphenyl**, 151

1,1-Biphenyl, 151

Birch Tar Oil, Rectified, 152

2,10-Bisaboladien-7-ol, 153

Bis(2-amino-2-deoxy- β -D-
glucopyranose) Sulfate Potassium
Chloride Complex (-,-), 527Bis(2-amino-2-deoxy- β -D-
glucopyranose) Sulfate Sodium
Chloride Complex (-,-), 529Bis(D-glucose, 2-amino-2-deoxy-),
Sulfate Potassium Chloride Complex,
527Bis(D-glucose, 2-amino-2-deoxy-),
Sulfate Sodium Chloride Complex,
529

Bismuth Nitrate TS, 1525

Bisulfite Identification Test, 1321

Bitter Almond Oil Free from Prussic
Acid, 49**Black Pepper Oil**, 153**Black Pepper Oleoresin**, 1133

Black PN, 158

Blank Tests, 4

Bohenin, 154**Bois de Rose Oil**, 155Boric Acid-Potassium Chloride, 0.2 M,
1523**Borneol**, 156**Bornyl Acetate**, 157

L-Bornyl Acetate, 157

Bound Styrene (Chewing Gum Base
Polymers), 1360

Brewer's Yeast, 1258

Brilliant Black BN, 158

Brilliant Black PN, 158**Brilliant Blue**, 161

Brilliant Blue FCF, 161, 468

Brilliant Carmine 6B, 707

Brilliant Green BS, 552

Bromelain, 413, 1364

Bromide Identification Test, 1321

Brominated Vegetable Oil, 163

Bromine, 0.1 N, 1530

Bromine TS, 1525

Bromocresol Blue, 1533

Bromocresol Blue TS, 1525

Bromocresol Green, 1533

Bromocresol Green TS, 1525

Bromocresol Purple, 1533

Bromocresol Purple TS, 1525

Bromophenol Blue, 1533

Bromophenol Blue TS, 1525

Bromothymol Blue, 1534

Bromothymol Blue TS, 1525

Brown HT, 163

Buffer Solutions

Acid Phthalate, 1523

Alkaline Borate, 1523

Hydrochloric Acid, 1523

Neutralized Phthalate, 1523

Phosphate, 1523

Phosphate, pH 7.2, 1440

Standard, 1523

Stock, 1440

Butadiene-Styrene Rubber, 166**Butane**, 170*n*-Butane, 170

Butane-1,3-diol, 186

Butane, 1-isothiocyanato-, 180

1,4-Butanedicarboxylic Acid, 28

Butanedioic Acid, 1148

2,3-Butanedione, 376

2,3-Butanedithiol, 172Butanoic Acid, 2-amino-4-
(methylseleno)-, (S)-, 1054

1-Butanol, 174

Butan-3-one-2-yl Butanoate, 173**2-Butanone**, 172

(E)-Butenedioic Acid, 501

4-(Butoxymethyl)-2-methoxyphenol,
1236

Butter Starter Distillate, 1140

n-Butyl-*n*-valerianate, 185

Butyl 2-Aminobenzoate, 175

Butyl Acetate, 174*n*-Butyl Acetate, 174**Butyl Alcohol**, 174

Butyl Aldehyde, 186

Butyl Anthranilate, 175*n*-Butyl Anthranilate, 175

Butylated Hydroxyanisole, 143

Butylated Hydroxymethylphenol,
185

Butylated Hydroxytoluene, 144

Butyl beta-Phenylacrylate, 177

Butyl Butyrate, 175*n*-Butyl *n*-Butyrate, 175**Butyl Butyryllactate**, 176

Butyl Caproate, 179

Butyl Cinnamate, 177*n*-Butyl Cinnamate, 177**2-sec-Butyl Cyclohexanone**, 177

Butyl Dodecanoate, 181

Butyl Dodecylate, 181

1,3-Butylene Glycol, 186

Butyl Ester, 176

Butyl Heptanoate, 178

Butyl Heptylate, 178

Butyl Hexanoate, 179*tert*-Butylhydroquinone, 1178**Butyl Isobutyrate**, 179**Butyl Isothiocyanate**, 180*n*-Butyl isothiocyanate, 180**Butyl Isovalerate**, 180**Butyl Laurate**, 181**Butyl 2-Methyl Butyrate**, 182

Butyl mustard oil, 180

Butyl *o*-Aminobenzoate, 175

Butyl Octadecanoate, 184

Butyl Oenanthe, 178

Butyl pentanoate, 185

n-Butyl pentanoate, 185**Butyl Phenylacetate**, 183

Butyl 3-Phenylpropenoate, 177

Butyl Rubber, 636

Butyl Stearate, 184**Butyl Valerate**, 185**Butyraldehyde**, 186

Butyrate, 176

Butyric Acid, 187

Butyrolin, 1216

 γ -Butyrolactone, 188

Butyryllactic Acid, 176

C

Cadmium Limit Test, 1325

Caffeine, 190**Calcium Acetate**, 191**Calcium Acid Pyrophosphate**, 191**Calcium Alginate**, 192**Calcium Ascorbate**, 192**Calcium Benzoate**, 193

Calcium Biphosphate, 219

Calcium Bromate, 194**Calcium Carbonate**, 194**Calcium Chloride**, 195Calcium Chloride Double Salt of DL- or
D-Calcium Pantothenate, 215**Calcium Chloride Solution**, 196

Calcium Chloride TS, 1525

Calcium Citrate, 197**Calcium Cyclamate**, 197

Calcium Cyclohexanesulfamate, 197

Calcium Cyclohexylsulfamate, 197

Calcium Disodium Edetate, 198

Calcium Disodium EDTA, 198

Calcium Disodium

Ethylenediaminetetraacetate, 198

Calcium Disodium

(Ethylenedinitrilo)tetraacetate, 198

Calcium Gluconate, 199**Calcium Glycerophosphate**, 200Calcium guanosine-5-monophosphate,
201

Calcium guanylate, 201

Calcium 5'-Guanylate, 201**Calcium Hydroxide**, 202

Calcium Hydroxide TS, 1525

Calcium Hydroxyapatite, 220

Calcium Identification Test, 1321

Calcium Iodate, 202**Calcium L-Threonate**, 228**Calcium Lactate**, 203**Calcium Lactobionate**, 203**Calcium Lignosulfonate**, 204**Calcium Lignosulfonate (40-65)**,
206**Calcium L-5-****Methyltetrahydrofolate**, 210**Calcium Oxide**, 213**Calcium Pantothenate**, 214

D-Calcium Pantothenate, 214

- Calcium Pantothenate, Calcium Chloride Double Salt**, 215
Calcium Pantothenate, Racemic, 216
Calcium Peroxide, 217
Calcium Phosphate, Dibasic, 218
Calcium Phosphate, Monobasic, 219
Calcium Phosphate, Tribasic, 220
 Calcium Propanoate, 221
Calcium Propionate, 221
Calcium Pyrophosphate, 221
Calcium Saccharin, 222
 Calcium salt of 3-hydroxy-4-[(4-methyl-2-sulphophenyl)azo]-2-naphthalenecarboxylic acid, 707
 Calcium, Seaweed-Derived, 1052
Calcium Silicate, 223
Calcium Sorbate, 225
Calcium Stearate, 225
 Calcium Stearoyl Lactate, 226
Calcium Stearoyl Lactylate, 226
 Calcium Stearoyl-2-Lactylate, 226
Calcium Sulfate, 227
 Calcium Sulfate TS, 1525
 Calcium Threonate, 228
Camphene, 229
d-Camphor, 229
(+)-Camphor, 229
Cananga Oil, 229
Candelilla Wax, 230
 Cane Sugar, 1153
Canola Oil, 231
 Cantha, 233
Canthaxanthin, 233
 Capillary Electrophoresis, 1553
 Capraldehyde, 358
 Capric Acid, 359
 Caproic Acid, 572
 Caproic Aldehyde, 571
 Capryl Alcohol, 863
 Caprylic Acid, 858
 Caprylic Aldehyde, 857
Capsicum Oleoresin, 1133
Caramel, 233
 Caramel Color, 233
Caraway Oil, 239
Caraway Oleoresin, 1133
 Carbamide, 1231
 2-[Carbamimidoyl(methyl)amino]acetic Acid; Hydrate, 328
 Carbohydrase, 414, 1364
Aspergillus niger var., 1364, 1365, 1366
Aspergillus oryzae var., 1364, 1365, 1366
Bacillus acidopullulyticus, 1367
Bacillus licheniformis (Containing a *Bacillus stearothermophilus* Gene), 1364
Bacillus licheniformis var., 1364
Bacillus stearothermophilus, 1364
Bacillus subtilis (Containing a *Bacillus megaterium* Gene), 1364
Bacillus subtilis (Containing a *Bacillus stearothermophilus* Gene), 1364, 1366
Bacillus subtilis var., 1364, 1365
 Barley, 1364
 Barley Malt, 1364
Candida pseudotropicalis, 1366
Kluyveromyces marxianus var. *lactis*, 1366
Mortierella vinacea var. *raffinoseutilizer*, 1365
Rhizopus niveus, 1365
Rhizopus oryzae var., 1364, 1365, 1366
Saccharomyces sp., 1366
Saccharomyces sp. (*cerevisiae*), 1366
Saccharomyces sp. (*Kluyveromyces*), 1366
Trichoderma longibrachiatum, 1365
Trichoderma longibrachiatum (Formerly *reesei*), 1365
 Carbohydrase and Protease, Mixed, 415
 Carbohydrate Authenticity Markers For Soluble (Instant) Coffee, 1450
 Carbohydrates and Related Substances, Tests and Assays, 1423
 Acetyl Groups, 1423
 Crude Fat, 1423
 Invert Sugar Determination, 1423
 Lactose Determination, 1424
 Propylene Chlorohydrin Determination, 1425
 Reducing Sugars Assay, 1426
 Sulfur Dioxide Determination, 1426
 Total Solids, 1428
Carbon, Activated, 240
 Carbonate Identification Test, 1321
Carbon Dioxide, 243
 Carbon Dioxide-Free Water, 5
 Carbon Dioxide Detector Tube, 1535
 Carbon Monoxide Detector Tube, 1535
 (R)-3-Carboxy-2-hydroxy-*N,N,N*-trimethyl-1-propanaminium Hydroxide, Inner Salt, 247
 Carboxycyclohexane, 347
 [2-Carboxy- β -(*N*-(*b*-methoxycarbonyl)-phenyl)ethylcarbamoyl] ethanaminium 6-methyl-4-oxo-1,2,3-oxathiazin-3-ide-2,2-dioxide, 96
Cardamom Oil, 245
Cardamom Oleoresin, 1133
Carmine, 246
 Carmine 6B, 707
 Carminic Acid, 246
Carnauba Wax, 247
L-Carnitine, 247
L-Carnitine L-Tartrate, 248
 Carob Bean Gum, 710
 Carotene, 250, 251
 β -Carotene, 250
 Beta-Carotene, 250
 β -Carotene From *Blakeslea Trispora*, 251
 β - β -Carotene-3,3'-diol, (3*R*,3'*S*)-(3*R*,3'*S*-meso)-Zeaxanthin, 1261
 β -Carotene-4,4'-dione, 233
 Carr-Price Reagent, 1525
Carrageenan, 253
Carrot Seed Oil, 263
Carvacrol, 264
(-)-Carveol, 265
L-Carveol, 265
 4-Carvomenthenol, 1183
(+)-Carvone, 266
(-)-Carvone, 267
d-Carvone, 266
dextro-Carvone, 266
L-Carvone, 267
levo-Carvone, 267
(-)-Carvyl Acetate, 268
L-Carvyl Acetate, 268
 β -Caryophyllene, 269
Cascarilla Oil, 270
Casein and Caseinate Salts, 271
 CAS number, 2
Cassia Oil, 272
Castor Oil, 273
 Catalase, 415, 1364
 Catalase Activity, 1370
 Catalase, Bovine Liver, 413
 Caustic Potash, 975
 Caustic Soda, 1086
 Caustic Soda Solutions, 1085
 gamma-CD, 341
Cedar Leaf Oil, 274
Celery Oleoresin, 1133
Celery Seed Oil, 274
 Cellulase Activity, 1371
 Cellulose, Ethyl, 431
Cellulose Gel, 275
Cellulose Gum, 276
 Cellulose Gum Viscosity, 1298
 Cellulose, Hydroxypropyl, 601
 Cellulose, Methyl Ethyl, 789
 Cellulose, Microcrystalline, 275
Cellulose, Powdered, 277
 Centrifuge, 4
 Ceric Ammonium Nitrate TS, 1525
 Ceric Sulfate, 0.01 N, 1530
 Ceric Sulfate, 0.1 N, 1530
 Cetyl alcohol, 569
Cetylpyridinium Chloride, 279
Chamomile Oil, English Type, 281
Chamomile Oil, German Type, 282
 Chamomile Oil, Hungarian Type, 282
 Chandi-ka-vark, 1060
 Chemical Formulas, 2
 Chemical Tests and Determinations, 1321
 Chewing Gum Base Polymers, 1360
 Arsenic Limit Test, 1362
 Bound Styrene, 1360
 Lead Limit Test, 1362
 Molecular Weight, 1360
 Quinones, 1361
 Residual Styrene, 1362
 Total Unsaturation, 1363
 Chicle, 751
 Chilte, 751
 China Clay, 650
 Chiquibul, 751
Chitosan, 283
 Chloride and Sulfate Limit Tests, 1325
 Chloride Identification Test, 1321
 Chloride Limit Test, 1326

Chlorinated Compounds (Essential Oils and Flavors), 1396

Chlorine, 287

Chlorine Detector Tube, 1535

Chlorine TS, 1525

Chlorophyll, 1401

Chocolate Brown HT, 163

Cholic Acid, 287

Cholecalciferol, 1243

Cholic Acid, 287

Choline Bitartrate, 288

Choline Chloride, 289

Chromatography, 1282

Column, 1282

Gas, 1285

High-Performance Liquid, 1287

Paper, 1283

Thin-Layer, 1284

Chromic Chloride, 289

Chromium (Color Additive Assays), 1343

Chromium(III) Picolinate, 291

Chromium(III) Trispicolinate, 291

Chromium chloride hexahydrate, 289

Chromium chloride hexahydrate (III), 289

Chromium chloride (III), 289

Chromium Picolinate, 291

Chromium trichloride hexahydrate, 289

Chromium Tripicolinate, 291

Chromotropic Acid TS, 1525

Chymosin, 415, 1365

Chymotrypsin, 413, 1372

Chymotrypsin Activity, 1372

CI Food Black 1, 158

Cinene, 697

1,8-Cineol, 462

Cineole, Percentage of (Essential Oils and Flavors), 1397

Cinnamal, 292

Cinnamaldehyde, 292

Cinnamic Acid, 293

Cinnamic Acid, Butyl Ester, 177

Cinnamic Acid *n*-Butyl Ester, 177

Cinnamic Alcohol, 296

Cinnamic Aldehyde, 292

Cinnamon Bark Oil, Ceylon Type, 293

Cinnamon Leaf Oil, 294

Cinnamon Oil, 272

Cinnamyl Acetate, 295

Cinnamyl Alcohol, 296

Cinnamyl Butyrate, 297

Cinnamyl Cinnamate, 298

Cinnamyl Formate, 299

Cinnamyl Isobutyrate, 300

Cinnamyl Isovalerate, 301

Cinnamyl Propionate, 302

Citral, 303

Citrate Identification Test, 1321

CITREM, 305

Citric Acid, 304

Citric Acid Esters of Mono- and Diglycerides, 305

Citric and Fatty Acid Esters of Glycerol, 305

Citridic Acid, 24

Citroglycerides, 305

Citronellal, 307

Citronellol, 308

Citronellyl Acetate, 309

Citronellyl Butyrate, 309

Citronellyl Formate, 310

Citronellyl Isobutyrate, 311

Citronellyl Propanoate, 312

Citronellyl Propionate, 312

Citrus Oils, Ultraviolet Absorbance (Essential Oils and Flavors), 1398

Clary Oil, 313

Clary Sage Oil, 313

Class: Bis-azo, 163

CI Food Blue 1, 604

CI Food Brown 3, 163

CI Food Green 4, 552

CI Food Orange 5, 251

CI Food Red 14, 419

CI Food Yellow 13, 1014

CI Food Yellow 4, 1175

CI No. 20285, 163

Clove Bud Oil, 315

Clove Leaf Oil, 314

Clove Oil, 315

Clove Stem Oil, 316

CI Pigment Red 57, 707

CMC, 276

Coagulated or Concentrated Latexes of Vegetable Origin, 751

CMP, 350

Cobalt-Uranyl Acetate TS, 1525

Cobalt Identification Test, 1321

Cobaltous Chloride TS, 1525

Cocoa Butter Substitute, 317

Coconut Oil (Unhydrogenated), 318

Cognac Oil, Green, 319

Cold Test, 1401

Coliforms, 1458

Color (AOCS-Wesson), 1401

Color Additive Assays

Chromium, 1343

Ether Extracts, 1343

Leuco Base, 1344

Loss on Drying, 1349

Mercury, 1345

Sodium Chloride, 1346

Sodium Sulfate, 1346

Total Color, 1346

Uncombined Intermediates and

Products of Side Reactions, 1348

Water-Insoluble Matter, 1349

Color Determination, 1343

Colorimetric Solutions, 1523

Color Value (Oleoresins), 1415

Column Chromatography, 1282

Congo Red TS, 1525

"Constant Weight", Defined, 6

Containers, 3

Light-Resistant Container, Defined, 3

Tight Container, Defined, 3

Well-Closed Container, Defined, 3

Copaiba Oil, 320

Copovidone, 321

Copper Gluconate, 324

Copper Identification Test, 1321

Copper Limit Test, 1326

Copper Sulfate, 324

Copper Sulfate TS, 1525

Coriander Oil, 325

Coriander Oleoresin, 1133

Cornmint Oil, Partially Dementholized, 760

Corn Oil (Unhydrogenated), 326

Corn Sugar, 367

Corn Syrup, 531

Costus Root Oil, 327

Cottonseed Oil

(**Unhydrogenated**), 327

Coulometric Titration (for water), 1300

Cream of Tartar, 967

Creatine Monohydrate, 328

Cresol Red, 1534

Cresol Red-Thymol Blue TS, 1525

Cresol Red TS, 1525

Cresyl Acetate (Test for Free Cresol), 1439

p-Cresyl Acetate, 329

p-Cresyl Isobutyrate, 1211

p-Cresyl Methyl Ether, 771

Crospovidone, 330

Crown gum, 751

Crude Fat, 1423

Cryptocodinium cohnii Oil, 367

Crystal Violet, 1534

Crystal Violet TS, 1525

Cubeb Oil, 331

Cubeb Oleoresin, 1133

Cuminal, 333

Cuminaldehyde, 333

Cumin Aldehyde, 333

p-Cuminic Aldehyde, 333

Cumin Oil, 332

Cumin Oleoresin, 1133

Cupric Citrate TS, Alkaline, 1525, 1525

Cupric Nitrate TS, 1526

Cupric Sulfate, 324

Cupric Sulfate Test Paper, 1535

Cupric Sulfate TS, 1526

Cupric Tartrate TS, Alkaline, 1526

Curcuma longa L. Root Turmeric, 1222

Curcumin Content, 1415

Curdian, 334

Cyanidenolon, 1522, 1011

Cyanocobalamin, 1241

Cyanogen Bromide TS, 1526

Cyclamen Aldehyde, 335

Cyclamic Acid, 336

3-Cyclohexene-1-methanol, α ,4-dimethyl- α -(4-methyl-3-pentenyl)-, [*S*-(*R**,*R**)]-, 153

α -**Cyclodextrin**, 337

γ -Cyclodextrin, 341

β -Cyclodextrin, 339

gamma-Cyclodextrin, 341

Cyclohexane, 343

Cyclohexanecarboxylic Acid, 347

1,2,3,5/4,6-Cyclohexanhexol, 606

Cyclohexanoic Acid, 347

Cyclohexyl Acetate, 347

Cyclohexylcarboxylic Acid, 347

Cyclohexylmethanoic Acid, 347
 Cyclomaltotriose, 341
 Cyclooctaamylose, 341
 Cyclopentadecanolid, 896
p-Cymene, 347
L-Cysteine Monohydrochloride, 348
L-Cystine, 349
 Cytidine 5'-monophosphate, 350
 Cytidine 5'-phosphoric acid, 350
 Cytidylic acid, 350
5'-Cytidylic Acid, 350

D

D.E., 380
 DAG Oil, 378
 Damar Gum, 355
 Damar Resin, 355
 α -**Damascone**, 354
 β -**Damascone**, 354
 δ -**Damascone**, 355
 Damasonone, 354
 Dammar, 355
Dammar Gum, 355
 Dammar Resin, 355
 Danish Agar, 502
 Data Elements Required for Assay
 Validation, 1540
 DATEM, 377
 D&C Red No. 7, 707
 "Deaerated water", Defined, 5
(E),(E)-2,4-Decadienal, 355
trans,*trans*-2,4-Decadienal, 355
 δ -**Decalactone**, 356
 γ -**Decalactone**, 357
Decanal, 358
Decanoic Acid, 359
 1-Decanol, 362
(E)-2-Decenal, 359
(Z)-4-Decenal, 360
cis-4-Decenal, 360
trans-2-Decenal, 359
Decyl Acetate, 361
Decyl Alcohol, 362
 "Degassed Water", Defined, 5
 Dehydrated Alcohol (Reagent), 5
Dehydroacetic Acid, 363
 Denigès' Reagent, 1526
 Deoxycholic Acid, 363
 Description, Statement of, 3
 Function, 3
 Odorless, 3
 Desiccators and Desiccants, 4
Desoxycholic Acid, 363
 Detector Tubes, 1535
 Ammonia Detector Tube, 1535
 Carbon Dioxide Detector Tube, 1535
 Carbon Monoxide Detector Tube, 1535
 Chlorine Detector Tube, 1535
 Hydrogen Sulfide Detector Tube, 1535
 Nitric Oxide-Nitrogen Dioxide Detector Tube, 1535

Sulfur Dioxide Detector Tube, 1535
 Water Vapor Detector Tube, 1535
 Devalized Wheat Gluten, 1246
Dexpantenol, 364
Dextrin, 365
 Dextro Calcium Pantothenate, 214
 Dextronic acid, 523
Dextrose, 367
DHA from Algal (Cryptocodinium) Oil, 367
DHA from Algal (Schizochytrium) Oil, 371
DHA from Algal (Ulkenia) Oil, 374
Diacetyl, 376
Diacetyl Tartaric Acid Esters of Mono- and Diglycerides, 377
Diacylglycerol Oil, 378
 Diallyl disulfide, 41
 Diallyl sulfide, 49
 2,6-Diaminohexanoic Acid
 Hydrochloride, 720
 Diammonium Hydrogen Citrate, 60
 Diammonium Hydrogen Phosphate, 62
 Diammonium Peroxydisulfate, 61
 Diammonium Phosphate, 62
 Diaquo bis(glycinato) iron (II), 488
 Diastase Activity, 1372
Diatomaceous Earth, 380
 Diatomaceous Silica, 380
 Diatomite, 380
Dibenzyl Ether, 381
 2,6-Di-*tert*-butyl-*p*-cresol, 144
 Dicalcium Phosphate, 218
 Dicarboxylic Acid, 394
 1,6-Dichloro-1,6-dideoxy- β -D-fructofuranosyl-4-chloro-4-deoxy- α -D-galactopyranoside, 1149
 1,2-Dichloroethane, 461
 Dichloromethane, 807
 Dichlorophenol-Indophenol TS, 1526
 2,3-Didehydro-L-threo-hexono-1,4-lactone-6-stearate, 92
 Dietary Fiber from Beets, 1159
1,2-Di[(1'-ethoxy)ethoxy]propane, 382
 Diethylene Glycol and Ethylene Glycol in Glycerin, 1443
 Diethylene Imidoxide, 824
 Diethylene Oximide, 824
Diethyl Malonate, 382
Diethyl Sebacate, 383
Diethyl Succinate, 383
 Dihydroanethole, 998
Dihydrocarveol, 384
(+)-Dihydrocarvone, 385
d-Dihydrocarvone, 385
 Dihydrocoumarin, 124
 2,3-Dihydro-3-oxobenziso-sulfonazole Monohydrate, 985
 (3*S*,3'*S*)-3,3'-Dihydroxy- β , β -carotene-4,4'-dione, 99
 3 α ,12 α -Dihydroxycholanolic Acid, 363
 2,7-Dihydroxynaphthalene TS, 1526
 2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-4*H*-chromen-4-one-3-yl 6-

O- α -L-rhamnopyranosyl- β -D-glucoside, 1036
 2-(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4*H*-1-benzopyran-4-one, 1011
 1,2-Dihydroxypropane, 1003
 1,3-Dihydroxypropane, 994
 4,4'-Diketo- β -carotene, 233
Dilauryl Thiodipropionate, 385
 Dill Herb Oil, American Type, 388
 Dill Oil, 388
 Dill Oil, Indian Type, 387
Dill Seed Oil, European Type, 386
 Dill Seed Oil, Indian, 387
Dill Seed Oil, Indian Type, 387
Dillseed Oleoresin, 1133
Dillweed Oil, American Type, 388
 Dimagnesium Phosphate, 729
 2,3-Dimercaptobutane, 172
 1,2-Dimethoxy-4-allylbenzene, 790
 3,4-Dimethoxybenzaldehyde, 1239
 1,1-Dimethoxy-2-benzylideneheptane, 72
 (2-(Dimethoxymethyl)-1-heptenyl)benzene, 72
2,6-Dimethoxy Phenol, 389
 2,5-Dimethyl-3-acetylfuran, 16
 6,6-Dimethyl-2-methylenebicyclo [3.1.1]heptane, 933
 3,7-Dimethyl-1,6-octadien-3-ol, 699
cis-3,7-Dimethyl-2,6-octadien-1-ol, 834
E-3,7-Dimethyl-2,6-octadien-1-ol, 512
trans-3,7-Dimethyl-2,6-octadien-1-ol, 512
 3,7-Dimethyl-2,6-octadien-1-yl Acetate, 514, 701
cis-3,7-Dimethyl-2,6-octadien-1-yl Acetate, 836
 3,7-Dimethyl-2,6-octadien-1-yl Benzoate, 515, 702
 3,7-Dimethyl-2,6-octadien-1-yl Butyrate, 516
 3,7-Dimethyl-1,6-octadien-3-yl Formate, 517, 703
 3,7-Dimethyl-6-octadien-3-yl Isobutyrate, 704
 3,7-Dimethyl-2,6-octadien-1-yl Phenylacetate, 519
 3,7-Dimethyl-2,6-octadien-1-yl Propionate, 520
 3,7-Dimethyl-6-octadien-3-yl Propionate, 705
 3,7-Dimethyl-3-octanol, 1189
 3,7-Dimethyl-6-octen-1-ol, 307
 3,7-Dimethyl-6-octen-1-ol, 308
 3,7-Dimethyl-6-octen-1-yl Acetate, 309
 3,7-Dimethyl-6-octen-1-yl Butyrate, 309
 3,7-Dimethyl-6-octen-1-yl Formate, 310
 3,7-Dimethyl-6-octen-1-yl Isobutyrate, 311
 3,7-Dimethyl-6-octen-1-yl Propionate, 312
Dimethyl Anthranilate, 390
Dimethyl Benzyl Carbinol, 390

Dimethyl Benzyl Carbinyl Acetate, 391**Dimethyl Benzyl Carbinyl Butyrate**, 392N-[N-(3,3-Dimethylbutyl)-L- α -aspartyl]-L-phenylalanine 1-Methyl Ester, 832**3,4-Dimethyl 1,2-****Cyclopentandione**, 393**Dimethyl Dicarboxate**, 394

Dimethyldiketone, 376

Dimethyl Ester, 394

Dimethylglyoxal, 376

2,6-Dimethyl-5-heptenal, 395

Dimethylketol, 13

Dimethyl Ketone, 13

Dimethyl Octanol, 396

3,7-Dimethyl-1-octanol, 396 α,α -Dimethylphenethyl Acetate, 391 α,α -Dimethylphenethyl Alcohol, 390 α,α -Dimethylphenethyl Butyrate, 392**Dimethylpolysiloxane**, 398

Dimethylpolysiloxane Viscosity, 1296

2,3-Dimethylpyrazine, 399**2,5-Dimethylpyrazine**, 399**2,6-Dimethylpyrazine**, 400

Dimethyl Pyrocarbonate, 394

2,5-Dimethylpyrrole, 401

Dimethyl Silicone, 398

Dimethyl Succinate, 397**Dimethyl Sulfide**, 397**Dioctyl Sodium Sulfosuccinate**, 402

Diodium 2-(1,3-dioxo-2-indanyl)-6,8-quinolinesulfates, 1014

1,4-Dioxane Limit Test, 1327

Diphenyl, 151

Diphenylamine TS, 1526

Diphenylcarbazone TS, 1526

Diphenyl Ether, 404

Diphenyl Ketone, 126

Di(phenylmethyl)disulfide, 132

Diphenyl Oxide, 404

Dipotassium Monophosphate, 981

Dipotassium Phosphate, 981

 α,α -Dipyridyl TS, 1526

Direct Aqueous Acid Base Titrations (Flavor Chemicals Other Than Essential Oils), 1436

Direct Aqueous Alcoholic Acid Base Titrations (Flavor Chemicals Other Than Essential Oils), 1436

Direct Titration (for Water), 1299

Disodium

(Ethylenedinitrilo)tetraacetate, 405

Disodium 5'-Guanylate, 406

Disodium 5'-Inosinate, 407

Disodium 5'-Uridylate, 408

Disodium Dihydrogen Diphosphate, 1062

Disodium Dihydrogen Pyrophosphate, 1062

Disodium 4,4'-(2,4-dihydroxy-5-hydroxymethyl-1,3-phenylene-bisazo) di-1-naphthalene-sulfonate, 163

Disodium DL-Malate, 1095

Disodium Edetate, 405

Disodium EDTA, 405

Disodium EDTA, 0.05 M, 1530

Disodium Ethylenediaminetetraacetate, 405

Disodium Guanosine-5'-monophosphate, 406

Disodium Guanylate, 406**Disodium Inosinate**, 407

Disodium Inosine-5'-monophosphate, 407

DL-Disodium Malate, 1095

Disodium Monohydrogen Phosphate, 1103

Disodium Phosphate, 1103

Disodium Pyrophosphate, 1062

Disodium 2-(2-quinolyl)-indan-1,3-dionedisulfonates, 1014

Disodium selenate, 1112

Disodium Tartrate, 1117

Disodium L-Tartrate, 1117

Disodium uridine 5'-monophosphate, 408

Distillation Range, 1290

3,3'-Dithiobis(2-aminopropanoic acid), 349

Dithizone, 1534

Dithizone Method (for Lead), 1331

Dithizone TS, 1526

DMDC, 394

Docosate Sodium, 402

 δ -Dodecalactone, 410 **γ -Dodecalactone**, 411

Dodecanal, 682

Dodecanoic Acid, 681

Dodecanoic Acid, Butyl Ester, 181

1-Dodecanol, 681

(E)-2-Dodecen-1-al, 412*trans*-2-Dodecen-1-al, 412

Dorinone, 354

Dried Glucose Syrup, 531

Dried Yeast, 1258

DSS, 402

E**E. Coli**, 1459

Edible Gelatin, 509

Electrolytic Iron, 612

Elemental Impurities by ICP, 1350

Emulsifier YN, 63

Enanthic Alcohol, 566

Enocianina, 550

Enterobacteria Enrichment Broth Mossel, 1440

Enterobacter Sakazakii (*Cronobacter* spp.), 1442**Enterococci**, 1461

Enzyme-Hydrolyzed (Source) Protein, 887

Enzyme-Modified Fats, 417

Enzyme-Modified (Source) Protein, 887

Enzyme Assays, 1364

Acid Phosphatase Activity, 1367

Aminopeptidase Activity, 1368

 α -Amylase Activity (Bacterial), 1370 α -Amylase Activity (Nonbacterial), 1368

Amyloglucosidase Activity, 1374

Catalase Activity, 1370

Cellulase Activity, 1371

Chymotrypsin Activity, 1372

Diastase Activity, 1372

 α -Galactosidase Activity, 1373 β -Glucanase Activity, 1374

Glucoamylase Activity, 1374

Glucose Isomerase Activity, 1375

Glucose Oxidase Activity, 1376

Hemicellulase Activity, 1377

Invertase Sumner Unit Activity, 1378

Lactase (Acid) Activity, 1380

Lactase (Neutral) Activity, 1379

Lipase (Microbial) Activity for Medium- and Long-Chain Fatty Acids, 1382

Lipase Activity, 1381

Lysozyme Activity, 1383

Maltogenic Amylase Activity, 1383

Milk-Clotting Activity, 1384

Pancreatin Activity, 1384

Pepsin Activity, 1386

Phospholipase A₂ Activity, 1387

Phytase Activity, 1387

Plant Proteolytic Activity, 1389

Proteolytic Activity, Bacterial (PC), 1390

Proteolytic Activity, Fungal (HUT), 1390

Proteolytic Activity, Fungal (SAP), 1391

Pullulanase Activity, 1392

Transglutaminase Activity, 1393

Trypsin Activity, 1394

Enzyme Preparations, 413

Enzyme Preparations Used in Food Processing, 1364

Eosin Y TS, 1526

1,8 Epoxy-*p*-menthane, 462

Epoxyp propane, 1005

Epsom Salt, 733

Equisetic Acid, 24

Ergocalciferol, 1242

Eriochrome Black T, 1534

Eriochrome Black TS, 1526

Erythorbic Acid, 418**Erythritol**, 418*meso*-Erythritol, 418**Erythrosine**, 419, 470

Essential Oils and Flavors, Tests and Assays, 1395

Acetals, 1395

Acid Value, 1395

Aldehydes, 1395

Aldehydes and Ketones, 1395

Chlorinated Compounds, 1396

Esters, 1396

Linalool Determination, 1396

Percentage of Cineole, 1397

Phenols, 1397

Phenols, Free, 1397

Residue on Evaporation, 1397

Solubility in Alcohol, 1398

Total Alcohols, 1398

Ultraviolet Absorbance of Citrus Oils, 1398
 Volatile Oil Content, 1398
 Ester Determination (Essential Oils and Flavors), 1396
 Ester Gum, 536, 541
 Esters (Essential Oils and Flavors), 1396
 Ester Value (Essential Oils and Flavors), 1396
Estragole, 421
 Estragon Oil, 1174
 Ethanal, 10
 Ethanol, 426
 Ethanol (Reagent), 5
 Ether Extracts (Color Additive Assays), 1343
Ethone, 421
p-Ethoxychrysoidin TS, 1526
p-Ethoxychrysoidin
 Monohydrochloride, 1534
 6-Ethoxy-1,2-dihydro-2,2,4-trimethylquinoline, 423
 3-Ethoxy-4-hydroxybenzaldehyde, 458
 1-Ethoxy-2-hydroxy-4-propenylbenzene, 995
Ethoxylated Mono- and Diglycerides, 422
Ethoxyquin, 423
Ethyl Acetate, 424
Ethyl Acetoacetate, 424
Ethyl Acrylate, 425
Ethyl Alcohol, 426
 Ethyl Alcohol (Reagent), 5
 Ethyl *o*-Aminobenzoate, 428
Ethyl *p*-Anisate, 427
Ethyl Anthranilate, 428
Ethyl Benzoate, 429
Ethyl Benzoyl Acetate, 430
Ethyl-(E)-2-Butenoate, 458
 Ethyl-*trans*-2-butenate, 458
 Ethyl Butyl Ketone, 564
2-Ethylbutyraldehyde, 459
Ethyl Butyrate, 430
2-Ethylbutyric Acid, 459
 Ethyl Caprate, 433
 Ethyl Caproate, 437
 Ethyl Capronate, 437
 Ethyl Caprylate, 451
Ethyl Cellulose, 431
Ethyl Cinnamate, 432
 Ethyl Citrate, 1217
 Ethyl Crotonate, 458
Ethyl Decanoate, 433
2-Ethyl-3,5(6)-dimethylpyrazine, 433
 Ethyl Dodecanoate, 442
Ethylene Brassylate, 460
trans-1,2-Ethylenedicarboxylic Acid, 501
Ethylene Dichloride, 461
 Ethylene Trichloride, 1217
 Ethyl ester of *p*-hydroxybenzoic acid, 461
2-Ethyl Fenchol, 434
Ethyl Formate, 435
 5-N-Ethyl-L-glutamine, 1191

4-Ethyl Gualacol, 435
Ethyl Heptanoate, 436
 Ethyl Heptoate, 436
Ethyl Hexanoate, 437
2-Ethyl Hexanol, 438
 2-Ethyl-1-hexanol, 438
 Ethyl *p*-Hydroxybenzoate, 461
5-Ethyl 3-Hydroxy 4-Methyl 2(5H)-Furanone, 438
 Ethyl 2-Hydroxypropionate, 441
 2-Ethyl-3-hydroxy-4-pyrone, 445
Ethyl Isobutyrate, 439
Ethyl Isovalerate, 440
Ethyl Lactate, 441
Ethyl Laurate, 442
Ethyl Lauroyl Arginate, 442
Ethyl Levulinate, 444
 Ethyl Malonate, 382
Ethyl Maltol, 445
 Ethyl *p*-Methoxybenzoate, 427
 Ethyl 3-Methylbutyrate, 440
Ethyl 2-Methylbutyrate, 445
Ethyl 2-Methylpentanoate, 445
Ethyl Methylphenylglycidate, 446
2-Ethyl-3-Methylpyrazine, 447
Ethyl 3-Methylthiopropionate, 448
Ethyl Myristate, 449
 Ethyl-*N*^ω-Dodecanoyl-L-Arginate • HCl, 442
 Ethyl-*N*^ω-Lauroyl-L-Arginate • HCl, 442
Ethyl Nonanoate, 450
 Ethyl 9-Octadecenoate, 452
Ethyl Octanoate, 451
 Ethyl Octoate, 451
Ethyl Oleate, 452
 Ethyl *p*-Oxybenzoate, 461
 Ethyl 3-Oxybutanoate, 424
Ethyl Oxyhydrate (So-Called), 452
Ethylparaben, 461
 Ethyl Pelargonate, 450
 Ethyl *n*-Pentanoate, 457
Ethyl Phenylacetate, 452
Ethyl Phenylglycidate, 453
 Ethyl 3-Phenylpropionate, 432
Ethyl Propionate, 454
3-Ethyl Pyridine, 455
Ethyl Salicylate, 456
 Ethyl Sebacate, 383
 Ethyl Succinate, 383
Ethyl 10-Undecenoate, 457
Ethyl Valerate, 457
Ethyl Vanillin, 458
Eucalyptol, 462
Eucalyptus Oil, 463
 Eugenol, 464
Eugenol, 464
 Eugenol Acetate, 464
Eugenyl Acetate, 464
 Eugenyl Methyl Ether, 790
Euphasia superba Oil, 653
 Exaltolide, 896
 Expanded Perlite, 901

F

Farnesol, 466

Fast Green, 467
 Fast Green FCF, 467, 469
 Fats and Related Substances, 1400
 Acetyl Value, 1400
 Acid Value, 1400
 Anisidine Value, 1400
 Chlorophyll, 1401
 Cold Test, 1401
 Color (AOCS-Wesson), 1401
 Fatty Acid Composition, 1402
 Fatty Acid Composition (Saturated, *cis*-Monosaturated, and *cis*-Polyunsaturated) in Oils Containing Long Chain Polyunsaturated Fatty Acids, 1402
 Free Fatty Acids, 1405
 Free Glycerin or Propylene Glycol, 1405
 Hexane-Insoluble Matter, 1406
 Hydroxyl Value, 1406
 Iodine Value, 1406
 Lovibond Color, 1401
 Melting Range, 1407
 1-Monoglycerides, 1407
 Oxyethylene Determination, 1408
 Peroxide Value, 1409
 Reichert-Meissl Value, 1410
 Saponification Value, 1410
 Soap, 1411
 Specific Gravity, 1411
 Stability, 1411
 Tocopherols, 1412
 Total Monoglycerides, 1407
 Unsaponifiable Matter, 1413
 Volatile Acidity, 1414
 Fatty Acid Composition, 1402
 Fatty Acid Composition (Saturated, *cis*-Monosaturated, and *cis*-Polyunsaturated) in Oils Containing Long Chain Polyunsaturated Fatty Acids, 1402
 Fatty Acids, Free, 1405
 FCC in the U.S. Code of Federal Regulations, 1647
 FCC Specifications, 2
FD&C Blue No. 1, 468
FD&C Blue No. 2, 469
FD&C Green No. 3, 469
FD&C Red No. 3, 470
FD&C Red No. 40, 471
FD&C Yellow No. 5, 471
FD&C Yellow No. 6, 472
 Federal Regulations
 FCC in the U.S. Code of, 1647
 Fehling's Solution, 1526
 FEMA number, 2
 (+)-**Fenchone**, 473
d-Fenchone, 473
Fenchyl Alcohol, 474
Fennel Oil, 475
Fennel Oleoresin, 1133
Ferric Ammonium Citrate, Brown, 476
Ferric Ammonium Citrate, Green, 477
 Ferric Ammonium Sulfate TS, 1526
 Ferric Chloride TS, 1526

Ferric Chloride TS, Alcoholic, 1526

Ferric Citrate, 479

Ferric Orthophosphate, 479

Ferric Phosphate, 479

Ferric Pyrophosphate, 481

Ferric Sulfate TS, Acid, 1526

Ferrioin TS, 1526

Ferrous Ammonium Phosphate, 483

Ferrous Ammonium Sulfate, 0.1 N, 1530

Ferrous Bisglycinate, 488

Ferrous Citrate, 484

Ferrous Fumarate, 485

Ferrous Gluconate, 486

Ferrous Glycinate, 488

Ferrous Lactate, 489

Ferrous Sulfate, 490

Ferrous Sulfate, Dried, 491

Ferrous Sulfate TS, 1526

FHMO, 752

Ficin, 413, 1365

"Filtration", Defined, 4

Fir Needle Oil, Canadian Type, 492

Fir Needle Oil, Siberian Type, 492

Fischer-Tropsch Paraffin, 884

Flame Atomic Absorption

Spectrophotometric Method (for Lead), 1332

Flavin Mononucleotide, Sodium Salt, 1028

Flavor Chemicals, Tests and Assays, 1434

Acidity Determination by Iodometric Method (M-5), 1437

Alcohol Content of Ethyl Oxyhydrate (M-4), 1436

Assay by Gas Chromatography (M-1), 1434

Assay by Titrimetric Procedures (M-3), 1436

Aldehydes and Ketones (M-2), 1435

Limit Test for Antioxidants in Ethyl Acrylate (M-6), 1437

Limit Test for Hydrocarbons in Eugenol (M-7), 1438

Limit Test for Hydrocyanic Acid in Benzaldehyde (M-8), 1438

Limit Test for Lead (M-9), 1438

Limit Test for Methyl Compounds in Ethyl Acetate (M-10), 1438

Limit Test for Peroxide Value (M-11), 1438

Limit Test for Readily Carbonizable Substances in Ethyl Acetate (M-12), 1438

Limit Test for Readily Oxidizable Substances in *dl*-Menthol (M-13), 1438

Limit Test for Reducing Substances (M-14), 1438

Acid Value (M-15), 1438

Residue on Evaporation (M-16), 1438

Qualitative Test for Phenols Using Ferric Chloride (M-17), 1439

Flavoring Agents

Acetaldehyde, 10

Acetaldehyde Diethyl Acetal, 10

Acetanisoole, 11

Acetoin Dimer, 12

Acetoin Monomer, 13

Acetophenone, 15

3-Acetyl-2,5-dimethyl Furan, 16

2-Acetylpyrazine, 19

3-Acetylpyridine, 21

2-Acetylpyrrole, 21

2-Acetyl Thiazole, 18

Allyl Cyclohexanepropionate, 40

Allyl Heptanoate, 42

Allyl Hexanoate, 43

Allyl α -Ionone, 44

Allyl Isothiocyanate, 44

Allyl Isovalerate, 45

Allyl Phenoxy Acetate, 47

Allyl Propionate, 48

Almond Oil, Bitter, FFPA, 49

Ambrette Seed Oil, 56

Ammoniated Glycyrrhizin, 57

1-Amyl Alcohol, 68

Amyl Butyrate, 68

α -Amylcinnamaldehyde, 71

Amyl Formate, 68

Amyl Heptanoate, 69

Amyl Octanoate, 69

Amyl Propionate, 70

Amyris Oil, West Indian Type, 74

Anethole, 75

Angelica Root Oil, 75

Angelica Seed Oil, 76

Anise Oil, 77

Anisole, 78

Anisyl Acetate, 79

Anisyl Alcohol, 80

Anisyl Formate, 81

Balsam Peru Oil, 115

Basil Oil, Comoros Type, 116

Basil Oil, European Type, 117

Bay Oil, 118

Benzaldehyde, 122

Benzaldehyde Glyceryl Acetal, 122

1,2-Benzodihydropyrene, 124

Benzophenone, 126

Benzyl Acetate, 127

Benzyl Alcohol, 129

Benzyl Benzoate, 129

Benzyl Butyrate, 130

Benzyl Cinnamate, 131

Benzyl Formate, 132

Benzyl Isobutyrate, 133

Benzyl Isovalerate, 134

Benzyl Phenylacetate, 136

Benzyl Propionate, 137

Benzyl Salicylate, 137

Bergamot Oil, Coldpressed, 138

Birch Tar Oil, Rectified, 152

Black Pepper Oil, 153

Bois de Rose Oil, 155

Borneol, 156

Bornyl Acetate, 157

2-Butanone, 172

Butan-3-one-2-yl Butanoate, 173

Butyl Acetate, 174

Butyl Alcohol, 174

Butyl Butyrate, 175

Butyl Butyryllactate, 176

2-sec-Butyl Cyclohexanone, 177

Butyl Isobutyrate, 179

Butyl Isovalerate, 180

Butyl 2-Methyl Butyrate, 182

Butyl Phenylacetate, 183

Butyl Stearate, 184

Butyraldehyde, 186

Butyric Acid, 187

γ -Butyrolactone, 188

Caffeine, 190

Camphene, 229

(+)-Camphor, 229

Cananga Oil, 229

Caraway Oil, 239

Cardamom Oil, 245

Carrot Seed Oil, 263

Carvacrol, 264

(-)-Carveol, 265

(+)-Carvone, 266

(-)-Carvone, 267

(-)-Carvyl Acetate, 268

β -Caryophyllene, 269

Cascarilla Oil, 270

Cassia Oil, 272

Cedar Leaf Oil, 274

Celery Seed Oil, 274

Chamomile Oil, English Type, 281

Chamomile Oil, German Type, 282

Cinnamaldehyde, 292

Cinnamic Acid, 293

Cinnamon Bark Oil, Ceylon Type, 293

Cinnamon Leaf Oil, 294

Cinnamyl Acetate, 295

Cinnamyl Alcohol, 296

Cinnamyl Butyrate, 297

Cinnamyl Cinnamate, 298

Cinnamyl Formate, 299

Cinnamyl Isobutyrate, 300

Cinnamyl Isovalerate, 301

Cinnamyl Propionate, 302

Citral, 303

Citronellal, 307

Citronellol, 308

Citronellyl Acetate, 309

Citronellyl Butyrate, 309

Citronellyl Formate, 310

Citronellyl Isobutyrate, 311

Citronellyl Propionate, 312

Clary Oil, 313

Clove Leaf Oil, 314

Clove Oil, 315

Clove Stem Oil, 316

Cognac Oil, Green, 319

Copaiba Oil, 320

Coriander Oil, 325

Costus Root Oil, 327

p-Cresyl Acetate, 329

Cubeb Oil, 331

Cuminic Aldehyde, 333

Cumin Oil, 332

Cyclamen Aldehyde, 335

Cyclohexyl Acetate, 347

p-Cymene, 347

(*E*),(*E*)-2,4-Decadienal, 355

- δ -Decalactone, 356
- γ -Decalactone, 357
- Decanal, 358
- (*E*)-2-Decenal, 359
- (*Z*)-4-Decenal, 360
- Decyl Alcohol, 362
- Diacetyl, 376
- Dibenzyl Ether, 381
- Diethyl Malonate, 382
- Diethyl Sebacate, 383
- Diethyl Succinate, 383
- Dihydrocarveol, 384
- (+)-Dihydrocarvone, 385
- Dill Seed Oil, European Type, 386
- Dill Seed Oil, Indian Type, 387
- Dillweed Oil, American Type, 388
- 2,6-Dimethoxy Phenol, 389
- 3,7-Dimethyl-1-octanol, 396
- 2,6-Dimethyl-5-heptenal, 395
- 3,4-Dimethyl 1,2-Cyclopentandione, 393
- Dimethyl Anthranilate, 390
- Dimethyl Benzyl Carbinol, 390
- Dimethyl Benzyl Carbonyl Acetate, 391
- Dimethyl Benzyl Carbonyl Butyrate, 392
- 2-Ethyl-3,5(6)-dimethylpyrazine, 433
- 2,3-Dimethylpyrazine, 399
- 2,5-Dimethylpyrazine, 399
- 2,6-Dimethylpyrazine, 400
- 2,5-Dimethylpyrrole, 401
- Dimethyl Succinate, 397
- Dimethyl Sulfide, 397
- Diphenyl Ether, 404
- 1,2-Di[(1'-ethoxy)ethoxy]propane, 124
- δ -Dodecalactone, 410
- γ -Dodecalactone, 411
- (*E*)-2-Dodecen-1-al, 412
- Enzyme-Modified Fats, 417
- Estragole, 421
- Ethone, 421
- Ethyl Acetate, 424
- Ethyl Acrylate, 425
- Ethyl *p*-Anisate, 427
- Ethyl Anthranilate, 428
- Ethyl Benzoate, 429
- Ethyl Benzoyl Acetate, 430
- Ethyl-(*E*)-2-butenolate, 458
- 2-Ethylbutyraldehyde, 459
- Ethyl Butyrate, 430
- 2-Ethylbutyric Acid, 459
- Ethyl Cinnamate, 432
- Ethyl Decanoate, 433
- 2-Ethyl Fenchol, 434
- Ethyl Formate, 435
- 4-Ethyl Guaiacol, 435
- Ethyl Heptanoate, 436
- Ethyl Hexanoate, 437
- 2-Ethyl Hexanol, 438
- 5-Ethyl 3-Hydroxy 4-Methyl 2(5*H*)-Furanone, 438
- Ethyl Isobutyrate, 439
- Ethyl Isovalerate, 440
- Ethyl Lactate, 441
- Ethyl Laurate, 442
- Ethyl Levulinate, 444
- Ethyl 2-Methylbutyrate, 445
- Ethyl 2-Methylpentanoate, 445
- Ethyl Methylphenylglycidate, 446
- 2-Ethyl-3-methylpyrazine, 447
- Ethyl 3-Methylthiopropionate, 448
- Ethyl Myristate, 449
- Ethyl Nonanoate, 450
- Ethyl Octanoate, 451
- Ethyl Oleate, 452
- Ethyl Oxyhydrate (so-called), 452
- Ethyl Phenylacetate, 452
- Ethyl Phenylglycidate, 453
- Ethyl Propionate, 454
- 3-Ethyl Pyridine, 455
- Ethyl Salicylate, 456
- Ethyl 10-Undecenoate, 457
- Ethyl Valerate, 457
- Ethyl Vanillin, 458
- Ethylene Brassylate, 460
- Eucalyptol, 462
- Eucalyptus Oil, 463
- Eugenol, 464
- Eugenyl Acetate, 464
- Farnesol, 466
- (+)-Fenchone, 473
- Fenchyl Alcohol, 474
- Fennel Oil, 475
- Fir Needle Oil, Canadian Type, 492
- Fir Needle Oil, Siberian Type, 492
- Furfural, 503
- Furfuryl Alcohol, 505
- Furfuryl Mercaptan, 506
- 2-Furyl Methyl Ketone, 506
- Fusel Oil, Refined, 507
- Garlic Oil, 509
- Geraniol, 512
- Geranium Oil, Algerian Type, 513
- Geranyl Acetate, 514
- Geranyl Benzoate, 515
- Geranyl Butyrate, 516
- Geranyl Formate, 517
- Geranyl Isovalerate, 518
- Geranyl Phenylacetate, 519
- Geranyl Propionate, 520
- Ginger Oil, 522
- Glyceryl Tripropanoate, 546
- Grapefruit Oil, Coldpressed, 551
- (*E*),(*E*)-2,4-Heptadienal, 559
- γ -Heptalactone, 560
- Heptanal, 561
- 2,3-Heptanedione, 562
- 2-Heptanone, 563
- 3-Heptanone, 564
- (*Z*)-4-Hepten-1-al, 565
- Heptyl Alcohol, 566
- γ -Hexalactone, 570
- Hexanal, 571
- Hexanoic Acid, 572
- (*E*)-2-Hexen-1-al, 573
- (*E*)-2-Hexen-1-ol, 573
- (*Z*)-3-Hexenol, 574
- (*E*)-2-Hexenyl Acetate, 574
- (*Z*)-3-Hexenyl Acetate, 575
- (*Z*)-3-Hexenyl Butyrate, 576
- (*Z*)-3-Hexenyl Formate, 577
- (*Z*)-3-Hexenyl Isovalerate, 578
- (*Z*)-3-Hexenyl 2-Methylbutyrate, 578
- Hexyl Acetate, 579
- Hexyl Alcohol, 579
- Hexyl-2-butenolate, 580
- Hexyl Butyrate, 581
- Hexyl Hexanoate, 582
- Hexyl Isovalerate, 583
- Hexyl 2-Methylbutyrate, 583
- α -Hexylcinnamaldehyde, 584
- Hops Oil, 590
- Hydroxycitronellal, 596
- Hydroxycitronellal Dimethyl Acetal, 597
- 4-Hydroxy-2,5-dimethyl-3(2*H*)-furanone, 598
- 6-Hydroxy-3,7-dimethyloctanoic Acid Lactone, 599
- 4-(*p*-Hydroxyphenyl)-2-butanone, 600
- Indole, 605
- α -Ionone, 608
- β -Ionone, 609
- Isoamyl Acetate, 615
- Isoamyl Alcohol, 616
- Isoamyl Benzoate, 616
- Isoamyl Butyrate, 617
- Isoamyl Cinnamate, 618
- Isoamyl Formate, 619
- Isoamyl Hexanoate, 620
- Isoamyl Isobutyrate, 621
- Isoamyl Isovalerate, 622
- Isoamyl Phenyl Acetate, 622
- Isoamyl Salicylate, 623
- Isoborneol, 624
- Isobornyl Acetate, 625
- Isobutyl Acetate, 627
- Isobutyl Alcohol, 628
- Isobutyl-2-butenolate, 634
- Isobutyl Butyrate, 628
- Isobutyl Cinnamate, 629
- Isobutyl Formate, 630
- Isobutyl Hexanoate, 631
- Isobutyl Phenylacetate, 632
- Isobutyl Salicylate, 633
- Isobutyraldehyde, 637
- Isobutyric Acid, 637
- Isoeugenol, 638
- Isoeugenyl Acetate, 639
- Isopropyl Acetate, 645
- Isopulegol, 646
- Isovaleric Acid, 647
- Juniper Berries Oil, 649
- Labdanum Oil, 659
- Laurel Leaf Oil, 680
- Lauryl Alcohol, 681
- Lauryl Aldehyde, 682
- Lavandin Oil, Abrial Type, 683
- Lavender Oil, 684
- Lemongrass Oil, 690
- Lemon Oil, Coldpressed, 687
- Lemon Oil, Desert Type, Coldpressed, 688
- Lemon Oil, Distilled, 689
- Levulinic Acid, 693
- Lime Oil, Coldpressed, 694
- Lime Oil, Distilled, 695
- (+)-Limonene, 697

- (-)-Limonene, 698
- Linaloe Wood Oil, 698
- Linalool, 699
- Linalool Oxide, 700
- Linalyl Acetate, 701
- Linalyl Benzoate, 702
- Linalyl Formate, 703
- Linalyl Isobutyrate, 704
- Linalyl Propionate, 705
- Lovage Oil, 711
- Mace Oil, 721
- Maltol, 740
- Maltol Isobutyrate, 741
- Mandarin Oil, Coldpressed, 742
- Marjoram Oil, Spanish Type, 749
- Marjoram Oil, Sweet, 750
- Mentha Arvensis Oil, Partially Dementholized, 760
- Menthol, 761
- (-)-Menthone, 762
- (-)-Menthyl Acetate, 763
- l*-Menthyl Acetate, 763
- Menthyl Acetate, Racemic, 762
- 2-Mercaptopropionic Acid, 763
- 2-Methoxy-3(5)-methylpyrazine, 766
- 2-Methoxy 3-(or 5- or 6-) Isopropyl Pyrazine, 766
- p*-Methoxybenzaldehyde, 767
- 4-*p*-Methoxyphenyl-2-butanone, 813
- 2-Methoxypyrazine, 768
- Methyl Acetate, 783
- 4-Methyl Acetophenone, 774
- p*-Methyl Anisole, 771
- Methyl Anthranilate, 785
- Methyl Benzoate, 785
- Methylbenzyl Acetate, 801
- α -Methylbenzyl Alcohol, 802
- 2-Methyl Butanal, 772
- 3-Methyl Butanal, 773
- 2-Methylbutyl Acetate, 804
- 2-Methylbutyl Isovalerate, 804
- Methyl Butyrate, 786
- 2-Methylbutyric Acid, 803
- α -Methylcinnamaldehyde, 806
- Methyl Cinnamate, 786
- 6-Methylcoumarin, 769
- Methyl Cyclopentenolone, 787
- 5*H*-5-Methyl-6,7-dihydrocyclopenta [6]pyrazine, 776
- Methyl Eugenol, 790
- 5-Methyl Furfural, 777
- Methyl Furoate, 791
- 6-Methyl-5-hepten-2-one, 778
- Methyl Hexanoate, 791
- Methyl Hexyl Ketone, 792
- Methyl Ionones, 793
- Methyl Isobutyrate, 793
- Methyl Isoeugenol, 794
- 5-Methyl-2-isopropyl-2-hexenal, 778
- Methyl Isovalerate, 795
- Methyl 2-Methylbutyrate, 780
- Methyl-3-methylthiopropionate, 800
- Methyl β -Naphthyl Ketone, 779
- Methyl 2-Octynoate, 782
- 2-Methylpentanoic Acid, 809
- 4-Methylpentanoic Acid, 770
- 4-Methyl-2-pentanone, 775
- 2-Methyl-2-pentenoic Acid, 773
- Methyl Phenylacetate, 796
- Methyl Phenylcarbonyl Acetate, 797
- 5-Methyl 2-Phenyl 2-Hexenal, 776
- 2-Methyl Propyl 3-Methyl Butyrate, 772
- 2-Methylpyrazine, 810
- Methyl Salicylate, 798
- 4-Methyl-5-thiazole Ethanol, 775
- Methyl Thiobutyrate, 798
- 3-Methylthiopropionaldehyde, 811
- 2-Methylundecanal, 812
- Methyl Valerate, 799
- Monoammonium Glycyrrhizinate, 820
- Mustard Oil, 825
- Myrcene, 826
- Myristaldehyde, 826
- Myristyl Alcohol, 827
- Myrrh Oil, 827
- β -Naphthyl Ethyl Ether, 829
- Nerol, 834
- Nerolidol, 835
- Neryl Acetate, 836
- (*E*),(*E*)-2,4-Nonadienal, 844
- (*E*),(*Z*)-2,6-Nonadienal, 845
- (*E*),(*Z*)-2,6-Nonadienol, 846
- δ -Nonalactone, 846
- γ -Nonalactone, 847
- Nonanal, 848
- Nonanoic Acid, 850
- 2-Nonanone, 849
- (*E*)-2-Nonen-1-ol, 850
- (*Z*)-6-Nonen-1-ol, 851
- (*E*)-2-Nonenal, 852
- Nonyl Acetate, 853
- Nonyl Alcohol, 854
- Nutmeg Oil, 854
- δ -Octalactone, 856
- γ -Octalactone, 856
- Octanal, 857
- 3-Octanol, 858
- (*E*)-2-Octen-1-ol, 858
- (*Z*)-3-Octen-1-ol, 859
- 1-Octen-3-ol, 860
- 1-Octen-3-yl Acetate, 861
- 1-Octen-3-yl Butyrate, 862
- Octyl Acetate, 862
- 3-Octyl Acetate, 862
- Octyl Alcohol, 863
- Octyl Formate, 864
- Octyl Isobutyrate, 866
- Olibanum Oil, 872
- Onion Oil, 873
- Orange Oil, Bitter, Coldpressed, 874
- Orange Oil, Coldpressed, 875
- Orange Oil, Distilled, 876
- Origanum Oil, Spanish Type, 877
- Orris Root Oil, 878
- Palmarosa Oil, 882
- Parsley Herb Oil, 885
- Parsley Seed Oil, 886
- Pennyroyal Oil, 895
- ω -Pentadecalactone, 896
- 2,3-Pentanedione, 899
- 2-Pentanone, 899
- Peppermint Oil, 900
- Petitgrain Oil, Paraguay Type, 902
- α -Phellandrene, 906
- Phenethyl Acetate, 907
- Phenethyl Alcohol, 908
- Phenethyl Isobutyrate, 909
- Phenethyl Isovalerate, 910
- 2-Phenethyl 2-Methylbutyrate, 913
- Phenethyl Phenylacetate, 911
- Phenethyl Salicylate, 912
- Phenoxyethyl Isobutyrate, 913
- 3-Phenyl-1-propanol, 916
- Phenyl Ethyl Cinnamate, 914
- Phenyl Ethyl Propionate, 915
- Phenylacetaldehyde, 917
- Phenylacetaldehyde Dimethyl Acetal, 918
- Phenylacetic Acid, 919
- Phenylethyl Anthranilate, 922
- Phenylethyl Butyrate, 922
- 2-Phenylpropionaldehyde, 924
- 3-Phenylpropionaldehyde, 925
- 2-Phenylpropionaldehyde Dimethyl Acetal, 926
- 3-Phenylpropyl Acetate, 923
- Pimenta Leaf Oil, 931
- Pimenta Oil, 930
- α -Pinene, 933
- β -Pinene, 933
- Pine Needle Oil, Dwarf, 931
- Pine Needle Oil, Scotch Type, 932
- Piperidine, 934
- Piperonal, 935
- Propenylguaethol, 995
- Propionaldehyde, 995
- Propyl Acetate, 997
- Propyl Alcohol, 997
- p*-Propyl Anisole, 998
- Propyl Formate, 999
- Propyl Mercaptan, 1001
- Propyl Propionate, 1002
- Pyrrole, 1010
- Quinine Hydrochloride, 1013
- Quinine Sulfate, 1013
- Rhodinol, 1024
- Rhodinyl Acetate, 1025
- Rhodinyl Formate, 1026
- Rose Oil, 1031
- Rosemary Oil, 1034
- Rue Oil, 1035
- Sage Oil, Dalmatian Type, 1041
- Sage Oil, Spanish Type, 1042
- Salicylaldehyde, 1047
- Sandalwood Oil, East Indian Type, 1048
- Santalol, 1049
- Santalyl Acetate, 1050
- Savory Oil (Summer Variety), 1051
- Spearmint Oil, 1132
- Spice Oleosins, 1133
- Spike Lavender Oil, 1134
- Starter Distillate, 1140
- Tangerine Oil, Coldpressed, 1171
- Tarragon Oil, 1174
- Terpinen-4-ol, 1183
- α -Terpinene, 1183
- γ -Terpinene, 1184

α -Terpineol, 1184
 Terpinyl Acetate, 1185
 Terpinyl Propionate, 1186
 δ -Tetradecalactone, 1187
 Tetrahydrofurfuryl Alcohol, 1188
 Tetrahydrolinalool, 1189
 2,3,5,6-Tetramethylpyrazine, 1189
 Thyme Oil, 1195
 Thymol, 1196
 Tolualdehyde, Mixed Isomers, 1210
p-Tolualdehyde, 1210
p-Tolyl Isobutyrate, 1211
 Tributyrin, 1216
 2-Tridecanone, 1214
 2-Tridecenal, 1214
 Trimethylamine, 1219
 2,4,5-Trimethyl δ -3-Oxazoline, 1218
 3,5,5-Trimethyl Hexanal, 1218
 2,3,5-Trimethylpyrazine, 1219
 δ -Undecalactone, 1225
 γ -Undecalactone, 1225
 Undecanal, 1226
 2-Undecanone, 1228
 1,3,5-Undecatriene, 1227
 10-Undecenal, 1229
 (E)-2-Undecenol, 1230
 Undecyl Alcohol, 1231
 Valeraldehyde, 1233
 Valeric Acid, 1233
 γ -Valerolactone, 1234
 Vanillin, 1235
 Veratraldehyde, 1239
 Wintergreen Oil, 1252
 Zingerone, 1268
 Flowers of sulfur, 1161
 Fluorescence Spectroscopy, 1565
 Fluoride Limit Test, 1328
Folic Acid, 494
 Food-Grade Gelatin, 509
 Food Fraud Mitigation Guidance, 1473
 Food Green S, 552
 Food Starch—Modified, 494
Food Starch, Modified, 494
Food Starch, Unmodified, 497
 Formaldehyde TS, 1526
Formic Acid, 498
 α -Formylanisole, 77
 Free Cresol (Cresyl Acetate in Flavor Chemicals Other than Essential Oils), 1439
 Free Fatty Acids, 1405
 Free Glycerin or Propylene Glycol, 1405
 Free Phenols (Essential Oils and Flavors), 1397
 Freskomenthe, 177
 β -D-Fructofuranosyl- α -D-glucopyranoside, 1153
Fructooligosaccharides, Short Chain, 499
Fructose, 500
 D-Fructose, 500
 Fruit Sugar, 500
 Fuchsin-Sulfurous Acid TS, 1526
 Fully Hydrogenated Rapeseed Oil, 1017
Fumaric Acid, 501

Function, Statement of, 3
 2-Furaldehyde, 503
 2-Furanmethanol acetate, 504
Furcelleran, 502
Furfural, 503
Furfuryl Acetate, 504
Furfuryl Alcohol, 505
 Furfuryl alcohol, acetate, 504
Furfuryl Mercaptan, 506
 2-Furyl carbonyl acetate, 504
2-Furyl Methyl Ketone, 506
Fusel Oil, Refined, 507

G

β -D-Galactopyranosyl-D-glucitol, 665
 4-O- β -Galactopyranosyl-D-glucose, 674
 α -Galactosidase Activity, 1373
 α -Galactosidase, 1373
 Galam, 1057
 Gallic Acid Propyl Ester, 1000
 Gallotannic Acid, 1172
 Gamma-glutamylethylamide, 1191
Garlic Oil, 509
 Gas Chromatography, 1285
 Flavor Chemicals (Other than Essential Oils), 1434
 Gaultheria Oil, 1252
Gelatin, 509
Gellan Gum, 511
 General Guidance for Food
 Ingredients, 1475
 Food Fraud Mitigation Guidance, 1475
 General Information Analytical
 Techniques, 1553
 Atomic Absorption Spectroscopy, 1561
 Capillary Electrophoresis, 1553
 Fluorescence Spectroscopy, 1565
 Ion Chromatography, 1603
 Mass Spectrometry, 1582
 Mid-Infrared Spectroscopy, 1571
 Near-Infrared Spectroscopy, 1606
 Nuclear Magnetic Resonance, 1588
 Radioactivity, 1597
 Raman Spectroscopy, 1613
 Scoville Heat Units, 1620
 Ultraviolet-Visible Spectroscopy, 1575
 General Information Tables, 1644
 Alcoholometric, 1644
 Atomic Weights, 1646
 Relative Atomic Mass and Half-Lives of Selected Radionucleotides, 1646
 General Provisions and Requirements, 1
 General Specifications and Statements, 2
Geraniol, 512
Geranium Oil, Algerian Type, 513
 Geranium Oil, East Indian Type, 882
 Geranium Oil, Turkish Type, 882
Geranyl Acetate, 514
Geranyl Benzoate, 515

Geranyl Butyrate, 516
Geranyl Formate, 517
Geranyl Isovalerate, 518
Geranyl Phenylacetate, 519
Geranyl Propionate, 520
Gibberellic Acid, 521
Ginger Oil, 522
Ginger Oleoresin, 1133
 Glacial Acetic Acid, 12
 GLA Safflower Oil, 588
 Glassy Sodium Polyphosphates, 1106
 Glassy Sodium Potassium Polyphosphates, 1106
 (1-3), (1-6)- β -D-glucan, Poly-(1-6)- β -D-glucopyranosyl-(1,3)- β -D-glucopyranose, 139
 β -Glucanase Activity, 1374
 β -Glucanase, 1374
 D-Glucitol, 1125
 Glucoamylase, 1374
 Glucoamylase Activity, 1374
Gluconic Acid, 523
 D-Gluconic acid, 523
 D-Gluconic Acid, Monopotassium Salt, 974
 Gluconic acid solution, 523
Glucono delta-Lactone, 524
 2-Amino-2-deoxy- β -D-glucopyranose Hydrochloride, 525
 α -D-Glucopyranosyl-1,4-D-glucitol, 738
 α -D-Glucopyranosyl- α -D-glucopyranoside, dihydrate, 1213
Glucosamine Hydrochloride, 525
Glucosamine Sulfate Potassium Chloride, 527
Glucosamine Sulfate Sodium Chloride, 529
 Glucose, 367
 D-Glucose, 2-amino-2-deoxy, Hydrochloride, 525
 D-Glucose, 367
 Glucose Isomerase, 415, 1375
 Glucose Isomerase Activity, 1375
 Glucose Oxidase, 415, 1376
 Glucose Oxidase Activity, 1376
Glucose Syrup, 531
 Glucose Syrup (Corn Syrup), 1428
Glucose Syrup, Dried, 531
 Glucose Syrup Solids, 531
 β -D-Glucosidase, 1365
 (α -D-Glucurono- α -D-manno- β -D-manno- β -D-gluco), (α -L-gulurono- β -34
 Gluside, 1039
 Glutamic Acid, 532, 1352
 L-Glutamic acid- γ -monoethylamide, 1191
L-Glutamic Acid Hydrochloride, 533
L-Glutamic Acid, 532
L-Glutamine, 534
 Glutaral, 534
Glutaraldehyde, 534
 Gluten, Wheat, 1246
Glycerin, 535
 Glycerin or Propylene Glycol, Free, 1405

Glycerol, 535

Glycerol Ester of Gum Rosin, 536

Glycerol Ester of Partially Dimerized Rosin, 537

Glycerol Ester of Partially Hydrogenated Gum Rosin, 538

Glycerol Ester of Partially Hydrogenated Wood Rosin, 539

Glycerol Ester of Polymerized Rosin, 539

Glycerol Ester of Tall Oil Rosin, 540

Glycerol Ester of Wood Rosin, 541

Glycerol Esters of Condensed Castor Oil Fatty Acids, 951

Glyceryl Behenate, 541

Glyceryl-Lacto Esters of Fatty Acids, 547

Glyceryl Monooleate, 543

Glyceryl Monostearate, 544

Glyceryl Palmitostearate, 545

Glyceryl Triacetate, 1215

Glyceryl Tribehenate, 541

Glyceryl Tributyrates, 1216

Glyceryl Tridocosanoate, 541

Glyceryl Tripropanoate, 546

Glyceryl Tristearate, 547

Glycine, 548

Glycine, *N*-(aminoiminomethyl)-*N*-Methyl-, Monohydrate, 328

Glycine betaine, 142

Glycocol, 548

Gold, 548

Good Manufacturing Practices

IFAC Good Manufacturing Practice and QA Audit Guide for Food Additives, 1679

IFAC Good Manufacturing Practice and QA Guide for Food Additives, 1657

Graham's Salt, 1106

Granulated Sugar, 1153

Grapefruit Oil, Coldpressed, 551

Grapefruit Oil, Expressed, 551

Grape Skin Extract, 550

Green S, 552

Powdered Decaffeinated Green Tea Extract, 1180

Ground Limestone, 696

Guaiac Resin, 557

Guar Gum, 555

Guidance On Developing And

Validating Non-Targeted Methods For Adulteration Detection, 1510

Guidance Standard For UHPLC-MS/MS Screening Of Nitrogen Containing Adulterants In Milk Ingredients, 1465

Guidelines for Collaborative Study Procedures To Validate Characteristics of a Method of Analysis, 1541

Gum Arabic, 556

Gum Ghatti, 556

Gum Guaiac, 557

Gum Tragacanth, 1212

Gutta hang katiau, 751

Gutta Katiau, 751

H

Haluronic Acid Na-salt, 1083

Heliotropine, 935

Helium, 559

Hemicellulase, 1377

Hemicellulase Activity, 1377

(E),(E)-2,4-Heptadienal, 559

trans,trans-2,4-Heptadienal, 559

γ -**Heptalactone**, 560

Heptaldehyde, 561

Heptanal, 561

2,3-Heptanedione, 562

Heptanoic acid, 2-methylpropyl ester, 631

Heptanoic Acid, Butyl Ester, 178

Heptanoic acid, isobutyl ester, 631

2-Heptanone, 563

3-Heptanone, 564

cis-4-Hepten-1-ol, 565

(Z)-4-Hepten-1-ol, 565

Heptyl Alcohol, 566

n-Heptyl-*p*-hydroxybenzoate, 567

Heptylparaben, 567

Hesperidin, 568

Hexadecanoic Acid, 883

1-Hexadecanol, 569

Hexadecan-1-ol, 569

1-Hexadecylpyridinium Chloride, Monohydrate, 279

2,4-Hexadienoic Acid, 1120

2,4-Hexadienoic Acid, Calcium Salt, 225

2,4-Hexadienoic Acid, Potassium Salt, 987

Hexahydrobenzoic Acid, 347

cis-Hexahydro-2-oxo-1H-thieno[3,4]imidazole-4-valeric Acid, 151

Hexahydropyridine, 934

γ -**Hexalactone**, 570

Hexaldehyde, 571

Hexanal, 571

Hexane-Insoluble Matter, 1406

Hexanedioic Acid, 28

1,2,3,4,5,6-Hexanehexol, 746, 1125

Hexanes, 571

Hexanoic Acid, 572

Hexanoic Acid, Butyl Ester, 179

1-Hexanol, 579

(E)-2-Hexen-1-ol, 573

trans-2-Hexen-1-ol, 573

(E)-2-Hexen-1-ol, 573

cis-3-Hexen-1-ol, 574

trans-2-Hexen-1-ol, 573

(Z)-3-Hexenol, 574

(E)-2-Hexenyl Acetate, 574

(Z)-3-Hexenyl Acetate, 575

cis-3-Hexen-1-yl Acetate, 575

trans-2-Hexen-1-yl Acetate, 574

(Z)-3-Hexenyl Butyrate, 576

(Z)-3-Hexenyl Formate, 577

(Z)-3-Hexenyl Isovalerate, 578

cis-3-Hexen-1-yl Isovalerate, 578

(Z)-3-Hexenyl 2-Methylbutyrate, 578

cis-3-Hexenyl 2-Methylbutyrate, 578

Hexyl Acetate, 579

Hexyl Alcohol, 579

4-Hexyl-1,3-benzenediol, 584

Hexyl-2-butenate, 580

Hexyl Butyrate, 581

α -**Hexylcinnamaldehyde**, 584

Hexyl Hexanoate, 582

Hexyl Isovalerate, 583

Hexyl 2-Methylbutyrate, 583

Hexylresorcinol, 584

4-Hexylresorcinol, 584

High-Fructose Corn Syrup, 586, 1429

High-Performance Liquid Chromatography, 1287

High Gamma-Linolenic Safflower Oil, 588

High Oleic Soybean Oil

(Unhydrogenated), 1131

High Phospholipid Krill Oil, 653

L-Histidine, 589

L-Histidine Monohydrochloride, 590

HMO, 752

Hop Oleoresin, 1133

Hops Oil, 590

HPMC, 601

Hyaluronic Acid Sodium, 1083

Hyaluronic Acid Sodium Salt, 1083

Hydratropic Aldehyde, 924

Hydratropic Aldehyde Dimethyl Acetal, 926

Hydrocarbons in Eugenol, Limit Test, 1438

Hydrochloric Acid, 591, 1526

Hydrochloric Acid, 0.2 M, 1523

Hydrochloric Acid, 1 N, 1530

Hydrochloric Acid Buffer, 1523

Hydrochloric Acid Table, 1302

Hydrochloric Acid TS, Diluted, 1526

Hydrocinnamaldehyde, 925

Hydrocinnamyl Alcohol, 916

Hydrocyanic Acid in Benzaldehyde, Limit Test, 1438

Hydrogenated Glucose Syrup, 739

Hydrogenated Lactose, 665

Hydrogenated Maltose, 738

Hydrogenated Starch Hydrolysate, 1139

Hydrogen Peroxide, 595

Hydrogen Peroxide TS, 1526

Hydrogen Sulfide Detector Tube, 1535

Hydrogen Sulfide TS, 1526

α -Hydro-*omega*-hydroxy-poly(oxyethylene)-poly(oxypropylene)(51-57 moles)poly(oxyethylene) Block Copolymer, 937

α -Hydro-*omega*-hydroxy-poly(oxyethylene)-poly(oxypropylene)(63-71 moles)poly(oxyethylene) Block Copolymer, 939

Hydrolyzable Gallotannin, 1172

Hydrolyzed Plant Protein (HPP), 22
 Hydrolyzed (Source) Protein Extract, 22
 Hydrolyzed Vegetable Protein (HVP), 22
 Hydroquinone Determination, 1437
 Hydroquinone Monomethyl Ether Determination, 1437
 2-Hydroxybutanedioic Acid, 734
 Hydroxybutanedioic Acid Disodium Salt, 1095
 2-Hydroxybutanedioic Acid Monosodium Salt, 1096
 3-Hydroxy-2-butanone, 13
Hydroxycitronellal, 596
Hydroxycitronellal Dimethyl Acetal, 597
 4-Hydroxydecanoic Acid Lactone, 357
4-Hydroxy-2,5-Dimethyl-3(2H)-furanone, 598
 7-Hydroxy-3,7-dimethyl Octanal, 596
 7-Hydroxy-3,7-dimethyl Octanal Dimethyl Acetal, 597
6-Hydroxy-3,7-dimethyloctanoic Acid Lactone, 599
 4-Hydroxydodecanoic Acid Lactone, 411
 (2-Hydroxyethyl)trimethylammonium-L-(+)-tartrate Salt, 288
 (2-Hydroxyethyl)trimethylammonium Chloride, 289
 4-Hydroxyhexanoic Acid Lactone, 570
 Hydroxylamine Hydrochloride, 0.5 N, 1530
 Hydroxylamine Hydrochloride TS, 1526
 Hydroxylamine Method, 1435
 Flavor Chemicals (Other than Essential Oils), 1435
 Hydroxylamine *tert*-Butyl Alcohol Method, 1435
 Flavor Chemicals (Other than Essential Oils), 1435
Hydroxylated Lecithin, 599
 Hydroxyl Value, 1406
 4-Hydroxy-3-methoxybenzaldehyde, 1235
 N-[N-[3-(3-Hydroxy-4-methoxyphenyl)propyl]- α -aspartyl]-L-phenylalanine 1-Methyl Ester, Monohydrate, 28
 (3S)-3-[3-(3-Hydroxy-4-methoxyphenyl)propylamino]-4-[(2S)-1-methoxy-1-oxo-3-phenylpropan-2-yl]amino]-4-oxobutanoic Acid Hydrate, 28
 5-Hydroxy-6-methyl-3,4-pyridinedimethanol Hydrochloride, 1009
 3-Hydroxy-2-methyl-4-pyrone, 740
 4-Hydroxy-3-methylethylbenzene, 435
 Hydroxy Naphthol Blue, 1534
 5-Hydroxynonanoic Acid, Lactone, 846
 5-Hydroxyoctanoic Acid Lactone, 856
 L- β -(*p*-Hydroxyphenyl)alanine, 1224
 4-(4-Hydroxyphenyl)-2-butanone, 600

4-(*p*-Hydroxyphenyl)-2-butanone, 600
 2-Hydroxypropanoic Acid, Calcium Salt, 203
 2-Hydroxypropanoic Acid, Monopotassium Salt, 978
 2-Hydroxypropanoic Acid, Monosodium Salt, 1090
 2-Hydroxypropionic Acid, 664
 α -Hydroxypropionic Acid, 664
 Hydroxypropyl Alginate, 1004
Hydroxypropyl Cellulose, 601
 Hydroxypropyl Determination, 1353
Hydroxypropyl Methylcellulose, 601
 8-Hydroxyquinoline TS, 1526
 (E)-5-(4-Hydroxystyryl)benzene-1,3-diol, 1022
 Hydroxysuccinic Acid, 734
 β -Hydroxy- γ -trimethyl aminobutyrate, L-tartrate, 248
 5-Hydroxyundecanoic Acid Lactone, 1225
 Hypophosphite Identification Test, 1321

Identification Tests, 4, 1321

Acetate, 1321
 Aluminum, 1321
 Ammonium, 1321
 Benzoate, 1321
 Bicarbonate, 1321
 Bisulfite, 1321
 Bromide, 1321
 Calcium, 1321
 Carbonate, 1321
 Chloride, 1321
 Citrate, 1321
 Cobalt, 1321
 Copper, 1321
 Hypophosphite, 1321
 Iodide, 1321
 Iron, 1322
 Lactate, 1322
 Magnesium, 1322
 Manganese, 1322
 Nitrate, 1322
 Nitrite, 1322
 Peroxide, 1322
 Phosphate, 1322
 Potassium, 1322
 Sodium, 1322
 Sulfate, 1322
 Sulfite, 1322
 Tartrate, 1322
 Thiosulfate, 1322
 Zinc, 1323

Identity Standard, 1269

Pomegranate Juice, 1269

IFAC Good Manufacturing Practice and QA Audit Guide for Food Additives, 1679

IFAC Good Manufacturing Practice and QA Audit Guide for Food Additives, 1657

IMP, 1098
 Indian Gum, 556
 Indicator Papers And Test Papers, 1535
 Acetaldehyde Test Paper, 1535
 Cupric Sulfate Test Paper, 1535
 Lead Acetate Test Paper, 1535
 Litmus Paper, Blue, 1535
 Litmus Paper, Red, 1535
 Phenolphthalein Paper, 1535
 Starch Iodate Paper, 1535
 Starch Iodide Paper, 1535
 Indicators, 1533
 Alphazurine 2G, 1533
 Azo Violet, 1533
 Bromocresol Blue, 1533
 Bromocresol Green, 1533
 Bromocresol Purple, 1533
 Bromophenol Blue, 1533
 Bromothymol Blue, 1534
 Cresol Red, 1534
 Crystal Violet, 1534
 Dithizone, 1534
 Eriochrome Black T, 1534
 p-Ethoxychrysoidin Monohydrochloride, 1534
 Hydroxy Naphthol Blue, 1534
 Litmus, 1534
 Methylene Blue, 1534
 Methyl Orange, 1534
 Methyl Red, 1534
 Methyl Red Sodium, 1534
 Methyl Yellow, 1534
 Murexide Indicator Preparation, 1534
 Naphthol Green B, 1534
 Neutral Red, 1534
 Phenolphthalein, 1534
 Phenol Red, 1534
 Quantity Used, 5
 Quinaldine Red, 1534
 Thymol Blue, 1534
 Thymolphthalein, 1534
 Xylenol Orange, 1534
 Indigo Carmine, 469, 604
 Indigo Carmine TS, 1526
Indigotine, 469, 604
 Indigotine Disulfonate, 604
Indole, 605
 Infrared Absorption, 1356
 Infrared Spectra, 1356, 1621
Inositol, 606
 Inositol Hexakisphosphate Solution, 928
i-Inositol, 606
meso-Inositol, 606
myo-Inositol, 606
 INS number, 2
 Insoluble Foreign Matter in Amino Acids, 1303
 Insoluble Sodium Polyphosphate, 1098
Inulin, 606
 Invertase, 1378
 Invertase Sumner Unit Activity, 1378
Invert Sugar, 607, 1431
 Invert Sugar Determination, 1423
 Invert Sugar Syrup, 607
 Iodide Identification Test, 1321

Iodinated Zinc Chloride, 1526
 Iodine, 0.1 N, 1531
 Iodine TS, 1526
 Iodine Value, 1406
 Ion Chromatography, 1603
 α -Ionone, 608
 β -Ionone, 609
 Iron Ammonium Citrate, 476, 477
Iron, Carbonyl, 610
Iron, Electrolytic, 612
 Iron (II) Fumarate, 485
 Iron (II) Gluconate, 486
 Iron (II) 2-Hydroxypropionate, 489
 Iron Identification Test, 1322
 Iron (II) Lactate, 489
 Iron Phosphate, 479
 Iron Pyrophosphate, 481
Iron, Reduced, 614
 Iron (II) sodium salt of 2-hydroxypropane-1,2,3-tricarboxylic acid, 1080
 Iron Standard Solution, 1524
Isoamyl Acetate, 615
Isoamyl Alcohol, 616
Isoamyl Benzoate, 616
Isoamyl Butyrate, 617
 Isoamyl Caproate, 620
 Isoamyl Caprylate, 69
Isoamyl Cinnamate, 618
Isoamyl Formate, 619
Isoamyl Hexanoate, 620
Isoamyl Isobutyrate, 621
Isoamyl Isovalerate, 622
 Isoamyl Octanoate, 69
Isoamyl Phenyl Acetate, 622
 Isoamyl 3-Phenyl Propionate, 618
 Isoamyl Propionate, 70
Isoamyl Salicylate, 623
Isoborneol, 624
Isobornyl Acetate, 625
Isobutane, 626
Isobutyl Acetate, 627
Isobutyl Alcohol, 628
Isobutyl-2-butenate, 634
Isobutyl Butyrate, 628
Isobutyl Cinnamate, 629
Isobutylene-Isoprene Copolymer, 636
Isobutyl Formate, 630
Isobutyl Heptanoate, 631
 Isobutyl Heptanoate, 631
 Isobutyl heptylate, 631
Isobutyl Hexanoate, 631
 Isobutyl isobutanoate, 632
Isobutyl Isobutyrate, 632
 Isobutyl Isovalerate, 772
2-Isobutyl-3-Methoxypyrazine, 635
 2-Isobutyl-3-methyl-1,4-diazine, 636
2-Isobutyl-3 Methylpyrazine, 636
Isobutyl Phenylacetate, 632
Isobutyl Salicylate, 633
Isobutyraldehyde, 637
 Isobutyric acid, isobutyl ester, 632
Isobutyric Acid, 637
 Isodihydrolavandulal, 778
 Isoestragole, 75

Isoeugenol, 638
Isoeugenyl Acetate, 639
 Isoeugenyl Methyl Ether, 794
DL-Isoleucine, 640
L-Isoleucine, 641
Isomalt, 642
Isomaltulose, 643
 Isomerase
 Actinoplanes missouriensis, 1365
 Bacillus coagulans, 1365
 Microbacterium arborescens, 1365
 Streptomyces murinus, 1365
 Streptomyces olivaceus, 1365
 Streptomyces olivochromogenus, 1365
 Streptomyces rubiginosus, 1365
 Isopropanol, 645, 1527
 Isopropanol, Anhydrous, 1527
Isopropyl Acetate, 645
 Isopropylacetic Acid, 647
Isopropyl Alcohol, 645
 p-Isopropylbenzaldehyde, 333
 Isopropylformic Acid, 637
Isopulegol, 646
 1-Isothiocyantobutane, 180
 Isothiocyanic acid, butyl ester, 180
 Isovaleraldehyde, 773
Isovaleric Acid, 647

J

Jelutong, 751
Juniper Berries Oil, 649

K

Kamillosan, 153
Kaolin, 650
Karaya Gum, 650
 Karite, 1057
 Karl Fischer Titrimetric Method (for Water), 1299
 KASAL, 1065
Kelp, 651
 Kjeldahl Nitrogen Determination, 1354
 Konjac, 652
Konjac Flour, 652
 Konjac Gum, 652
 Konnyaku, 652
Krill Oil, 653

L

Labdanum Oil, 659
 Labeling, Statements for, 2
Alpha-Lactalbumin, 659
 Lactase, 1379
 Lactase (Acid) Activity, 1380
 Lactase (Neutral) Activity, 1379
 Lactated Mono-Diglycerides, 547
 Lactate Identification Test, 1322
Lactic Acid, 176, 664
 Lactic and Fatty Acid Esters of Glycerol, 547
Lactitol, 665
 D-Lactitol, 665
Lactobacillus acidophilus La-14, 666
Lactobacillus acidophilus NCFM, 668
Lactobacillus paracasei LPC-37, 670
Lactobacillus rhamnosus HN001, 672
Lactose, 674
 Lactose Determination, 1424
Lactylated Fatty Acid Esters of Glycerol and Propylene Glycol, 675
Lactylic Esters of Fatty Acids, 677
 LAE, 442
Lanolin, Anhydrous, 678
 Larch Fiber, 89
 Larch Gum, 89
Lard (Unhydrogenated), 679
 Lauramide Arginine Ethyl Ester, 442
Laurel Leaf Oil, 680
Laurel Leaf Oleoresin, 1133
Lauric Acid, 681
 Lauric Acid, Butyl Ester, 181
 Lauric Arginate Ethyl Ester, 442
Lauryl Alcohol, 681
Lauryl Aldehyde, 682
Lavandin Oil, Abrial Type, 683
Lavender Oil, 684
 Lead Acetate Test Paper, 1535
 Lead Acetate TS, 1527
 Lead Limit Test, 1331
 APDC Extraction Method, 1335
 Atomic Absorption Spectrophotometric Graphite Furnace Method, 1333
 Chewing Gum Base Polymers, 1362
 Dithizone Method, 1331
 Flame Atomic Absorption Spectrophotometric Method, 1332
 Flavor Chemicals Other Than Essential Oils, 1438
 Lead Subacetate TS, 1527
 Lead Subacetate TS, Diluted, 1527
 LEAR Oil, 231
 Leche caspi (sorva), 751
 Leche de vaca, 751
Lecithin, 685
 Lemonene, 151
Lemongrass Oil, 690
 Lemon Oil Arizona, 688
Lemon Oil, Cold-pressed, 687
Lemon Oil, Desert Type, Coldpressed, 688
Lemon Oil, Distilled, 689
 Lemon Oil, Expressed, 687
DL-Leucine, 691
L-Leucine, 692
 Leuco Base (Color Additive Assays), 1344
 Levocarnitine, 247
 Levocarnitine Tartrate, 248
 Levomenol, 153
Levulinic Acid, 693
 Levulose, 500
 Light-Resistant Container, 3
 Lignosulfonic Acid, Calcium Salt (40x65), 206
 Lime, 213

Lime Oil, Cold-pressed, 694
Lime Oil, Distilled, 695
 Lime Oil, Expressed, 694
Limestone, Ground, 696
 "Limit of Detection", Defined, 1539
 "Limit of Quantitation", Defined, 1539
 Limit Tests, 1323
 Aluminum, 1323
 Antioxidants in Ethyl Acrylate, 1437
 Arsenic, 1323
 Cadmium, 1325
 Chloride, 1326
 Copper Limit Test, 1326
 1,4-Dioxane, 1327
 Fluoride, 1328
 Hydrocarbons in Eugenol, 1438
 Hydrocyanic Acid in Benzaldehyde, 1438
 Hydroquinone in Ethyl Acrylate, 1437
 Hydroquinone Monomethyl Ether in Ethyl Acrylate, 1437
 Lead, 1331
 Lead (Flavor Chemicals Other Than Essential Oils), 1438
 Manganese, 1336
 Mercury, 1336
 Methyl Compounds in Ethyl Acetate, 1438
 Nickel, 1337
 Peroxide Value (Flavor Chemicals Other Than Essential Oils), 1438
 Phosphorus, 1338
 Readily Carbonizable Substances in Ethyl Acetate, 1438
 Readily Oxidizable Substances in *dl*-Menthol, 1438
 Reducing Substances (Flavor Chemicals Other Than Essential Oils), 1438
 Selenium, 1339
 Sulfate, 1326
(+)-Limonene, 697
(-)-Limonene, 698
d-Limonene, 697
l-Limonene, 698
Linaloe Wood Oil, 698
Linalool, 699
 Linalool Determination (Essential Oils and Flavors), 1396
Linalool Oxide, 700
Linalyl Acetate, 701
Linalyl Benzoate, 702
Linalyl Formate, 703
Linalyl Isobutyrate, 704
Linalyl Propionate, 705
 "Linearity and Range", Defined, 1539
Linoleic Acid, 706
 Lipase, 415, 1381
 Animal Pancreatic Tissue; 2-Acylhydrolase, 1366
 Animal Pancreatic Tissues, 1366
 Aspergillus niger var., 1366
 Aspergillus oryzae var., 1366
 Candida rugosa, 1366
 Edible Forestomach Tissue of Calves, Kids, and Lambs, 1366

Rhizomucor meihei, 1366
 Lipase (Microbial) Activity for Medium- and Long-Chain Fatty Acids, 1382
 Lipase Activity, 1381
 Lipase, Animal, 413
 Liquid Paraffin, 814, 816
 Liquid Petrolatum, 814, 816
Listeria, 1462
 Lithium Methoxide, 0.1 N, 1531
 Lithol Rubine B Ca, 707
Lithol Rubine Bk, 707
 Litholrubintoner BKL, 707
 Litmus, 1534
 Litmus Paper, Blue, 1535
 Litmus Paper, Red, 1535
 Litmus TS, 1527
 Locust Bean Gum, 710
Locust (Carob) Bean Gum, 710
 Loss on Drying, 1304
 Color Additives, 1349
Lovage Oil, 711
 Lovibond Color, 1401
 Low Erucic Acid Rapeseed Oil, 231
 Low Glycemic Carbohydrate, 1151
 Low Linolenic Acid Flaxseed Oil (Unhydrogenated), 1120
 Low Linolenic Acid Linseed Oil, 1120
 Luo Han Fruit Concentrate, 817
 Luo Han Guo Concentrate, 817
 Luo Han Guo Extract, 817
 Lutein, 712
Lycopene Extract from Tomato, 713
Lycopene from *Blakeslea trispora*, 716
Lycopene, Synthetic, 718
 Lycopene (Tomato), 713
 Lycopene, Tomato Extract, 713
 Lye, 1086
 Lye Solutions, 1085
L-Lysine Monohydrochloride, 720
 Lysozyme, 413
 Lysozyme Activity, 1383
 D-Lyx-Hexulose, 1168

M

Mace Oil, 721
 Maddrell's Salt, 1098
 Magadi Soda, 1113
 Magnesal, 721
 Magnesia Mixture TS, 1527
 Magnesium Ammonium Potassium Carnallite, 721
Magnesium Ammonium Potassium Chloride, Hydrate, 721
 Magnesium Ammonium Potassium Chloride, Triple Salt, 721
 Magnesium Biphosphate, 730
Magnesium Carbonate, 723
Magnesium Chloride, 724
 Magnesium Dihydrogen Phosphate, 730
Magnesium Gluconate, 725
Magnesium Hydroxide, 725
 Magnesium Identification Test, 1322
 Magnesium Lactate, 726
Magnesium Oxide, 727
Magnesium Phosphate, Dibasic, Mixed Hydrates, 728
Magnesium Phosphate, Dibasic, Trihydrate, 729
Magnesium Phosphate, Monobasic, 730
Magnesium Phosphate, Tribasic, 730
Magnesium Silicate, 731
 Magnesium Standard Solution, 1524
Magnesium Stearate, 732
Magnesium Sulfate, 733
 Magnesium Sulfate TS, 1527
 Malachite Green TS, 1527
Malic Acid, 734
 Malic Acid Disodium Salt, 1095
 DL-Malic Acid, 734
 Malic Acid Monosodium Salt, 1096
 Malic Acid Sodium Salt, 1095
 Malonic Ester, 382
 Malt, 413
 Malt Extract, 735
Maltitol, 738
 D-Maltitol, 738
Maltitol Syrup, 739
Maltodextrin, 740, 1430
 Maltogenic Amylase, 1383
 Maltogenic Amylase Activity, 1383
Maltol, 740
Maltol Isobutyrate, 741
Malt Syrup, 735
Mandarin Oil, Cold-pressed, 742
 Mandarin Oil, Expressed, 742
Manganese Chloride, 743
Manganese Citrate, 744
Manganese Gluconate, 744
Manganese Glycerophosphate, 745
Manganese Hypophosphite, 745
 Manganese Identification Test, 1322
 Manganese Limit Test, 1336
Manganese Sulfate, 746
 Mannite, 746
Mannitol, 746
 D-Mannitol, 746
 Maple Furanone, 438
Maritime Pine Extract, 747
Marjoram Oil, Spanish Type, 749
Marjoram Oil, Sweet, 750
Marjoram Sweet Oleoresin, 1133
 Markers for Authenticity Testing, 1447
 Biobased Content of 1,3-Propanediol, 1447
 Carbohydrate Authenticity Markers For Soluble (Instant) Coffee, 1450
 Massaranduba balata, 751
 Massaranduba chocolate, 751
 Mass Spectrometry, 1582
Masticatory Substances, Natural, 751
 Mayer's Reagent, 1527
 MC, 805
 Media and Reagents (Microbiological Tests), 1440

Meletin, 1011
 Melting Range
 Fats and Related Substances, 1407
 Melting Range or Temperature
 Determination, 1291
Menhaden Oil, Hydrogenated, 752
Menhaden Oil, Refined, 756
p-Menth-4-en-3-ol, 646
p-Menth-1-en-8-ol, 1184
**Mentha Arvensis Oil, Partially
 Dementholized**, 760
d-*p*-Mentha-1,8-diene, 697
l-*p*-Mentha-1,8-diene, 698
p-Mentha-1,5-diene, 906
p-Mentha-6,8-dien-2-ol, 265
p-Mentha-6,8-dien-2-yl Acetate, 268
3-p-Menthanol, 761
l-*p*-Menth-3-one, 762
dl-*p*-Menth-3-yl Acetate, 762
l-*p*-Menth-3-yl Acetate, 763
 Menth-1-yl-8 Acetate, 1185
 Menth-1-yl-8 Propionate, 1186
Menthol, 761
(-)-Menthone, 762
L-Menthone, 762
(-)-Menthyl Acetate, 763
DL-Menthyl Acetate, 762
l-Menthyl Acetate, 763
Menthyl Acetate, Racemic, 762
2-Mercaptopropionic Acid, 763
 Mercuric-Potassium Iodide TS, 1527
 Mercuric-Potassium Iodide TS, Alkaline,
 1524, 1527
 Mercuric Acetate TS, 1527
 Mercuric Chloride TS, 1527
 Mercuric Nitrate, 0.1 M, 1531
 Mercuric Sulfate TS, 1527
 Mercurous Nitrate TS, 1527
 Mercury (Color Additive Assays), 1345
 Mercury Limit Test, 1336
Meso-Zeaxanthin, 1261
 Metaphosphoric Acid, Sodium
 Potassium Salt, 1106
 Methanol, 784, 1527
 Methanol, Anhydrous, 1527
 Methional, 811
DL-Methionine, 764
L-Methionine, 765
p-Methoxyacetophenone, 11
 2-Methoxybenzaldehyde, 77
***p*-Methoxybenzaldehyde**, 767
 2-Methoxybenzenecarboxaldehyde, 77
p-Methoxybenzyl Acetate, 79
p-Methoxybenzyl Alcohol, 80
 4-Methoxybenzyl Butanoate, 81
p-Methoxybenzyl Butyrate, 81
p-Methoxybenzyl Formate, 81
 4-Methoxybenzyl Phenylacetate, 82
p-Methoxybenzyl Phenylacetate, 82
 4-Methoxybenzyl Propanoate, 83
p-Methoxybenzyl Propionate, 83
 2-Methoxy-3-isobutylpyrazine, 635
**2-Methoxy 3- (or 5- or 6-)
 Isopropyl Pyrazine**, 766
 Methoxyl Determination, 1354
2-Methoxy-3(5)-Methylpyrazine,
 766

4-*p*-Methoxyphenyl-2-butanone,
 813
 2-Methoxyphenylformaldehyde, 77
 1-(*p*-Methoxyphenyl)-1-penten-3-one,
 421
 2-Methoxy-4-propenylphenol, 638
 2-Methoxy-4-propenyl Phenyl Acetate,
 639
2-Methoxypyrazine, 768
 2-Methyl-1-propyl heptanoate, 631
 4-Methyl-2-phenyl-1,3-dioxolane, 123
 4-Methyl-2-phenyl-*m*-dioxolane, 123
 Methyl 2-Pyridyl Ketone, 20
Methyl 3-Nonenoate, 781
Methyl Acetate, 783
4-Methyl Acetophenone, 774
 Methylacetopyronone, 363
Methyl Alcohol, 784
p-Methylaminophenol Sulfate TS, 1528
 Methyl Amyl Ketone, 563
***p*-Methyl Anisole**, 771
Methyl Anthranilate, 785
 Methylbenzaldehyde, 1210
p-Methylbenzaldehyde, 1210
Methyl Benzoate, 785
Methylbenzyl Acetate, 801
 α -**Methylbenzyl Alcohol**, 802
 Methyl Benzyl Sulfide, 135
2-Methyl Butanal, 772
3-Methyl Butanal, 773
2-Methylbutyl Acetate, 804
 β -Methyl Butyl Acetate, 615
2-Methylbutyl Isovalerate, 804
 2-Methylbutyl-3-methylbutanoate, 804
Methyl Butyrate, 786
2-Methylbutyric Acid, 803
Methylcellulose, 805
 Methylcellulose, Hydroxypropyl, 601
 Methylcellulose Viscosity, 1297
 Methyl Chavicol, 421
 α -**Methylcinnamaldehyde**, 806
Methyl Cinnamate, 786
 Methyl Compounds in Ethyl Acetate,
 Limit Test, 1438
6-Methylcoumarin, 769
 Methyl *p*-Cresol, 771
 3-Methylcyclopentane-1,2-dione, 787
Methyl Cyclopentenolone, 787
**5H-5-Methyl-6,7-
 dihydrocyclopenta[b]pyrazine**,
 776
 Methylene Blue, 1534
 Methylene Blue TS, 1527
Methylene Chloride, 807
 Methylene Dichloride, 807
 3,4-(Methylenedioxy)-benzaldehyde,
 935
**Methyl Ester of Rosin, Partially
 Hydrogenated**, 788
Methyl Ethyl Cellulose, 789
 Methyl Ethylene Oxide, 1005
 Methyl Ethyl Ketone, 172
Methyl Eugenol, 790
L-Methylfolate, Calcium, 210
5-Methyl Furfural, 777
Methyl Furoate, 791
 Methyl Glycol, 1003

2-(1-Methylguanidino)acetic Acid
 Hydrate, 328
 Methyl Heptenone, 778
6-Methyl-5-hepten-2-one, 778
 Methyl Heptene Carbonate, 782
 Methyl Heptyl Ketone, 849
Methyl Hexanoate, 791
Methyl Hexyl Ketone, 792
 Methyl *p*-Hydroxybenzoate, 808
 Methyl [*N*-(3-hydroxy-4-
 methoxy)phenylpropyl-L-aspartyl]-L-
 phenylalaninate Monohydrate, 28
Methyl Ionones, 793
 Methyl Isobutyl Ketone, 775
 2-Methyl-3-isobutylpyrazine, 636
Methyl Isobutyrate, 793
Methyl Isoeugenol, 794
d-1-Methyl-4-isopropenyl-6-
 cyclohexen-2-one, 266
l-1-Methyl-4-isopropenyl-6-cyclohexen-
 2-one, 267
5-Methyl-2-isopropyl-2-hexenal,
 778
 2-Methyl-3-(*p*-
 isopropylphenyl)propionaldehyde,
 335
Methyl Isovalerate, 795
 Methyl *N*-Methyl Anthranilate, 390
 Methyl 2-Methylbutanoate, 780
Methyl 2-Methylbutyrate, 780
 (5)-6-Methyl-2-[(5)-4-methylcyclohex-
 3-en-1-yl]hept-5-en-2-ol, 153
 7-Methyl-3-methylene-1,6-octadiene,
 826
d-2-Methyl-5-(1-methylethenyl)-
 cyclohexanone, 385
 1-Methyl-4-(1-methylethyl)-1,3-
 cyclohexadiene, 1183
 1-Methyl-4-(1-methylethyl)-1,4-
 cyclohexadiene, 1184
Methyl-3-methylthiopropionate,
 800
Methyl β -Naphthyl Ketone, 779
Methyl 2-Nonenoate, 780
 Methyl Non-3-enoate, 781
 (*E,Z*)-Methyl 2-nonenoate, 780
 Methyl *n*-Nonyl Acetaldehyde, 812
 Methyl Nonyl Ketone, 1228
Methyl 2-Octanoate, 782
 Methyl Orange, 1534
 Methyl Orange TS, 1527
 6-Methyl-1,2,3-oxathiazine-4(3H)-one-
 2,2 Dioxide Potassium Salt, 9
 Methyl Oxirane, 1005
Methylparaben, 808
2-Methylpentanoic Acid, 809
4-Methylpentanoic Acid, 770
4-Methyl-2-pentanone, 775
2-Methyl-2-pentenoic Acid, 773
 α -Methyl Phenylacetaldehyde, 924
Methyl Phenylacetate, 796
p-Methylphenyl Acetate, 329
 Methyl Phenylcarbinol, 802
Methyl Phenylcarbinyl Acetate,
 797
 Methylphenyl Ether, 78
5-Methyl 2-Phenyl 2-Hexenal, 776

Methyl Phenyl Ketone, 15
 2-Methyl Propanoic Acid, 637
 2-Methyl Propanyl Butyrate, 628
 2-Methylpropyl 2-methyl propanoate, 632
 2-Methylpropyl 2-methylpropionate, 632
 2-Methylpropyl heptanoate, 631
 2-Methylpropyl isobutyrate, 632
 Methyl Propyl Ketone, 899
2-Methyl Propyl 3-Methyl Butyrate, 772
 2-(2-Methylpropyl)-3-methylpyrazine, 636
2-Methylpyrazine, 810
 Methyl Pyrazinyl Ketone, 19
 Methyl Pyridyl Ketone, 21
 Methyl 2-Pyrrolyl Ketone, 21
 Methyl Red, 1534
 Methyl Red-Methylene Blue TS, 1527
 Methyl Red Sodium, 1534
 Methyl Red TS, 1527
 Methylrosaniline Chloride TS, 1527
Methyl Salicylate, 798
 Methyl Sulfide, 397
 L-Methyltetrahydrofolate, Calcium Salt, 210
 L-5-Methyltetrahydrofolic Acid, Calcium Salt, 210
 2-Methyl-3-(3,7,11,15-tetramethyl-2-hexadecenyl), 1244
4-Methyl-5-thiazole Ethanol, 775
Methyl Thiobutyrate, 798
 Methylthiomethylbenzene, 135
3-Methylthiopropionaldehyde, 811
 Methyl *p*-Tolyl Ketone, 774
2-Methylundecanal, 812
Methyl Valerate, 799
 Methyl Vanillin, 1239
 Methyl Violet TS, 1527
 Methyl Yellow, 1534
 mg/kg and Percent, 5
 Microbial Food Cultures Including Probiotics, 1453
 Microbial Limit Tests, 5
 Microbiological Enumeration Tests, 1441
 Microbiological Tests, 1440
 Bile-Tolerant Gram-Negative Bacteria, 1442
 Enterobacteria Enrichment Broth Mossel, 1440
 Enterobacter Sakazakii (*Cronobacter* SPP.), 1442
 Media and Reagents, 1440
 Microbiological Enumeration Tests, 1441
 Phosphate Buffer Solution pH 7.2, 1440
 Rappaport Vassiliadis Salmonella Enrichment Broth, 1440
 Sabouraud Dextrose Agar, 1440
 Salmonella SPP., 1442
 Buffered Sodium Chloride-Peptone Solution pH 7.0, 1440
 Soybean-Casein Digest Agar, 1440

Soybean-Casein Digest Broth, 1440
 Stock Buffer Solution, 1440
 Tests for Absence of Specific Microorganisms, 1441
 Total Aerobic Microbial Count, 1441
 Total Yeasts and Molds Count, 1441
 Violet Red Bile Glucose Agar, 1440
 Xylose Lysine Deoxycholate Agar, 1441
 Mid-Infrared Spectroscopy, 1571
 Milk-Clotting Activity, 1384
 Milk Ingredients
 Guidance Standard For Uhlplc-Ms/ Ms Screening Of Nitrogen Containing Adulterants, 1465
 Millon's Reagent, 1527
Mineral Oil, High Viscosity, 814
Mineral Oil, Medium and Low Viscosity, 816
 Mineral Oil, White, 816
 Mixed Paraffinic Hydrocarbons, 571
 Mixture of 1,2- and 1,3-Benzaldehyde Cyclic Acetals of Glycerin, 122
 Mixture of α -, β -, γ - or α -iso, and δ -isomers, 793
 Mixture of Geranial [(E)-3,7-dimethyl-2,6-octadien-1-al] and Neral [the (Z) isomer], 303
 Modified Cellulose, 276, 601, 789, 805
 Modified Cellulose, EC, 431
 Modified Food Starch, 494
 Molar Solutions, 1529
 Molecular Structure and Chemical Formulas, 2
 Molecular Weight (Chewing Gum Base Polymers), 1360
 Monk Fruit Concentrate, 817
Monk Fruit Extract, 817
Mono- and Diglycerides, 818
Monoammonium L-Glutamate, 819
 Monoammonium Glutamate Monohydrate, 819
Monoammonium Glycyrhizinate, 820
 Monoammonium Phosphate, 62
 Mono- and Diglycerides, Ethoxylated, 422
 Mono-*tert*-butylhydroquinone, 1178
 Monocalcium Benzoate, 193
 Monocalcium Phosphate, 219
Monoglyceride Citrate, 821
 Monoglycerides
 Total in Fats and Related Substances, 1407
 1-Monoglycerides (Fats and Related Substances), 1407
 Monomagnesium Dihydrogen Phosphate, 730
 Monomagnesium Orthophosphate, 730
 Monomagnesium Phosphate, 730
 Monoolein, 543
 Monopotassium D-Gluconate, 974
Monopotassium L-Glutamate, 822

Monopotassium Glutamate Monohydrate, 822
 Monopotassium Phosphate, 982
 Monosodium 2-DL-hydroxy Succinate, 1096
 Monosodium Dihydrogen Phosphate, 1104
 Monosodium DL-Malate, 1096
 Monosodium Glutamate, 823
Monosodium L-Glutamate, 823
 Monosodium Glutamate Monohydrate, 823
 Monosodium Phosphate, 1104
 Monostearin, 544
 Morellone, 133
Morpholine, 824
Mortierella alpina Oil, 84
 MPG, 822
 MSG, 823
 L-5-MTHF-Ca, 210
 Murexide Indicator Preparation, 1534
Mustard Oil, 825
myo-Inositol Hexakis(dihydrogen Phosphate) Solution, 928
Myrcene, 826
 Myrcia Oil, 118
Myristaldehyde, 826
Myristic Acid, 827
 Myristica Oil, 854
Myristyl Alcohol, 827
Myrrh Oil, 827

N

1,4-Naphthalenedione, 1244
 α -Naphtholbenzein TS, 1527
 Naphthol Green B, 1534
 Naphthol Green TS, 1527
 β -Naphthyl Ethyl Ether, 829
Natamycin, 829
 Natural rubber (latex solids), 751
 Natural Terpene Resin, 1182
 C.I. Natural Yellow 10, 1011
 Near-Infrared Spectroscopy, 1606
 "Negligible", Defined, 5
Neohesperidine Dihydrochalcone, 830
Neotame, 832
Nerol, 834
Nerolidol, 835
 Nerolin II, 829
 Nerolin Bromelia, 829
Neryl Acetate, 836
 Nessler's Reagent, 1527
 Neutralized Phthalate Buffer, 1523
 Neutral Red, 1534
 Neutral Red TS, 1528
 Neutral Sulfite Method (Essential Oils and Flavors), 1396
 New and Changed List, xiii
Niacin, 837
Niacinamide, 837
Niacinamide Ascorbate, 838
Nickel, 839
 Nickel Catalysts, 839
 Nickel Limit Test, 1337

Nickel Standard Solution TS, 1528
 Nicotinamide, 837
 Nicotinamide Ascorbate, 838
 Nicotinic Acid, 837
 Niger Gutta, 751
 Ninhydrin TS, 1528
Nisin A Preparation, 840
 Nispero, 751
 Nitrate Identification Test, 1322
 Nitre Cake, 1068
 Nitric Acid, 1528
 Nitric Acid TS, Diluted, 1528
 Nitric Oxide-Nitrogen Dioxide
 Detector Tube, 1535
 Nitrite Identification Test, 1322
Nitrogen, 841
 Nitrogen Determination
 α -Amino, 1340
 Ammonia, 1340
 Kjeldahl Method, 1354
Nitrogen Enriched Air, 842
 Nitrogen Oxide, 843
Nitrous Oxide, 843
(E),(E)-2,4-Nonadienal, 844
trans,cis-2,6-Nonadienal, 845
(E),(Z)-2,6-Nonadienal, 845
trans,trans-2,4-Nonadienal, 844
(E),(Z)-2,6-Nonadienol, 846
trans,cis-2,6-Nonadienol, 846
 δ -Nonalactone, 846
 γ -Nonalactone, 847
Nonanal, 848
Nonanoic Acid, 850
 1-Nonanol, 854
2-Nonanone, 849
Noncrystallizing Sorbitol Solution,
 1127
(E)-2-Nonenal, 852
trans-2-Nonenal, 852
 2-Nonenoic Acid, Methyl Ester, 780
 3-Nonenoic Acid, Methyl Ester, 781
(E)-2-Nonen-1-ol, 850
(Z)-6-Nonen-1-ol, 851
cis-6-Nonen-1-ol, 851
trans-2-Nonenol, 850
 Nonfat Dry Milk
 Nonprotein Nitrogen Determination
 For Skim Milk Powder And Nonfat
 Dry Milk, 1471
Nonprotein Nitrogen
Determination For Skim Milk
Powder And Nonfat Dry Milk,
 1471
Nonyl Acetate, 853
Nonyl Alcohol, 854
 Normal Solutions, 1529
 Nuclear Magnetic Resonance, 1304,
 1588
Nutmeg Oil, 854

O

(Z),(Z)-9,12-Octadecadienoic Acid,
 706
 Octadecanoic Acid, 547, 1140
 Octadecanoic Acid, Zinc Salt, 1266

(Z)-9-Octadecenoic Acid, 870
cis-9-Octadecenoic Acid, Sodium Salt,
 1102
 δ -Octalactone, 856
 γ -Octalactone, 856
Octanal, 857
Octanoic Acid, 858
 1-Octanol, 863
3-Octanol, 858
 2-Octanone, 792
(E)-2-Octen-1-al, 858
trans-2-Octen-1-al, 858
(Z)-3-Octen-1-ol, 859
1-Octen-3-ol, 860
cis-3-Octen-1-ol, 859
1-Octen-3-yl Acetate, 861
1-Octen-3-yl Butyrate, 862
Octyl Acetate, 862
3-Octyl Acetate, 862
Octyl Alcohol, 863
 Octyl Ester of Gallic Acid, 865
n-Octyl Ester of 3,4,5-
 Trihydroxybenzoic Acid, 865
Octyl Formate, 864
Octyl Gallate, 865
Octyl Isobutyrate, 866
 Octyl 2-Methylpropanoate, 866
 Octyl 3,4,5-Trihydroxybenzoate, 865
 Odorless, Statement of, 3
 Oil Content of Synthetic Paraffin, 1311
 Oil of Frankincense, 872
 Oil of Shaddock, 551
 Completely Hydrogenated Oils and
 Fats, 866
Fully Hydrogenated Oils and Fats,
 866
 Hydrogenated Oils and Fats, 866
Oleic Acid, 870
 Oleic Acid, Sodium Salt, 1102
 Oleoresin Angelica Seed, 1133
 Oleoresin Anise, 1133
 Oleoresin Basil, 1133
 Oleoresin Black Pepper, 1133
 Oleoresin Capsicum, 1133
 Oleoresin Caraway, 1133
 Oleoresin Cardamom, 1133
 Oleoresin Celery, 1133
 Oleoresin Coriander, 1133
 Oleoresin Cubebs, 1133
 Oleoresin Cumin, 1133
 Oleoresin Dillseed, 1133
 Oleoresin Fennel, 1133
 Oleoresin Ginger, 1133
 Oleoresin Hop, 1133
 Oleoresin Laurel Leaf, 1133
 Oleoresin Marjoram Sweet, 1133
 Oleoresin Origanum, 1133
 Oleoresin Paprika, 1133
 Oleoresin Parsley Leaf, 1133
 Oleoresin Parsley Seed, 1133
 Oleoresin Pimenta Berries, 1133
 Oleoresin Rosemary, 1133
 Oleoresins, 1415
 Color Value, 1415
 Curcumin Content, 1415
 Piperine Content, 1415
 Residual Solvent, 1415

Total Capsaicinoids Content, 1416
 Volatile Oil Content, 1417
 Oleoresin Thyme, 1133
 Oleoresin Turmeric, 1134, 1222
Olestra, 870
Olibanum Oil, 872
Onion Oil, 873
 Optical (Specific) Rotation, 1292
Orange Oil, Bitter, Cold-pressed,
 874
Orange Oil, Cold-pressed, 875
Orange Oil, Distilled, 876
Origanum Oil, Spanish Type, 877
Origanum Oleoresin, 1133
Orris Root Oil, 878
 Orthophenanthroline TS, 1528
 Orthophosphoric Acid, 927
 Oxalic Acid, 0.1 N, 1531
 Oxalic Acid TS, 1528
Ox Bile Extract, 879
 1:8 Oxido-*p*-menthane, 462
 Oxidoreductase
Aspergillus niger var., 1364, 1365
 Bovine Liver, 1364
Micrococcus lysodeikticus, 1365
 3-Oxo-2,3-dihydrobenzo[d]isothiazol-
 1,1-dioxide Monohydrate, 985
 Oxyethylene Determination, 1408
 Oxygen Flask Combustion, 1279
Oxystearin, 880
Ozone, 880

P

Packaging and Storage
 Containers, 3
 Cool Place, Defined, 3
 Excessive Heat, Defined, 3
 Light Resistant Container, Defined, 3
 Product Security, 3
 Storage Under Nonspecific
 Conditions, 3
 Tight Container, Defined, 3
 Well-Closed Container, Defined, 3
Palmarosa Oil, 882
Palmitic Acid, 883
 Palmitoyl L-Ascorbic Acid, 91
 Palmityl alcohol, 569
Palm Kernel Oil
(Unhydrogenated), 881
Palm Oil (Unhydrogenated), 881
 Pancreatin, 413, 1384
 Pancreatin Activity, 1384
 Panthenol, 364
DL-Panthenol, 883
 D(+)-Pantothenyl Alcohol, 364
 DL-Pantothenyl Alcohol, 883
 Papain, 414, 1366
 Paper Chromatography, 1283
Paprika Oleoresin, 1133
Paraffin, Synthetic, 884
Parsley Herb Oil, 885
Parsley Leaf Oleoresin, 1133
Parsley Seed Oil, 886
Parsley Seed Oleoresin, 1133

Partial Acid Digest of (Source) Protein, 887
 Partial Enzymatic Digest of (Source) Protein, 887
 Partially Dementholized Mentha Arvensis Oil, 760
 Partially Hydrolyzed (Source) Protein, 887
Partially Hydrolyzed Proteins, 887
 Patent Blue 5, 888
Patent Blue V, 888
 Peach Aldehyde, 1225
Peanut Oil (Unhydrogenated), 891
 Pectinase, 1366
Pectins, 892
 PEG, 947
 Pelargonic Aldehyde, 848
 Pendare, 751
Pennyroyal Oil, 895
 ω -**Pentadecalactone**, 896
Pentaerythritol Ester of Partially Hydrogenated Wood Rosin, 897
Pentaerythritol Ester of Wood Rosin, 898
 3,3',4',5,7-Pentahydroxyflavone, 1011
 Pentahydroxyhexanoic acid, 523
 1,2,3,4,5-Pentahydroxypentane, 1254
 [2,3,4,5,6-Pentakis(phosphonooxy) cyclohexyl]oxyphosphonic Acid Solution, 928
 1,5-Pentanedial, 534
2,3-Pentanedione, 899
 Pentanoic Acid, 1233
 Pentanoic acid, butyl ester, 185
 1-Pentanol, 68
2-Pentanone, 899
 Pentapotassium Triphosphate, 989
 Pentasodium Triphosphate, 1118
 1-Pentyl Butyrate, 68
 1-Pentyl Formate, 68
 Pentyl Heptanoate, 69
 Pentyl Hexanoate, 620
 2-Pentyl-3-phenylprop-2-en-1-ol, 73
 People
 2015–2020, xi
Peppermint Oil, 900
 Pepsin, 413, 1386
 Pepsin Activity, 1386
 Peptone (Source), 887
 Percentage of Cineole (Essential Oils and Flavors), 1397
 Perchloric Acid, 0.1 N, 1531
 Perchloric Acid, 0.1 N, in Dioxane, 1531
 Perillo, 751
Perlite, 901
 Permanent Ruben L6B, 707
 Peroxide Identification Test, 1322
 Peroxide Value
 Fats and Related Substances, 1409
 Flavor Chemicals Other Than Essential Oils, 1438
 Pesticide Residues, 1443
Petitgrain Oil, Paraguay Type, 902
Petrolatum, 903
 Petroleum Jelly, 903
Petroleum Wax, 904

Petroleum Wax, Synthetic, 905
 pH Determination, 1293
 α -**Phellandrene**, 906
Phenethyl Acetate, 907
 2-Phenethyl Acetate, 907
Phenethyl Alcohol, 908
 α -Phenethyl Alcohol, 802
Phenethyl Isobutyrate, 909
Phenethyl Isovalerate, 910
2-Phenethyl 2-Methylbutyrate, 913
Phenethyl Phenylacetate, 911
Phenethyl Salicylate, 912
 Phenolphthalein, 1534
 Phenolphthalein Paper, 1535
 Phenolphthalein TS, 1528
 Phenol Red, 1534
 Phenol Red TS, 1528
 Phenols (Essential Oils and Flavors), 1397
 Phenols, Free (Essential Oils and Flavors), 1397
 Phenolsulfonphthalein TS, 1528
Phenoxyethyl Isobutyrate, 913
 1-Phenyl-2-Ethyl-3-Hexanone, 133
Phenylacetaldehyde, 917
Phenylacetaldehyde Dimethyl Acetal, 918
Phenylacetic Acid, 919
DL-Phenylalanine, 920
 L-Phenylalanine, N-[3-(3-hydroxy-4-methoxyphenyl)propyl]-L-aspartyl-, Methyl Ester, Monohydrate, 28
L-Phenylalanine, 912
 L-Phenylalanine, L- α -aspartyl-2-methyl ester compound with 6-methyl-1,2,3-oxathiazin-4(3H)-one 2,2-dioxide (1:1), 96
 Phenylbenzene, 151
 Phenyl Carbinol, 129
 α -Phenyl Ethyl Acetate, 797
 2-Phenylethyl Alcohol, 908
Phenylethyl Anthranilate, 922
Phenylethyl Butyrate, 922
Phenyl Ethyl Cinnamate, 914
Phenyl Ethyl Propionate, 915
 Phenyl Mercaptan, 123
 2-(Phenylmethylene)heptyl Acetate, 73
 2-(Phenylmethylene)heptyl Formate, 74
 p-Phenylphenol TS, 1528
3-Phenyl-1-propanol, 916
 3-Phenylpropenoic Acid, 293
2-Phenylpropionaldehyde, 924
3-Phenylpropionaldehyde, 925
2-Phenylpropionaldehyde Dimethyl Acetal, 926
3-Phenylpropyl Acetate, 923
 Phenylpropyl Alcohol, 916
 Phenylpropyl Aldehyde, 925
 PHMO, 752
 Phosphatase
 Aspergillus niger var., 1366
 Phosphate Buffer, 1523
 Phosphate Buffer Solution pH 7.2, 1440
 Phosphate Identification Test, 1322

Phosphate Standard Solution, 1524
 Phospholipase A₂, 413, 1387
 Phospholipase A₂ Activity, 1387
Phosphoric Acid, 927, 1528
 Phosphoric acid, ammonium iron (II) salt, 483
 Phosphorus Limit Test, 1338
 Phosphotungstic Acid TS, 1528
 Phylloquinone, 1244
 Physical Tests and Determinations, 1282
 Physiochemical Properties, 1290
 Phytase, 415, 1387
 Phytase Activity, 1387
Phytic Acid Solution, 928
 Phytanadione, 1244
 Picolinic Acid, Chromium(III) Salt, 291
 Picric Acid TS, 1528
 Pigment Metal 3, 548
 Pimaricin, 829
 Pimenta Berries Oil, 930
Pimenta Berries Oleoresin, 1133
Pimenta Leaf Oil, 931
Pimenta Oil, 930
 Pimento Leaf Oil, 931
 Pimento Oil, 930
 Pineapples: *Ananas comosus* *Ananas bracteatus* (L), 1364
 1- α -Pinene, 933
 2-Pinene, 933
 α -**Pinene**, 933
 β -**Pinene**, 933
 Pine Needle Oil, 492, 931
Pine Needle Oil, Dwarf, 931
Pine Needle Oil, Scotch Type, 932
Pinus pinaster Extract, 747
Piperidine, 934
 Piperine Content, 1415
Piperonal, 935
 Piperonyl Aldehyde, 935
 Plant Proteolytic Activity, 1389
Plant Stanol Esters, 935
 Plasma Spectrochemistry, 1313
Poloxamer 331, 937
Poloxamer 407, 939
 Poly- β -(1,4)-2-amino-2-deoxy-D-glucose, 283
Polydextrose, 941
Polydextrose Solution, 944
 Polydimethylsiloxane, 398
Polyethylene, 946
Polyethylene Glycols, 947
 Polyglucitol, 1139
 Polyglycerate (60), 422
Polyglycerol Esters of Fatty Acids, 950
 Polyglycerol Esters of Interesterified Ricinoleic Acid, 951
 Polyglycerol Polyricinoleate, 951
Polyglycerol Polyricinoleic Acid, 951
 PolyGlycopleX, 34
Polyisobutylene, 952
 Poly[1-(2-oxo-1-pyrrolidinyl)ethylene], 990
 Poly(oxy-1,2-ethanediyl) Derivative, 954, 956, 958

- Polyoxyethylene (20) Mono- and Diglycerides of Fatty Acids, 422
 Polyoxyethylene (20) Sorbitan Monolaurate, 954
 Polyoxyethylene (20) Sorbitan Monooleate, 958
 Polyoxyethylene (20) Sorbitan Monostearate, 956
 Polyoxyethylene (20) Sorbitan Tristearate, 957
Polypropylene Glycol, 953
 Polysaccharide Complex KAX, 34
Polysorbate 20, 954
Polysorbate 40, 955
Polysorbate 60, 956
Polysorbate 65, 957
Polysorbate 80, 958
Polyvinyl Acetate, 959
 Poly(vinyl acetate), 959
Polyvinyl Alcohol, 960
 Poly(vinyl alcohol), 960
 Polyvinylpyrrolidone, 330
 Polyvinylpyrrolidone, 990
Pomegranate Juice, 1269
Ponceau 4R, 962
Pork Collagen, 965
 Potassium Acetate TS, 1528
 Potassium Acid Phthalate, 0.1 N, 1531
Potassium Acid Tartrate, 967
Potassium Alginate, 967
 Potassium Alum, 51
Potassium Benzoate, 968
 Potassium-o-benzosulfimide, 985
Potassium Bicarbonate, 969
 Potassium Biphosphate, 982
 Potassium Biphthalate, 0.2 M, 1523
 Potassium Bitartrate, 967
Potassium Bromate, 969
Potassium Carbonate, 970
Potassium Carbonate Solution, 970
Potassium Chloride, 970
 Potassium Chloride, 0.2 M, 1523
 Potassium Chromate TS, 1528
Potassium Citrate, 973
 Potassium Dichromate, 0.1 N, 1531
 Potassium Dichromate TS, 1528
 Potassium Dihydrogen Phosphate, 982
 Potassium Ferricyanide TS, 1528
 Potassium Ferrocyanide TS, 1528
Potassium Gibberellate, 973
Potassium Gluconate, 974
 Potassium Glutamate, 822
Potassium Glycerophosphate, 975
Potassium Hydroxide, 975
 Potassium Hydroxide, 0.5 N, Alcoholic, 1531
 Potassium Hydroxide, 1 N, 1531
Potassium Hydroxide Solution, 976
 Potassium Hydroxide TS, 1528
 Potassium Hydroxide TS, Alcoholic, 1528
 Potassium Identification Test, 1322
Potassium Iodate, 976
 Potassium Iodate, 0.05 M, 1532
Potassium Iodide, 977
 Potassium Iodide TS, 1528
 Potassium Kurrol's Salt, 983
Potassium Lactate Solution, 978
Potassium Metabisulfite, 979
 Potassium Metaphosphate, 983
Potassium Nitrate, 980
Potassium Nitrite, 980
 Potassium Permanganate, 0.1 N, 1532
 Potassium Permanganate TS, 1528
Potassium Phosphate, Dibasic, 981
Potassium Phosphate, Monobasic, 982
 Potassium Phosphate, Monobasic, 0.2 M, 1523
Potassium Phosphate, Tribasic, 983
Potassium Polymetaphosphate, 983
 Potassium Polyphosphates, 983
 Potassium Pyroantimonate TS, 1528
Potassium Pyrophosphate, 984
 Potassium Pyrosulfite, 979
Potassium Saccharin, 985
 Potassium Salt, 987
 Potassium Salt of 1,2-benzisothiazole-3(2H)-one-1,1-dioxide Monohydrate, 985
 Potassium Sodium Tartrate, 1107
Potassium Sorbate, 987
Potassium Sulfate, 988
 Potassium Sulfate TS, 1528
Potassium Sulfite, 988
 Potassium Triphosphate, 989
Potassium Tripolyphosphate, 989
Povidone, 990
 Powdered Cellulose, 277
 Powdered Decaffeinated Green Tea Extract, 1180
 Precipitated Calcium Phosphate, 220
 "Precision", Defined, 1538
 Preface, v
 Pressure Measurements, 5
L-Proline, 992
Propane, 993
 Propane, 1-3-diol, 994
 1,2-Propanediol, 1003
1,3-Propanediol, 994
 Biobased Content of, 1447
 1,2,3-Propanetriol Octadecanoate, 544
 1,2,3-Propane Tristearoyl Ester, 547
 Propanoic acid, 2-methyl-, 2-methylpropyl ester, 632
 2-Propanol, 645
n-Propanol, 997
 2-Propanone, 13
 2-Propen-1-yl 3-phenyl-2-propenoate, 40
 1-Propene-1,2,3-tricarboxylic Acid, 24
 Propene Oxide, 1005
 2-Propenyl 2-aminobenzoate, 39
 2-Propenyl butyrate, 39
p-Propenylanisole, 75
 Propenyl cinnamate, 40
 2-Propenyl 5-cyclohexane pentanoate, 40
 2-Propenyl 3-phenyl-2-propenoate, 40
 2-Propenyl sulfide, 49
 4-Propenyl veratrole, 794
Propenylguaethol, 995
Propionaldehyde, 995
Propionic Acid, 996
Propyl Acetate, 997
n-Propyl Acetate, 997
Propyl Alcohol, 997
***p*-Propyl Anisole**, 998
 Propylene Chlorohydrin Determination, 1425
Propylene Glycol, 1003
Propylene Glycol Alginate, 1004
 Propylene Glycol Ether of Methylcellulose, 601
 Propylene Glycol Lactostearate, 675
Propylene Glycol Mono- and Diesters, 1005
 Propylene Glycol Mono- and Diesters of Fatty Acids, 1005
 Propylene Glycol Monostearate, 1005
Propylene Oxide, 1005
 1,2-Propylene Oxide, 1005
Propyl Formate, 999
Propyl Gallate, 1000
 Propyl *p*-Hydroxybenzoate, 1007
Propyl Mercaptan, 1001
Propylparaben, 1007
Propyl Propionate, 1002
n-Propyl Propionate, 1002
 Protease, 416
 Animal Pancreas, 1366
 Aspergillus niger, 1364
 Aspergillus niger var., 1367
 Aspergillus niger var. *awamori* (Containing a *Calf Prochymosin Gene*), 1365
 Aspergillus oryzae var., 1366
 Bacillus cereus, 1367
 Bacillus licheniformis var., 1367
 Bacillus subtilis var., 1367
 Endothia parasitica, 1367
 Escherichia coli K-12 (Containing a *Calf Prochymosin Gene*), 1365
 Figs (*Ficus*) sp., 1365
 Kluyveromyces marxianus, 1365
 Pancreatic Extract, Bovine or Porcine, 1365
 Papaya (*Carica papaya* (L)), 1366
 Pineapples: *Ananas comosus* *Ananas bracteatus* (L), 1364
 Porcine or Other Animal Stomach Tissue, 1366
 Rhizomucor meihei, 1367
 Rhizomucor pusillus (Lindt), 1367
 Ruminant Animal Stomach, 1367
 Trichoderma longibrachiatum, 1365
 Protein-Based Ingredients, 1465
 Guidance Standard For UHPLC-MS/MS Screening of Nitrogen Containing Adulterants In Milk Ingredients, 1465
 Nonprotein Nitrogen Determination For Skim Milk Powder And Nonfat Dry Milk, 1471
 Proteins, Partially Hydrolyzed, 887

Proteolytic Activity, Bacterial (PC), 1390
 Proteolytic Activity, Fungal (HUT), 1390
 Proteolytic Activity, Fungal (SAP), 1391
 Pteroylglutamic Acid, 494
 Pullulanase, 1392
Pullulan, 1008
 Pullulanase Activity, 1392
 Purified Oxgall, 879
 PVOH, 960
 PVP, 990
 PVPP, 330
 3-Pyridinecarboxylic Acid, 837
 Pyridinium, 1-Hexadecyl-, Chloride, Monohydrate, 279
Pyridoxine Hydrochloride, 1009
 Pyridoxol Hydrochloride, 1009
 Pyromucic Aldehyde, 503
 2-Pyroxidinecarboxylic Acid, Chromium Salt, 291
Pyrrole, 1010
 L-2-Pyrrolidinecarboxylic Acid, 992

Q

Qualitative Test for Phenols Using Ferric Chloride (Flavor Chemicals Other Than Essential Oils), 1439
Quercetin, 1011
 Quercetin-3-rutinoside trihydrate, 1036
 Quercetol, 1011
 Quertin, 1011
 Quertine, 1011
 Quimociac TS, 1528
 Quinaldine Red, 1534
 Quinaldine Red TS, 1528
Quinine Hydrochloride, 1013
Quinine Sulfate, 1013
Quinoline Yellow, 1014
 Quinones (Chewing Gum Base Polymers), 1361

R

Racemic Pantothenyl Alcohol, 883
 Radioactivity, 1597
 Raman Spectroscopy, 1613
Rapeseed Oil, Fully Hydrogenated, 1017
Rapeseed Oil, Superglycerinated, 1017
 Rappaport Vassiliadis Salmonella Enrichment Broth, 1440
 Raspberry Ketone, 600
 Readily Carbonizable Substances, 1293
 Readily Carbonizable Substances in Ethyl Acetate, Limit Test, 1438
 Readily Oxidizable Substances in *dl*-Menthhol, 1438
 Reagents, Specifications, 5
 Reb A, 1018
Rebaudloside A, 1018
 Rebiana, 1018

Reduced Iron, 614
 Reducing Substances (Flavor Chemicals Other Than Essential Oils), 1438
 Reducing Sugars Assay, 1426
 Reference Standards, 5
 Refined Arachidonic Acid-Rich Oil (RAO), 84
 Refined Bleached Shellac, 1058
 Refined Microcrystalline Wax, 904
 Refined Paraffin Wax, 904
 Refractive Index, 1294
 Regular Bleached Shellac, 1057
 Reichert-Meissl Value, 1410
 Relative Atomic Mass and Half-Lives of Selected Radionucleotides, 1646
 Rennet, 1367
 Rennet, Bovine, 413
 Rennet, Calf, 413
 Rennet, Microbial, 416
 Requirements for Listing Substances in FCC, 2
 Residual Solvent (Oleoresins), 1415
 Residual Styrene (Chewing Gum Base Polymers), 1362
 Residual Titration (for Water), 1300
 Residue on Evaporation
 Essential Oils and Flavors, 1397
 Flavor Chemicals (Other than Essential Oils), 1438
 Residue on Ignition (Sulfated Ash), 1318
 Resveratrol, 1022
 3-Rhamnoglucoside of 5,7,3',4'-tetrahydroxyflavonol, 1036
Rhodinol, 1024
Rhodinyl Acetate, 1025
Rhodinyl Formate, 1026
Riboflavin, 1027
 Riboflavin 5'-Phosphate Ester Monosodium Salt, 1028
 Riboflavin 5'-Phosphate Ester Monosodium Salt, Dihydrate, 1028
Riboflavin 5'-Phosphate Sodium, 1028
 Ribose, 1029
D-Ribose, 1029
Rice Bran Wax, 1030
 Ricinus Oil, 273
 "Robustness", Defined, 1540
 Rochelle Salt, 1107
 Rose Geranium Oil, Algerian Type, 513
Rosemary Extract, 1032
Rosemary Oil, 1034
Rosemary Oleoresin, 1133
Rose Oil, 1031
 Rosidinha (rosadinha), 751
 Rosins and Related Substances
 Acid Number, 1418
 Softening Point, 1418
 Viscosity, 1421
 Rosins and Related Substances, Tests and Assays, 1418
 Rubinpigment, 707
Rue Oil, 1035
 "Ruggedness", Defined, 1539
 Rum Ether, So-Called, 452
Rutin, 1036

Rutin trihydrate, 1036

S

(S)-2-Amino-4-(methylselenyl)butyric Acid, 1054
 Sabouraud Dextrose Agar, 1440
Saccharin, 1039
Safflower Oil (Unhydrogenated), 1040
Sage Oil, Dalmatian Type, 1041
Sage Oil, Spanish Type, 1042
 SAIB, 1156
Salatrim, 1043
Salicylaldehyde, 1047
 Salicylaldehyde methyl ether, 77
Salmonella, 1463
Salmonella spp., 1442
 SALP, 1065
 Salt, 1071
Sandalwood Oil, East Indian Type, 1048
 Sandalwood Oil, West Indian Type, 74
Santalol, 1049
Santalyl Acetate, 1050
 Saponification Value
 Essential Oils and Flavors, 1396
 Fats and Related Substances, 1410
Savory Oil (Summer Variety), 1051
 Schiff's Reagent, Modified, 1528
 Schizochytrium Oil, 371
 Scoville Heat Units, 1620
Seaweed-Derived Calcium, 1052
 Seignette Salt, 1107
 Selenium Limit Test, 1339
Selenium Speciation, 1355
L-Selenomethionine, 1054
DL-Serine, 1055
L-Serine, 1056
 Shea Butter, 1057
Sheanut Oil, Refined, 1057
Shellac, Bleached, 1057
Shellac, Bleached, Wax-Free, 1058
 Short- and Long-Chain Acyl Triglyceride Molecules, 1043
 Short Chain Fructooligosaccharides, 499
 Sieve Analysis of Granular Metal Powders, 1319
 Significant Figures, 5
Silicon Dioxide, 1059
Silver, 1060
 Silver Nitrate, 0.1 N, 1532
 Silver Nitrate TS, 1528
Siraitia grosvenorii Extract, 817
 Skim Milk Powder
 Nonprotein Nitrogen Determination For Skim Milk Powder And Nonfat Dry Milk, 1471
 Slaked Lime, 202
 Smectite, 121
 Soap, 1411
 Soda Alum, 51
 Soda Ash, 1069
Sodium Acetate, 1062
 Sodium Acetate, 0.1 N, 1532

Sodium Acid Pyrophosphate, 1062
 Sodium Acid Sulfate, 1068
 Sodium Acid Sulfite, 1069
Sodium Alginate, 1063
 Sodium Alginate, Konjac Flour (*Amorphophallus konjac*), Xanthan Gum Complex, 34
 Sodium Alum, 51
Sodium Aluminosilicate, 1063
Sodium Aluminum Phosphate, Acidic, 1065
Sodium Aluminum Phosphate, Basic, 1065
 Sodium Arsenite, 0.05 N, 1532
Sodium Ascorbate, 1066
 Sodium L-Ascorbate, 1066
Sodium Benzoate, 1067
 Sodium α -Benzosulfimide, 1110
Sodium Bicarbonate, 1068
 Sodium Biphosphate, 1104
Sodium Bisulfate, 1068
Sodium Bisulfite, 1069
 Sodium Bisulfite TS, 1528
 Sodium Bitartrate TS, 1528
 Sodium Borate TS, 1528
Sodium Carbonate, 1069
 Sodium Carbonate TS, 1528
 Sodium Carboxymethylcellulose, 276
Sodium Carboxymethyl Cellulose, Enzymatically Hydrolyzed, 1070
Sodium Chloride, 1071
 Sodium Chloride (Color Additive Assays), 1346
 Buffered Sodium Chloride-Peptone Solution pH 7.0, 1440
 Sodium Chlorite Solutions, Acidified, 23
 Sodium Choleate, 879
Sodium Citrate, 1074
 Sodium Cobaltinitrite TS, 1528
Sodium Cyclamate, 1075
 Sodium Cyclohexanesulfamate, 1075
 Sodium Cyclohexylsulfamate, 1075
Sodium Dehydroacetate, 1076
Sodium Diacetate, 1076
 Sodium 5-[4-dimethylamino- α -(4-dimethyliminocyclohexa-2,5-dienylidene) benzyl]-6-hydroxy-7-sulfonato-naphthalene-2-sulfonate, 552
 Sodium N-[4-[[4-(dimethylamino)phenyl](2-hydroxy-3,6-disulfo-1-naphthalenyl)-methylene]-2,5-cyclohexadien-1-ylidene-N-methylmethanaminium, 552
Sodium DL-Malate, 1095
 Sodium Dodecyl Sulfate, 1091
Sodium Erythorbate, 1077
Sodium Ferric Pyrophosphate, 1077
Sodium Ferrocyanide, 1079
Sodium Ferrous Citrate, 1080
 Sodium Fluoride TS, 1528
Sodium Fumarate, 1082
Sodium Gluconate, 1083
 Sodium D-Gluconate, 1083

Sodium Glutamate, 823
 Sodium Hexametaphosphate, 1106
Sodium Hyaluronate (from Microbial Fermentation), 1083
 Sodium Hyaluronate (*Streptococcus*), 1083
 Sodium Hydrogen Carbonate, 1068
 Sodium Hydrogen Diacetate, 1076
Sodium Hydrogen DL-Malate, 1096
 Sodium Hydrogen Sulfite, 1069
Sodium Hydroxide, 1086
 Sodium Hydroxide, 0.2 M, 1523
 Sodium Hydroxide, 0.5 N, Alcoholic, 1532
 Sodium Hydroxide, 1 N, 1532
Sodium Hydroxide Solutions, 1085
 Sodium Hydroxide TS, 1528
 Sodium 3-(1-Hydroxyethylidene)-6-methyl-1,2-pyran-2,4(3H)-dione, 1076
Sodium Hypophosphite, 1086
 Sodium Hyposulfite, 1117
 Sodium Identification Test, 1322
 Sodium Indigotindisulfonate TS, 1526, 1528
Sodium Iron EDTA, 1087
 Sodium Iron Pyrophosphate, 1077
Sodium Lactate Solution, 1090
Sodium Lauryl Sulfate, 1091
Sodium Lignosulfonate, 1092
Sodium Magnesium Aluminosilicate, 1093
 Sodium Malate, 1095
Sodium Metabisulfite, 1097
Sodium Metaphosphate, Insoluble, 1098
Sodium Metasilicate, 1098
 Sodium Methoxide, 1099
 Sodium Methoxide, 0.1 N, in Pyridine, 1532
 Sodium Methoxide, 0.02 N, in Toluene, 1532
Sodium Methylate, 1099
Sodium Molybdate Dihydrate, 1100
 Sodium Monohydrogendicarbonate, 1113
Sodium Nitrate, 1101
Sodium Nitrite, 1102
 Sodium Nitroferrocyanide TS, 1528
 Sodium (Z)-9-octadecenoate, 1102
 Sodium Oleate, 1102
Sodium Phosphate, Dibasic, 1103
Sodium Phosphate, Monobasic, 1104
Sodium Phosphate, Tribasic, 1105
 Sodium Phosphate TS, 1528
Sodium Polyphosphates, Glassy, 1106
 Sodium Potassium Hexametaphosphate, 1106
 Sodium Potassium Phosphate, Glassy, 1106
Sodium Potassium Polyphosphates, Glassy, 1106
Sodium Potassium Tartrate, 1107

Sodium Potassium Tripolyphosphate, 1108
 Sodium Propanoate, 1109
Sodium Propionate, 1109
Sodium Pyrophosphate, 1109
 Sodium Pyrosulfite, 1097
Sodium Saccharin, 1110
 Sodium selenate, 1112
Sodium Selenate Anhydrous, 1112
Sodium Sesquicarbonate, 1113
 Sodium Silicoaluminate, 1063
Sodium Stearoyl Lactylate, 1114
Sodium Stearyl Fumarate, 1115
Sodium Sulfate, 1116
 Sodium Sulfate (Color Additive Assays), 1346
 Sodium Sulfide TS, 1528
Sodium Sulfite, 1117
Sodium Tartrate, 1117
 Sodium Tetraphenylborate TS, 1528
 Sodium Tetraphenylboron, 0.02 M, 1533
 Sodium Tetrapolyphosphate, 1106
Sodium Thiosulfate, 1117
 Sodium Thiosulfate, 0.1 N, 1533
 Sodium Thiosulfate TS, 1528
Sodium Trimetaphosphate, 1118
 Sodium Triphosphate, 1118
Sodium Tripolyphosphate, 1118
 Softening Point (Rosins and Related Substances), 1418
 Drop Method, 1418
 Ring-And-Ball Method, 1419
 Solidification Point, 1294
Solin Oil, 1120
 Solubility in Alcohol (Essential Oils and Flavors), 1398
 Solubility Specifications and Statements, 3
 Soluble Saccharin, 1110
 Solutions
 Colorimetric, 1523
 Preparation of, 5
 Standard Buffer, 1523
 Water for, 5
 Solutions and Indicators, 1523
 Sone-ka-vark, 548
 Sophoretin, 1011
Sorbic Acid, 1120
 Sorbitan Monododecanoate, 954
 Sorbitan Monolaurate, 1121
 Sorbitan Monooctadecanoate, 956
 Sorbitan Mono-9-octadecenoate, 958
Sorbitan Monooleate, 1122
 Sorbitan Monopalmitate, 1122
Sorbitan Monostearate, 1123
 Sorbitan Tristearate, 1124
 D-Sorbitol, 1125
Sorbitol, 1125
 D-Sorbitol, 1125
Sorbitol Solution, 1126
 Noncrystallizing, 1127
 Soybean-Casein Digest Agar, 1440
 Soybean-Casein Digest Broth, 1440
Soybean Oil (Unhydrogenated), 1130
 High oleic, 1131

Soy Protein Concentrate, 1130
Spearmint Oil, 1132
 Specific Gravity, 5
 Fats and Related Substances, 1411
 "Specificity", Defined, 1538
 Specific Rotation, 1292
 Spectrophotometric Identification
 Tests, 1356
 Infrared Absorption, 1356
 Infrared Spectra, 1356
 Ultraviolet Absorption, 1357
Spice Oleoresins, 1133
 Angelica seed, 1133
 Anise, 1133
 Basil, 1133
 Black pepper, 1133
 Capsicum, 1133
 Caraway, 1133
 Cardamom, 1133
 Celery, 1133
 Coriander, 1133
 Cubeb, 1133
 Cumin, 1133
 Dillseed, 1133
 Fennel, 1133
 Ginger, 1133
 Hop, 1133
 Laurel leaf, 1133
 Marjoram sweet, 1133
 Origanum, 1133
 Paprika, 1133
 Parsley leaf, 1133
 Parsley seed, 1133
 Pimenta berries, 1133
 Rosemary, 1133
 Thyme, 1133
 Turmeric, 1134
Spike Lavender Oil, 1134
Spirulina, 1135
 Stability (Fats and Related Substances), 1411
 Active Oxygen Method, 1411
 Standard Buffer Solutions, 1523
 Standard Solutions
 Ammonium, 1524
 Barium, 1524
 Iron, 1524
 Magnesium, 1524
 Phosphate, 1524
 Standard Solutions for the Preparation
 of Controls and Standards, 1524
Stannous Chloride, 1138
 Stannous Chloride TS, 1529
Staphylococcus Aureus, 1463
 Starch Hydrolysate, Hydrogenated, 1139
 Starch Iodate Paper, 1535
 Starch Iodide Paper, 1535
 Starch Iodide Paste TS, 1529
 Starch TS, 1529
Starter Distillate, 1140
Stearic Acid, 1140
 Stearin, 547
 6-Stearoyl-3-keto-L-gulofuranolactone, 92
Stearyl Alcohol, 1141
Stearyl Citrate, 1142

Stearyl Monoglyceridyl Citrate, 1142
 Sterculia Gum, 650
 Stevia Leaf Extract, 1144
Steviol Glycosides, 1144
 Stock Buffer Solution, 1440
 Strawberry Aldehyde, 446
 Stronger Ammonia Water, 57
 Sublimed sulfur, 1161
 Submissions to the Food Chemicals
 Codex, 1538
Succinic Acid, 1148
Succinylated Monoglycerides, 1148
Sucralose, 1149
 Sucroesters, 1157
Sucromalt, 1151
Sucrose, 1153
Sucrose Acetate Isobutyrate, 1156
Sucrose Fatty Acid Esters, 1157
 Sucrose (Refractive Index Scale), 1431
 Sugar, 1153
Sugar Beet Fiber, 1159
 Sugar Beet Pulp, 1159
 Sulfanilic Acid TS, 1529
 Sulfated Ash (Residue on Ignition), 1318
 Sulfate Identification Test, 1322
 Sulfate Limit Test, 1326
 Sulfite Identification Test, 1322
 Sulfiting Agents, Labeling, 2
 2-Sulfoethylamine, 1176
Sulfur, 1161, 1357
Sulfur Dioxide, 1162
 Sulfur Dioxide Detector Tube, 1535
 Sulfur Dioxide Determination, 1426
Sulfuric Acid, 1163, 1529
 Sulfuric Acid, 1 N, 1533
 Sulfuric Acid, Alcoholic, 0.5 N, 1533
 Sulfuric Acid, Alcoholic, 5 N, 1533
 Sulfuric Acid Table, 1319
 Sulfuric Acid TS, 1529
 Sulfuric Acid TS, Diluted, 1529
 Sulfurol, 775
 Sulphur, 1161
 Summer Savory Oil, 1051
Sunflower Oil (Unhydrogenated), 1164
Sunset Yellow, 1165
 Sunset Yellow FCF, 472, 1165
 Superglycerinated Fully Hydrogenated
 Rapeseed Oil, 1017
 Sweet Basil Oil, 117
 Sweet Orange Oil, 875
 Sweetwood Bark Oil, 270
 Symbols, 6
 Synthetic Amorphous Silica, 1059
Synthetic Iron Oxide, 1166
 Synthetic Lycopene, 718
 Synthetic Magnesium Silicate, 731
 Synthetic Paraffin, 884
 Oil Content, 1311
 Synthetic Petroleum Wax, 905
 Synthetic Terpene Resin, 1183
 Synthetic Wax (Ethylene Polymer or
 Ethylene Copolymer with Alpha-
 Olefins), 905

T

D-Tagatose, 1168
 Tagetes Extract, 1168
Talc, 1169
Tallow, 1170
Tangerine Oil, Coldpressed, 1171
 Tangerine Oil, Expressed, 1171
Tannic Acid, 1172
 Tannic Acid TS, 1529
Tara Gum, 1173
 "Tared Container", Defined, 6
Tarragon Oil, 1174
Tartaric Acid, 1175
 L(+)-Tartaric Acid, 1175
 Tartrate Identification Test, 1322
Tartrazine, 471, 1175
Taurine, 1176
TBHQ, 1178
Tea Polyphenols from Green Tea,
 Decaffeinated, 1180
 Temperatures, 5
Terpene Resin, Natural, 1182
Terpene Resin, Synthetic, 1183
 α -Terpinene, 1183
 γ -Terpinene, 1184
Terpinen-4-ol, 1183
 α -Terpineol, 1184
Terpinyl Acetate, 1185
Terpinyl Propionate, 1186
 Tests and Assays, 3
 Tests for Absence of Specific
 Microorganisms, 1441
 Test Solutions (TS) and Other
 Reagents, 1524
 δ -Tetradecalactone, 1187
 Tetradecanal, 826
 Tetradecanoic Acid, 827
 1-Tetradecanol, 827
 Tetradecyl Alcohol, 827
Tetrahydrofurfuryl Alcohol, 1188
 Tetrahydrogeraniol, 396
Tetrahydrolinalool, 1189
 Tetrahydro-2H-1,4-oxazine, 824
2,3,5,6-Tetramethylpyrazine, 1189
 Tetrapotassium Pyrophosphate, 984
 Tetrasodium 4-acetamido-5-hydroxy-6-
 ((7-sulfonato-4-[(4-
 sulfonatophenyl)diazenyl]naphthalen-
 1-yl)diazenyl)naphthalene-1,7-
 disulfonate, 158
 Tetrasodium Diphosphate, 1109
 Tetrasodium Pyrophosphate, 1109
Thaumatococin, 1190
L-Theanine, 1191
 Thermometers, 1279
 Thiamine Chloride, 1192
Thiamine Hydrochloride, 1192
Thiamine Mononitrate, 1193
 Thiamine Nitrate, 1193
 Thibetolide, 896
 Thin-Layer Chromatography, 1284
 Thioallyl ether, 49
 Thiobenzyl alcohol, 135
 Thiobismethane, 397
 3,3-Thiobispropane, 49
 Thiophenol, 123
 Thiosulfate Identification Test, 1322

- Thorium Nitrate 0.1 M, 1533
 L-Threonic Acid Calcium Salt, 228
L-Threonine, 1195
 Thuja Oil, 274
Thyme Oil, 1195
Thyme Oleoresin, 1133
Thymol, 1196
 Thymol Blue, 1534
 Thymol Blue TS, 1529
 Thymolphthalein, 1534
 Thymolphthalein TS, 1529
 Tight Container, 3
 Time Limits, 5
 Tin Dichloride, 1138
Titanium Dioxide, 1197
 Title of Monograph
 CAS number, 2
 FEMA number, 2
 INS number, 2
 Molecular Structure and Chemical Formulas, 2
 Titrimetric Assays (Flavor Chemicals Other Than Essential Oils), 1436
 Direct Aqueous Acid Base Titrations, 1436
 Direct Aqueous Alcoholic Acid Base Titrations, 1436
 TMG, 142
All-rac- α -Tocopherol, 1202
 DL- α -Tocopherol, 1202
 DL- α -Tocopherol Acetate, 1203
 D- α -Tocopherol Concentrate, 1201
RRR- α -Tocopherol Concentrate, 1201
 Tocopherols, 1412
 Tocopherols Concentrate, Mixed, 1204
RRR-Tocopherols Concentrate, Mixed, 1204
All-rac- α -Tocopheryl Acetate, 1203
 D- α -Tocopheryl Acetate, 1207
 DL- α -Tocopheryl Acetate, 1203
RRR- α -Tocopheryl Acetate, 1207
 D- α -Tocopheryl Acetate Concentrate, 1206
RRR- α -Tocopheryl Acetate Concentrate, 1206
 D- α -Tocopheryl Acetate Preparation, 1206
 D- α -Tocopheryl Acid Succinate, 1208
RRR- α -Tocopheryl Acid Succinate, 1208
 Tolerances, 6
p-Tolualdehyde, 1210
Tolualdehyde, Mixed Isomers, 1210
 Toluene Distillation Method (for Water), 1301
 α -Toluic Acid, 919
 α -Toluic Aldehyde, 917
 o-Tolyl Acetate, 801
 p-Tolyl Acetate, 329
 Tolyl Aldehyde, Mixed Isomers, 1210
 p-Tolyl Aldehyde, 1210
p-Tolyl Isobutyrate, 1211
 Tomato Oleoresin Extract, 713
 Torula Yeast, 1258
 Total Aerobic Microbial Count, 1441
 Total Alcohols (Essential Oils and Flavors), 1398
 Total Capsaicinoids Content, 1416
 Total Color (Color Additive Assays), 1346
 Total Monoglycerides, 1407
 Total Solids, 1428
 Glucose Syrup (Corn Syrup), 1428
 High-Fructose Corn Syrup, 1429
 Invert Sugar, 1431
 Maltodextrin, 1430
 Total Unsaturation (Chewing Gum Base Polymers), 1363
 Total Yeasts and Molds Count, 1441
 Trace Impurities, 6
Tragacanth, 1212
 Tragacanth Gum, 1212
 Transglutaminase, 416
 Transglutaminase Activity, 1393
trans-Resveratrol, Fermentation (*Saccharomyces cerevisiae*), 1022
trans-E-3,4',5-Trihydroxystilbene, 1022
Trehalose, 1213
Triacetin, 1215
 Triatomic Oxygen, 880
 Triphenyl-*sn*-glycerol, 541
Tributyrin, 1216
 Tricalcium Citrate, 197
 Tricalcium Phosphate, 220
 Trichloroethene, 1217
Trichloroethylene, 1217
 1,1,2-Trichloroethylene, 1217
 4,1',6'-Trichlorogalactosucrose, 1149
2-Tridecanone, 1214
2-Tridecenal, 1214
 Tridocosanoyl-*sn*-glycerol, 541
 Triethanolamine, 0.5 N, 1533
Triethyl Citrate, 1217
 (2R,3S)-2,3,4-Trihydroxybutyric Acid Hemicalcium Salt, 228
 3,7,12-Trihydroxycholanolic Acid, 287
 2,4 α ,7-Trihydroxy-1-methyl-8-methylenegibb-3-ene-1,10-dicarboxylic Acid 1,4- α -Lactone, 521
 3,5,4'-Trihydroxystilbene, 1022
 Triketohydrindene Hydrate TS, 1529
 Trimagnesium Phosphate, 730
 1-(2,6,6-Trimethyl-1-cyclohexenyl)-2-buten-1-one, 354
 4-(2,6,6-Trimethyl-2-cyclohexen-1-yl)-but-2-en-4-one, 354
 1-(2,6,6-Trimethyl-2-cyclohexenyl)-2-buten-1-one, 354
 4-(2,6,6-Trimethyl-2-cyclohexenyl)-2-buten-4-one, 354
 1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one, 355
 1-(2,6,6-Trimethyl-3-cyclohexenyl)-2-buten-1-one, 355
Trimethylamine, 1219
 4-Trimethylamino-3-hydroxybutyrate, 247
 2-Trimethylammonioacetate, 142
 2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, 933
 4-(2,6,6-Trimethylcyclohex-1-enyl)but-2-en-4-one, 354
 4-(2,6,6-Trimethyl-1-cyclohexenyl)-3-buten-2-one, 608, 609
 3,7,11-Trimethyl-1,6,10-dodecatrien-3-ol, 835
 3,7,11-Trimethyl-2,6,10-dodecatrien-1-ol, 466
 Trimethylene Glycol, 994
 Trimethylglycine, 142
3,5,5-Trimethyl Hexanal, 1218
2,4,5-Trimethyl δ -3-Oxazoline, 1218
2,3,5-Trimethylpyrazine, 1219
 1,3,7-Trimethylxanthine, 190
 Trinitrophenol TS, 1529
 Triphosphate, 1118
 Tripotassium Citrate, 973
 Tripotassium Phosphate, 983
 Tripropionin, 546
 Trisodium Citrate, 1074
 Trisodium Diphosphate, 1220
 Trisodium Dipotassium Tripolyphosphate, 1108
 Trisodium Monohydrogen Diphosphate, 1220
 Trisodium Phosphate, 1105
Trisodium Pyrophosphate, 1220
 Tristearin, 547
 Trypsin, 413, 1394
 Trypsin Activity, 1394
DL-Tryptophan, 1220
L-Tryptophan, 1221
 Tunu (tuno), 751
Turmeric Oleoresin, 1134
 Turmeric Oleoresin, 1222
L-Tyrosine, 1224
- ## U
- Ultraviolet-Visible Spectroscopy, 1575
 Ultraviolet Absorbance of Citrus Oils (Essential Oils and Flavors), 1398
 Ultraviolet Absorption, 1357
 UMP disodium salt, 408
 Uncombined Intermediates and Products of Side Reactions, 1348
 δ -Undecalactone, 1225
 γ -Undecalactone, 1225
Undecanal, 1226
2-Undecanone, 1228
1,3,5-Undecatriene, 1227
 Undecen-10-al, 1229
10-Undecenal, 1229
(E)-2-Undecenol, 1230
Undecyl Alcohol, 1231
n-Undecyl Aldehyde, 1226
 UNII Code, 2
 Unmodified Food Starch, 497
 Unsaponifiable Matter, 1413
Urea, 1231
 Uridine 5'-monophosphate disodium salt, 408
- ## V
- "Vacuum", Defined, 6

Valeraldehyde, 1233
Valeric Acid, 1233
 γ -**Valerolactone**, 1234
 "Validation", Defined, 1538
 Validation of Food Chemicals Codex Methods, 1538
L-Valine, 1235
Vanillin, 1235
Vanillyl Butyl Ether, 1236
 Vegetable Oil, Brominated, 163
Vegetable Oil Phytosterol Esters, 1237
 Venezuelan Chicle, 751
Veratraldehyde, 1239
 Veratryl Aldehyde, 1239
 Vinyl Alcohol Polymer, 960
 Vinyl Carbinyl Cinnamate, 40
 1-Vinyl-2-pyrrolidone Crosslinked Insoluble Polymer, 330
 Violet Red Bile Glucose Agar, 1440
 Viscosity (Rosins and Related Substances), 1421
 Viscosity Determination, 1295
 Cellulose Gum, 1298
 Dimethylpolysiloxane, 1296
 Methylcellulose, 1297
 Vital Wheat Gluten, 1246
Vitamin A, 1239
 Vitamin B₁, 1192, 1193
 Vitamin B₁ Hydrochloride, 1192
 Vitamin B₁ Mononitrate, 1193
 Vitamin B₂, 1027
 Vitamin B₆, 1009
 Vitamin B₆ Hydrochloride, 1009
Vitamin B₁₂, 1241
 Vitamin C, 91
 Vitamin C Sodium, 1066
 Vitamin C Stearate, 92
 Vitamin D, 1242, 1243
Vitamin D₂, 1242
Vitamin D₃, 1243
 Vitamin E Acetate, 1203
Vitamin K, 1244
 Volatile Acidity, 1414
 Volatile Oil Content

Oleoresins, 1417
 Volatile Oil Content (Essential Oils and Flavors), 1398
 Volumetric Apparatus, 1280
Volumetric Solutions, 1529

W

Water (Reagent), 5
 Carbon Dioxide-Free, 5
 Deaerated water, 5
 Degassed Water, 5
 Water-Insoluble Matter (Color Additive Assays), 1349
 Water and Loss on Drying, 6
 Water Determination, 1299
 Coulometric Titration, 1300
 Direct Titration, 1299
 Karl Fischer Titrimetric Method, 1299
 Residual Titration, 1300
 Toluene Distillation, 1301
 Water for Solutions, 5
 Water-Insoluble Matter, 1320
 Water Vapor Detector Tube, 1535
 Weighing Practices
 "Constant Weight", Defined, 6
 "Tared Container", Defined, 6
 Weights and Balances, 1281
 Weights and Measures, 6
 Well-Closed Container, 3
Wheat Gluten, 1246
Wheat Protein Isolate, 1246
Whey, 1247
Whey Protein Concentrate, 1250
Whey Protein Isolate, 1251
Whey, Reduced Lactose, 1248
Whey, Reduced Minerals, 1249
 White Cedar Leaf Oil, 274
 White Petrolatum, 903
 White Shellac, 1057
 White Wax, 119
 Wine Yeast Oil, 319

Wintergreen Oil, 1252
 Wood sugar, 1255
 Wool Fat, 678

X

Xanthan Gum, 1253
 Xanthaurine, 1011
 Xylenol Orange, 1534
 Xylenol Orange TS, 1529
Xylitol, 1254
 D-Xylopyranose, 1255
Xylose, 1255
 (+)-Xylose, 1255
 D-Xylose, 1255
 Xylose Lysine Deoxycholate Agar, 1441

Y

Yam Flour, 652
Yeast, Autolyzed, 1257
Yeast, Dried, 1258
Yeast Extract, 1260
 Yellow Petrolatum, 903
 Yellow Prussiate of Soda, 1079
 Yellow Wax, 120

Z

Zein, 1262
Zinc Acetate, 1264
 Zinc Acetate Dihydrate, 1264
 Zinc Distearate, 1266
Zinc Gluconate, 1264
 Zinc Identification Test, 1323
Zinc Oxide, 1265
Zinc Stearate, 1266
Zinc Sulfate, 1267
 Zinc Sulfate, 0.05 M, 1533
Zingerone, 1268