

SUBJECT INDEX

A

- Acids, dibasic, 399
 Albumin-anionic mixtures, 62
 Alkalinity, 231C
 Alkylaryl sulfonates, 30, 163, 178, 195, 198, 209, *see* Alkylbenzene sulfonate
 Alkylbenzene, 35A, 80, 366B, 367G, 384, 392, 450
 Alkylbenzene sulfonate, 44, 112, 196, 312, 318, 324, 345, 361A, 363D, 383, 388, 459, 461, 464
 Alkylbenzene sulfonate
 combining weight, 396
 combustion, 396
 fusion and diazotization, 344
 unsulfonated, 392
 Alkylolamides, 294
 Alkylphosphoric acids, 367B
 Alkyl sulfates, 9, 10, 15, 17, 18, 28, 29, 31, 36, 46, 47, 55, 81, 105, 108, 112, 129, 139, 146, 165, 193, 195, 238A, 244A, 254C, 264, 277A, 277B, 281A, 317B, 325, 361B, 363J, 373, 375A, 385, 456
 Alkyl sulfate, alcohols in, 402
 hydrolysis, 244D
 identification, 14
 potentiometric titration, 472
 Alkyl sulfonate, 10, 18, 28, 31, 45, 59
 Amides, 27B, 37, 335, 444
 Amine, 42A, 201A, 207A, 294, 371A, 423, 447
 Amines, aryl oxamate esters in, identification, 204A
 extraction, 371C
 free, 32
 identification, 39
 potentiometric titration, 229a
 Amine hydrochlorides, 340
 Amino acids, 16A
 Ampholytic, 362, 362A, 408
 Anionic, amylose-starch-iodine, 355
 benzidine, 13, 81, 92, 110, 119, 140, 232, 314, 350A
 bromocresol green, 254C
 bromophenol blue, 343, 361D
 bubble pressure, 341A, 438
 chromatographic, 226, 279, 280, 281A, 350, 361D, 366A, 366C, 367B, 374A, 375C, 375J, 375K, 411, 441, 455, 464, 467
 combining weight, 396
 conductometric, 116A, 200A, 363K
 dichlorofluorescein, 229
 dimethyl-1-naphthylamine, 362B
 drop number, 74
 eosin, 238A, 445
 eosinate, sodium, 35, 363A
 equivalent weight, 467
 erythrosine, 445
 fast red 8 BNL, 407
 fluorescent indicator, 363A
 see eosin
 fuchsin, 149
 hydrolysis, 116B, 220, 221
 hydrophobe estimation, 462
 identification, 59, 123
 infrared, 286, 343, 345, 439, 459
 isolation, 34A, 367D, 373B, 374, 374D, 375C, 375F, 375J, 375K, 412, 414, 420, 433, 455, 472
 methylene blue, 73, 113B, 125, 129A, 193, 195A, 196, 218, 219, 222, 254A, 290, 308A, 318, 339A, 360A, 361D, 439, 464, 469
 methyl green, 309, 337
 miscellaneous, 17, 20, 34B, 54, 200, 262, 317, 338, 346, 363G, 371H, 375A, 383, 385, 407, 410
 neutral red, 284A
 nickel ammonium, 363J
 nickel salt-EDTA, 373
 night blue, 336A
 paper electrophoresis, 367B
 polarographic, 259A, 438
 potentiometric, 116A
 protein-bromocresol purple, 255
 review, 288
 rosaniline, 129, 255, 265
 S-benzylthiuronium, 348A
 scheme analysis, 34Aa, 361A, 375A, 388, 457A
 semimicro, 97A, 111Aa, 375C, 457A :
 sewage, 218, 219, 222, 244, 290, 309
 spectrophotometric, 419
 sulfated esters, 116B
 tensiometric, 61, 227
 thymol blue, 260
 titrimetric, 125A, 277B, 338A
 o-tolidine, 30, 44, 456
 toluidine blue, 205A
 p-toluidine, 76, 140, 180, 181, 182, 209, 210, 253, 267A, 270B, 299, 302A, 348A, 363D, 402
 ultraviolet, 461
 uranin, 73
 volumetric, 77A
- Apples, 167B
 Arsenic in, 406

BIBLIOGRAPHY ON SYNTHETIC DETERGENTS

B

Barium, 280a
 Bentonite, 363F
 Benzene sulfonate, 1
 Bircarbonate, 50A, 115, 367C
 Bituminous coatings, 34A
 Borax, 67, 122B
 Bread, 405

C

Calcium ion, 279A
 Carbohydrate, alpha-naphthol, 51
 anthrone, 70A, 89A, 120A, 178A
 cellulose, 120A
 cellulose ethers, 135, 136
 methyl cellulose, 178A
 naphthol sulfonic acid, 52
 qualitative, 70A
 relatin, 51, 52
 starch, 120A
 sugar, 148, 229A, 259a
 tylose, 51, 52, 59, 150
 Carbon dioxide, 170
 Carbonate, 143, 367C
 Cationic, acid blue K, 381
 amperometric titration, 375G
 amylose-starch iodine, 355
 Azarol B, 264
 benzethonium, 256
 bichromate, 131, 204, 374G
 brilliant blue, 102
 brom cresol green, 378
 brom cresol purple, 245
 bromophenol blue, 22, 43, 49, 53A, 72,
 79, 82, 85, 99, 158, 159, 164, 176,
 184, 191, 201A, 204, 228, 229A, 231,
 237A, 238, 256, 264, 290B, 304, 305,
 308, 349, 358, 360A
 bubble pressure, 341A
 chromatographic, 213, 281A, 326, 326A,
 326B, 340, 361D, 373C, 400
 cis-aconitic acid, 423
 cobalt thiocyanate, 276, 306, 447
 crystal violet, 207a
 dichlorofluorescein, 113, 229
 dimethylaminoazobenzene, 241
 dipycrylamine, 263
 electrometric titration, 338A
 eosin, 57, 116D, 205, 223, 271, 282, 363,
 445
 eosin yellow, 104
 equivalent weight, 467
 Eriochrome Azurol B, 167A
 erythrosin, 445
 extraction, fruit juice, 75
 fast red, 122
 ferricyanide, 96, 111A, 276A
 fluorescent indicators, 453
 halide ion, 371G
 helianthin, 361C
 heteropoly acids, 303A, 303B, 308, 336,
 360
 identification, 38, 39, 87, 93

iodometric, 235, 342
 isolation, 367D, 367E
 methylene blue, 60, 84, 97, 101, 167B
 180, 183, 242, 244, 270, 360A, 361D
 methylene blue-mercuric iodide, 418
 methyl orange, 284A, 413
 methyl yellow, 280a
 miscellaneous, 12, 24, 63, 65, 106, 188,
 253, 262
 mixtures, 305
 morpholine salts, 274A
 orange II, 307, 319
 paper electrophoretic, 338D
 phosphotungsic, 303A, 303B, 336
 picric acid, 237
 pinacyanol, 120
 polarographic, 66, 290A, 301
 potentiometric titration, 229a
 precipitation, 172
 reactions, 174A
 reinekeate, 189, 207A, 211, 443
 review, 56, 71, 100, 113A, 121, 242A,
 264
 rhodamine, 282
 salicyl aldehyde, 371A
 scheme analysis, 32, 252, 448
 sodium iodide, 23
 starch-iodine, 378
 tensimetric, 61
 tetraphenyldiboroxide, 256B, 291A, 404
 toluidine blue, 446
 triiodide, 264
 turbidity, 89, 144, 173
 ultraviolet, 276A, 373A, 417
 unspecified, 33, 130, 145, 338
 Cherries, 167B
 Chloride ion, 261, 309
 Chlorophenolics, 434
 Cholesterol, 231A
 Chromatographic
 see Ion-exchange
 column, 226, 280, 390, 403
 displacement, 276a
 electrocappillary, 199
 gas, 360F, 367, 416
 gas-liquid, 465
 ion-exchange, 240A, 254D, 374C, 374D,
 429, 451, 463
 micro, 253A
 microphotometric, 440
 paper, 122A, 189, 190, 213, 224, 225A,
 230A, 239, 246, 253A, 255A, 279,
 320, 326A, 331, 333, 338C, 340, 348B,
 350, 360D, 360H, 363H, 366C, 367B,
 367H, 371B, 371D, 371J, 373C, 374A,
 376A, 387, 400, 405, 411, 424, 440,
 449, 457, 464, 466, 468, 470
 partition, 268, 326B, 338B, 356, 362, 371E
 partition micro, 174a
 review, 216
 salting-out, 422
 Cloud point, 328
 Cold wave lotion, 269A

- Concrete, 249
 Conductometric, 40
 Cresols, 386
 Critical micelle concentration, 12, 70, 83
- D**
- Dairy, 30
 Detergent mixtures, 50, 95
 Dieldrin, 390
 Differential titration, 242B
 Drycleaning detergents, 231B
- E**
- Eating utensils, 33
 Effluents, 348, 360A, 361D, 407
 Eggs, 358
 Electrophoretic—paper, 367B
 Electroplating, 438
 Elemental, 19, 24, 47, 78, 94, 152
 Emulsifiers, 42A, 280, 390, 412
EDTA (Ethylenediamine tetraacetic acid, or sodium salts), amperometric, 303
 chromic trichloride, 344A
 cobalt nitrate, 107A
 dimethylglyoxime, 192, 217
 Eriochrome black T, 357
 identification, 318A
 Essential oils, 380
Ethanolamine, 174a, 382
 Extraction, acetone, 116
 benzene, 175
 butanol, 18, 174, 166
 carbon tetrachloride, 76
 ethanol, 140
 ether, 21
 methanol, 53, 153
 miscellaneous, 36, 50
 petroleum ether, 253
 tetrachloroethane-acetone, 173
 unspecified, 10B, 29, 132, 253
- F**
- Fatty acid amides, 37
see Amides
Fatty acids, chromatographic, 255A, 276a
 gas, 360F, 416
 paper, 331, 360H, 367H, 374A, 376A, 440, 466
 salting-out, 422
 colorimetric, 307, 458
 free, 5, 25, 32, 60A, 114, 116A, 141A, 278A, 301A, 320, 356, 367, 370
 infrared, 435
 potentiometric, 162A
 separation, 255A, 363B
 thermal analysis, 379
Fatty alcohols identification, 270A, 465
Fatty alkanolamides, 367J
Flame photometry, 452
Foods, 79, 96, 111A, 142, 191, 196, 208, 279A
see individual foods
Fruit, 75
- Fruit juice, 334
 Functional group determination, 262B
 G
- Germicides
see Sanitizing agents
- H**
- Hair lotions, 269A
 Hexachlorophene, 311
 Hydrates, thermogravimetric, 364
 Hydrophobe estimation, 462
 Hydroxyl group, 17A, 60A, 239A
- I**
- Identification, 10B, 11, 19, 34, 34B, 35A, 42A, 64, 86, 88, 106, 111, 118, 123, 126, 127, 128, 141, 151, 153, 154, 156, 179, 180, 204A, 207, 213, 230, 233, 249, 252A, 254, 254A, 258, 262B, 269, 270, 285, 309A, 310, 317B, 318A, 335, 361D, 366, 374E, 448
- Igepon T, 92, 110
 Infrared, 161, 242C, 244A, 268, 277, 286, 312, 343, 345, 361B, 366B, 367G, 370, 390, 397, 412, 426, 435, 436, 439, 459
- Ion-exchange, 27, 137, 247, 251, 261, 332, 360A, 375C, 414, 424, 437, 441, 455, 467
- L**
- Lacquers, 367H
 Latex, 200A
 Lauroyl sarcosinate, 362
 Lignosulfonate, 205A, 362B, 363G
- M**
- Magnesium ion, 279A
 Mass spectrographic, 450
 Mersolate, 45
 Metal finishing, 348
 Methyl cellulose, anthrone, 178A
 Milk, 173, 176, 223, 271, 361C, 460
- N**
- Naphthalene sulfonate, 20
 Naphthols, 208A
 Nitrogen, organic, 252
 Nonionic, alkoxy-hydriodic, 77
 amylose-iodine complex, 169
 chromatographic, 224, 230A, 246, 253A, 274C, 338B, 338C, 367D, 371D, 373B, 374C, 403, 405, 422, 424, 455
 cloud point, 201, 298B, 310, 351, 375F, 442
 cobaltothiocyanate, 35, 276, 375H
 Cyanine 5R, 339
 ferrocyanide, 215, 234, 297
 fluorescein, 408
 gravimetric, 455
 heteropoly methods, 4, 91, 117, 175, 180, 197, 266, 298, 305, 308, 317A, 334, 360A, 361D, 363C, 394, 401, 433, 454
 hydriodic acid, 428

BIBLIOGRAPHY ON SYNTHETIC DETERGENTS

hydrophobe estimation, 462
 hydroxyl group, 300
 identification, 258, 295, 374E
 iodine-starch, 354, 415
 isolation, 367E, 369, 371E, 373B, 375C,
 375E, 375J, 375K, 390, 401, 414, 424,
 433, 441, 455
 Labat's reaction, 189A, 473
 miscellaneous, 224A, 293, 473
 mixed melting point, 283
 molybdenum blue, 197
 oxidation, 208, 460
 phenolic titration, 278, 284
 polarography, 360G
 potassium iodomercurate, 426
 refractive index, 201
 resorcinol-glucose sulfonate, 166, 244B
 review, 187, 275, 287, 427
 salting-out, 162
 saponification equivalent, 274
 sulfuric-formaldehyde, 293
 turbidity, 374E
 ultraviolet, 364A
 X-ray, 112, 367A

O

Official methods, 95, 96, 98, 147, 163, 180,
 186, 208, 240B, 250, 272, 273, 299A, 302,
 321, 322, 323, 324, 325, 363D, 363F, 375B,
 383, 384, 385, 410
 Orange juice, 334

P

Paper-electrophoretic, 338D, 374B
 Petroleum sulfonates, 6, 10A, 26, 34Aa, 53,
 68, 186, 225, 240A, 410
 Pharmaceutical preparations, 415
 Phenolic materials, 122A, 208A
 Phosphates, ammonium molybdate and hydrazine sulfate, 330
 benzidine, 244a
 benzylisothiourea precipitation, 202a
 cationic precipitation, 202
 chromatography, ion-exchange, 254D, 309,
 327, 341, 376, 429, 451, 463, 468
 chromatography, paper, 225A, 333, 360D,
 363H, 371B, 371J, 387, 449, 457, 468,
 470
 cobalt ammonium chloride, 244a
 cobaltoammonium nitrate, 374F
 hydrolysis, 329
 hydrolysis, selective, 291
 identification, 244a, 298C
 infrared, 436
 gravimetric, 374F
 molybdenum blue, 347
 molybdoavanadophosphate, 371
 paper electrophoresis, 374B
 polyphosphate, 257
 pyrophosphate *in ortho*, 389
 separation, 374B
 o-tolidine, 391

triphenylmethyl arsonium thiocyanate,
 220A
 tris(ethylenediamine) cobalt (III), 298C,
 305, 311, 357A, 360C, 375D
 turbidity, 391
 vanadomolybdate, 254D
 Versene method, 279A
 X-ray, 244C, 244E
 zinc salt, 168, 262A, 271C, 372, 372A
 Photographic emulsions, 23
 Polarographic, 42, 48, 148, 214, 240, 243,
 248, 301
 Potassium, 116C, 256A, 377
 Potentiometric titration, 203
 Protein and surfactant, 62, 63, 116

R

Resin acids, 104A
 Review, 90, 103, 138, 139, 171, 185, 194,
 202A, 206, 206A, 241A, 259A, 263A, 267,
 269, 269A, 281, 287, 298A, 313, 352, 353,
 365, 368, 375, 410, 425, 426, 427, 430,
 431, 432, 471
 Rosin, 182A, 271A
 Rosin acids, 116A

S

Sanitizing agents, 10, 43, 53A, 72, 85, 102,
 116D, 131, 229A, 290B, 311, 443
See Germicides
 Separation scheme, 244A, 367D
 Sewage, 103, 113B, 125, 129A, 132, 197, 200,
 218, 219, 222, 227, 244, 250, 290, 306,
 309, 317, 318, 337, 420, 469
 Shampoos, 414
 Silica, gravimetric, 50B
 molybdsilicate, 133, 274B
 spectrophotometric, 280A
 volumetric, 289
 Silicic acid, 251A
 Soap, 39A, 77A, 88A, 97A, 111Aa 116A,
 301A, 332, 336A, 367C, 377, 414
 bar, 398
 borax, 122B
 chlorophenolics in, 434
 chromatographic, 374A
 conductometric, 200A, 363K
 copper in, 360E
 cresol, 386
 ion-exchange, 332
 isolation, 401, 433, 472
 moisture, 371F, 398
 naphthenic acid, 180
 potassium, 116C
 potentiometric titration, 472
 saponification number, 437
 titration, 125A
 synthetic mixtures, 50, 95, 163

Sodium carboxymethylcellulose, aluminum salt,
 395
 anthrone, 157, 236
 ashing and gravimetric, 358A
 bichromate, 260A

- conductometric, 84A
 copper salt, 89B, 106A, 123A, 147, 299B,
 395
 2,7-dihydroxy naphthalene, 84A, 236
 unspecified, 178
 uranyl precipitation, 222A
 Sodium ethylenediaminetetraacetate
 See EDTA
 Solubilization, 107
 Starch, 120A
 Sugar, 148, 229A, 259a
 Sulfate, combined, 3, 5, 7, 8, 9, 21, 26, 58
 inorganic, 3, 109, 134, 209, 225, 253, 309,
 316, 348, 360B, 361, 367F, 452
 total, 5, 26, 41
 Sulfated oils, 3, 5, 7, 8, 25, 34B, 41, 53A,
 69, 114, 119, 236A, 263A, 272, 310, 310A,
 472
 Sulfite liquor, 205A
 Sulfonates, combining weight, 396
 Sulfur, 21, 240A, 409
 Sulfur trioxide, 236A
 Surfactant mixtures, 462
- T
- Tall oil resin acids, 155A
- Teepol, 308A
 Textiles, 3, 10B, 11, 15, 16, 24, 36, 39, 64,
 86, 106, 166, 205, 252, 252A, 298A, 454
 Titrimetric, potentiometric, 212
 Toluene sulfonic acids, 419
 Trade effluents, 361D
 Triethanolamine, 256A
- U
- Ultraviolet, 292, 373A, 397, 417, 461
 Unsaponifiable, 5, 6, 59
 Unsulfonated oil, 140
- V
- Vegetable oil, 363K
- W
- Washing powders, 41
 Water, 140, 176, 193, 227, 250, -290, 309,
 337, 343, 345, 361D, 368, 394, 398, 439,
 469
 electrometric, 371F
 Karl Fischer, 124, 160, 231B
 Wool scouring, 454
- X
- X-ray, 108, 112, 244E, 367A